



UNDERGRADUATE CATALOG

2007–2009

2007–2009
Buffalo State College
Undergraduate Catalog

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, 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 TTD/TDY phone number is (716) 878-3182.

This catalog is current as of May 2007. 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.

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This publication is available in large print or other accessible formats upon request.

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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

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)*

Accreditation Commission for Programs in Hospitality Administration

American Association of Museums (Burchfield-Penney Art Center)

American Chemical Society

American Dietetic Association**

American Speech-Language-Hearing Association

Council for Interior Design Accreditation

Council on Social Work Education

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 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.

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 135 major and minor bachelor's degree programs include several unavailable at any other State University of New York (SUNY) institution: design (computer textile design for industry, fiber, furniture, jewelry), fashion textile technology, forensic chemistry, dietetics coordinated, health and wellness, hospitality administration, public communication, the arts (a general performing arts program), and urban and regional analysis and planning. 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—79 percent 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 thirty-eight 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. In 2006, the college broke ground for a new museum to house the Burchfield-Penney Art Center, the Art Conservation Department, and spaces for exhibitions, research, and classrooms. 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 Dunn Tire 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 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—49 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, 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.

Carnegie 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

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 assistance 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.bkstore.com>

The bookstore carries a wide range of merchandise, including new and used textbooks; trade books; special-order books; emblematic clothing; art, school, and office supplies; greeting cards; gifts; and computer supplies. The store features a Java-U café. The store accepts cash, personal checks, and credit cards. A bookstore deferment program is available. The bookstore is a service of Barnes & Noble College Bookstores Inc.

Burchfield-Penney Art Center

Rockwell Hall, Third Floor, (716) 878-6011
www.burchfield-penney.org

The Burchfield-Penney Art Center is the only museum dedicated exclusively to the art and design of Western New York. It serves as a resource for students, faculty, staff, and the community. The center holds the world's largest collection of work by renowned American watercolorist Charles E. Burchfield (1893-1967) and more than 7,000 works by other important Western New York artists. The center is accredited by the American Association of Museums and is part of the Elmwood Museum District. Admission is free to students, faculty, and staff of the college.

Campbell Student Union

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

The Campbell Student Union, located in the center of campus, houses an eclectic blend of student services, activities, and recreation. The bookstore and Information Center are located in the union, as are the offices of the Dean of Students, the Associate Vice President for Campus Life, Campus Dining Services, United Students Government (USG), International Student Affairs Office, Student Life Office, and the campus radio station, WBNY 91.3 FM. The union offers a variety of programming space, dining services, the Underground Café, Internet access, Java-U Café, ATM machines, and several informal lounge and study areas, as well as the recently renovated USG game room.

Campus Dining Services

Campbell Student Union 223, (716) 878-5214

www.buffalostate.edu/offices/dining

Campus Dining Services, located in the Student Union, provides students with a variety of food choices, from home-cooked meals to pizza and tacos. 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 (57 credit hours). Vending machines are located throughout the campus.

Career Development Center

Cleveland Hall 306, (716) 878-5811

www.buffalostate.edu/offices/cdc

The Career Development Center (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, career assessment programs, career education programs, and an online forum and blog are among the resources available to help students explore careers and majors. In addition to a Web site with full-time, summer, and part-time jobs, and internships, the CDC sponsors annual recruitment events, hosts on-campus interviewing, presents job search workshops, and maintains reference files. The CDC also houses the Volunteer and Service-Learning Center, where students can find 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—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:

- Recruitment incentives for high-need areas and underrepresented constituencies.
- 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)

Buckham Campus School, (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 six weeks and five years on a first-come, first-served basis. A summer schoolage 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 and Community Partnerships Office

Cleveland Hall 211A, (716) 878-4132

www.buffalostate.edu/partnerships

The College and Community Partnerships Office provides an opportunity for faculty, staff, and students to form collaborations with the community that leverage resources and support the region as well as the mission of Buffalo State College. The college has centers, service learning, internships, and many connections in the community that contribute to the educational, economic, and cultural vitality of the region. The office's Web site elaborates on this civic engagement, lists current events in the community, and lists opportunities in which to get involved. Mini-grants are available to encourage faculty members to apply the latest knowledge and techniques to issues and trends analysis, using their expertise to develop better understanding of community problems and their solutions.

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 noncredit-bearing CWP 099 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. E-mail accounts are provided to all registered students. Access to e-mail, course materials, and library resources is available via the Buffalo State College Web site. Networked computer labs are available for students in many locations across campus, while department specific labs are available for students registered in their respective departments. A list of computer labs for general student use is available on the E.H. Butler Library Web site. Computer labs provide access to more than 50 instructional applications, including MS Office, Adobe Creative Suite, and AutoCAD. Wireless Internet access is available in several campus locations, listed on the E. H. Butler Library Web site.

Continuing Professional Studies

Cleveland Hall 210, (716) 878-5907
www.buffalostate.edu/academics/cenc

Continuing Professional Studies provides information for adult students seeking credit for lifelong learning experiences. Buffalo State College recognizes that mature students bring prior knowledge gained through life experience and skills, and will often credit this knowledge toward a degree. This process is known as recognition of prior learning. Through the Prior Learning Assessment process, students may be eligible to achieve college credit for skills and knowledge they have already gained through work or other life experiences. Prior Learning Assessment is a formal process that enables eligible candidates to demonstrate learning that they believe is equivalent to the learning outcomes of one or more Buffalo State College courses. Credit acquired through this process not only provides recognition for prior learning, but also may reduce the amount of time required to complete a certificate. A fee is assessed for any credits awarded. Continuing Professional Studies also advises summer school and adult-student academic concerns.

Counseling Center

Weigel Health Center, Second Floor, (716) 878-4436
www.buffalostate.edu/depts/counsel

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, a substance-abuse counselor, licensed clinical social workers, and a part-time psychiatrist. Information shared in counseling is confidential and is protected to the full extent of the law.

Dean of Students

Campbell Student Union 306, (716) 878-4618
www.buffalostate.edu/offices/stuaffr

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. The college's student judicial system is administered through the dean's office. As a spokesperson for students, the dean helps address important student-life issues and helps foster a positive atmosphere conducive to educational excellence. The dean assists students with their campus needs and promotes high standards of academic performance, social behavior, and citizenship.

Disability Services Office

South Wing 120, (716) 878-4500
www.buffalostate.edu/offices/disabilityservices

Buffalo State ensures access to its academic programs, services, and activities on campus to qualified individuals with disabilities in accordance with guidelines established by the Rehabilitation Act of 1973, Section 504, and by the Americans with Disabilities Act of 1990. This office provides advocacy and coordinates appropriate accommodations for students with disabilities. To receive services, students must contact the office, provide appropriate documentation, and meet with staff. Together, students and staff plan for support before assistance is given.

Educational Opportunity Program

University College
South Wing 710, (716) 878-4225

The 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. For more information on EOP admission, see page 12.

E. H. Butler Library

(716) 878-6300
www.buffalostate.edu/library

E. H. Butler Library is an ideal place for both the serious researcher and the casual reader. The library serves Buffalo State students and members of the faculty and staff with more than a million research materials, including more than a half million books, and online access to full-text articles from more than 28,000 journals. Visit the library on the Web for access to a wealth of information, including the online library catalog, many full-text databases, and general information about the library, including hours and descriptions of services and resources.

The library's Information Commons provides a variety of services in support of the information needs of the college community. Knowledgeable librarians, circulation staff, and computer student assistants are available to help patrons. Computer labs and wireless hot spots are available in several areas of the library with networked black-and-white and color laser printers. StudyQuad, Butler Library's state-of-the-art study facility, provides a safe, well-lighted area for Buffalo State students to work 24/7 during the fall and spring semesters.

Audiovisual materials and equipment are housed in Media Services. The Curriculum Materials Lab contains elementary- and secondary-level textbooks, children's books, and resources for teachers and others working with children. Archives/Special Collections maintains the official and historic documents of the college dating from the 1860s, as well as a wide range of unique materials. The Creative Studies Library, the largest collection of creativity books in the world, is a noncirculating collection that supports the International Center for Studies in Creativity at Buffalo State. The library's café serves gourmet coffees, teas, pastries, and sandwiches in the library lobby, where students may study or view campus exhibits.

Electronic Learning Office

Instructional Resources
Bulger Communication Center 113, (716) 878-3877, toll free (866) 411-0779
www.buffalostate.edu/offices/ir/E-Learning

The Electronic Learning Office supports the design and development of credit-bearing online and hybrid courses. Staff provide instructional design and technology training for faculty using ANGEL, the college's Learning Management System as well as Turnitin.com and other Web-related software programs supported by the college. The office also serves students by providing a list of online and hybrid courses on its Web site. The office will assist students in locating online courses within the SUNY system.

First-Year and Academic Support Programs

University College

Assistant Dean for First-Year and Academic Support Programs

Twin Rise 100, (716) 878-5906

www.buffalostate.edu/universitycollege

Academic Advisement Center

South Wing 110, (716) 878-5223

www.buffalostate.edu/academicsupport/x7.xml

The Academic Advisement Center facilitates required academic advisement for undeclared students during the initial orientation program and until a student has been accepted into a major. Advisers encourage students to explore potential majors and guide them in completing courses that fulfill the college's degree requirements.

Academic Skills Center

South Wing 330, (716) 878-4041

www.buffalostate.edu/academicsupport

The Academic Skills Center provides academic assistance and tutoring on a no-cost, one-to-one basis. This assistance is provided by a highly skilled staff of trained professional tutors.

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), Credit for Experiential Learning, and Success Track for Academic Readiness (STAR) Program.

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 students 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 Seminars

Twin Rise 100, (716) 878-5906

www.buffalostate.edu/firstyearprograms

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

Learning Communities

Twin Rise 100, (716) 878-5906

www.buffalostate.edu/firstyearprograms

Learning Communities (LC) provides four classes that incoming first-year students take in common around a central theme or concept. 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 can meet with other students, faculty, and professional staff members at special LC events.

Success Track for Academic Readiness Program

South Wing 530, (716) 878-4048

The Success Track for Academic Readiness (STAR) Program provides retention-support services for first-time freshmen accepted to the college through a special admissions initiative. STAR Program staff provide academic advisement and monitor students during their first year.

Great Lakes Center

Classroom Building C215 and Porter Avenue, Buffalo, (716) 878-4329

www.buffalostate.edu/orgs/glc

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, 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 the 40-foot research vessel, the Aquarius, and the 46-foot vessel, the Seneca. It also has an electroshocking boat, a fleet of smaller craft for near-shore sampling, and a variety of sampling instruments.

Intellectual Foundations

University College

Twin Rise 100, (716) 878-5906

www.buffalostate.edu/intellectualfoundations

The Intellectual Foundations program is a new liberal arts curriculum that replaced general education in 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

Classroom Building 310, (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 Statesponsored international study in Australia, Canada, England, Italy, the Netherlands, Puerto Rico, 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

A variety of services is 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 Immigration and Naturalization Service (INS). A three-day 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, 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 and college students. It coordinates a Global Perspectives Program in the Western New York community and the college's International Alumni Program. The office organizes international cultural events throughout the year on campus.

International Studies (minor program)

South Wing 420B, (716) 878-6116

The international 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

www.nse.org

National Student Exchange (NSE) 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 175 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.

Orientation Office

Porter Hall 14J, (716) 878-5336

www.buffalostate.edu/orientation

First-year and transfer students are introduced to many aspects of campus life during orientation sessions, which include everything from academic advisement and course-scheduling assistance to social activities. Orientation offers an opportunity to meet faculty, staff, and upper-division students. Attendance is mandatory, and a program fee is required. All students receive registration materials at orientation.

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 more than 180 events each year, including a Great Performers Series featuring world-class artists from a wide range of performance genres. The PAC also is home to the Buffalo City Ballet, Buffalo Opera Unlimited, and numerous other community and campus events. A recent \$1.2 million equipment upgrade makes the PAC one of the most technologically advanced theaters in Western New York.

Pre-Medical and Pre-Health Professional Advisement

School of Natural and Social Sciences, Dean's Office
Classroom Building A113, (716) 878-6674

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.

Pre-Law Advisement

School of Natural and Social Sciences, Dean's Office
Classroom Building A113, (716) 878-6674

Buffalo State provides pre-law advisement to assist students who plan to attend law school. Faculty members knowledgeable with the legal profession are available for consultation on such matters as recommended undergraduate courses, LSATs, and law school admission 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.

Reserve Officer Training Corps

U.S. Army Reserve Officer Training Corps (ROTC) classes are offered at Buffalo State through Niagara College. 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 is also available to Buffalo State students. The lab meets once a week at either Niagara College 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) 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) for juniors and seniors. Several units in the apartment complex are designated for students with dependent children (under the age of 18). Housing options include honors student housing, Native American, Diversity, and all music suites. Year-round housing is provided for students with dependent children (Family College) and for international students, on a space available basis. All residence halls are smoke free.

The residence hall staff help to guide students in their living environment, promote student health and safety, and provide 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 57 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.

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 work 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

United Students Government (USG) represents the interests of all students and encourages their active participation in educational, recreational, cultural, and social programs and activities. All programs and services are funded through the mandatory student activity fee.

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 activity fee-paying students are members of USG and are eligible to run for an elected position in campuswide elections if they meet the GPA and credit-hour requirements.

Student Life Office

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

The Student Life Office encourages student involvement in a variety of extracurricular experiences, contributes to building the campus community, and helps students develop skills. The office serves as the administrative liaison to the United Students Government (USG) and registers student clubs and organizations. The Student Life area includes Leadership Education, programming, Greek Affairs, Commuter Affairs, Minority Student Services, and Campbell Student Union operations. The office coordinates a variety of programs, such as Union Bash, a semi-annual event held in the Campbell Student Union, and the Nurturing Initiative and Achievement (NIA) Mentoring Program.

Transfer Admission Services

Moot Hall 110, (716) 878-4017
www.buffalostate.edu/admissions

Transfer Admission Services 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 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.

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 prevention 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 Web site, <http://ope.ed.gov/security>, or Buffalo State's Web site, 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.

The department 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 Certification Office

Moot Hall 141, (716) 878-5045

The Veterans Certification Office assists current and prospective students who are veterans, servicepersons, or dependents or survivors of veterans with Veterans Affairs educational benefits. Information on current regulations affecting educational benefits, tutorial assistance, and dependency allowance also is provided. The attendance form can be found on the Web at www.buffalostate.edu/registrar/documents/vetform.html.

Weigel Health Center

(716) 878-6711
www.buffalostate.edu/weigel

The Weigel Health Center provides health and wellness services for all registered students. In addition to diagnosis and treatment of 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 if a clinician is available. There is no charge for most services.

The Outreach Program sponsors professionals and peer educators who present topics on health issues such as wellness, stress management, sexuality, violence, and alcohol- and other drug-abuse prevention. Educational resources 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 immunizations are provided at no charge at the center for those students who need the vaccine. Students must be in compliance to register for classes.

The New York State Public Law also requires that all students enrolled for at least 6 credit hours complete and return the Meningitis Information Response Form to Weigel Health Center. This form is available online at www.buffalostate.edu/weigel.

All full-time students are required to have health insurance. Students with their own health coverage must complete an on-line waiver with proof of health insurance coverage by stated deadlines. Students who have not been approved for waivers will be automatically enrolled in and charged for the Buffalo State College Student Accident and Sickness Plan. Part-time students are not automatically enrolled but may apply for coverage.

Whitworth Ferguson Planetarium

Science Building 118, (716) 878-4911

The Whitworth Ferguson Planetarium is a teaching tool for the college and the community. Students taking astronomy and meteorology courses use the planetarium as a laboratory and assist in maintaining, improving, and operating the equipment and in developing presentations about the planets, stars, constellations, and the earth's atmosphere. The planetarium schedules a number of educational programs and public shows attended by thousands of area schoolchildren and adults 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, and 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 Web site for deadline information.

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.

Success Track for Academic Readiness Program

Buffalo State accepts a limited number of freshmen who would not normally be admissible to the college, contingent upon participation in the Success Track for Academic Readiness (STAR) program. STAR is a one-year transition program designed to assist with adjustment to academic expectations at the college. Participants must meet regularly with assigned advisers and attend all recommended skill-development activities.

Educational Opportunity Program

The 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 not qualify for a dmission under general admission standards and must have a family income equal to or less than published standards. EOP candidates may not apply for Early Decision.

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. A special booklet, *Information for New Students from Abroad*, is available from the Admissions Office and the International Student Affairs Office.

For spring admission, all applications and supporting materials should be submitted no later than October 1 if applicants are in their home country, or no later than November 15 if they are in the United States. For fall admission, all applications and supporting materials should be submitted no later than June 1 if applicants are in their home country, or no later than July 15 if they are in the United States.

Accepted students receive an I-20 form or an IAP-66 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 annual premium for the SUNY plan was \$687.25 for the 2004-2005 academic year. [[Should this figure and academic year be updated?]] The premium for future years is subject to change. 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 \$21,500 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 dormitory, which remains open during the holidays, or in any other dormitory, provided they move out of the dormitory during holidays. (See Student Services section for additional information regarding international students.) This college is authorized under federal law to enroll non-immigrant alien students.

Transfer Students

Admission is based on academic performance in college and on space availability. 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 more than 44 credit hours must apply for and be admitted to specific programs. Those with 44 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 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 colleges.

The State University of New York (SUNY) Board of Trustees in 1998 adopted a resolution that established a general education requirement for all baccalaureate degree candidates at the university's state-operated campuses. The requirement was instituted with students who entered the SUNY system as first-time freshmen in fall 2000. Community colleges have been working closely with their transfer students to ensure that these students complete most, if not all, of the general education requirements at the community college.

Students transferring to Buffalo State with an A.A. or A.S. degree must complete the remaining hours of the Trustees' general education requirements at Buffalo State but are not obligated to take additional Buffalo State general education courses (now referred to as Intellectual Foundations courses) beyond those mandated by SUNY.

This continues the policy established in fall 1996 that waives the Buffalo State Intellectual Foundations requirements for students who enter with an A.A. or A.S. Degree.

Transfer students should understand 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 on page 32 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.

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. Military service courses	15
4. Noncollegiate institutions	15
5. Proprietary institutions	15
Further details may be found in the section on Academic Policies, page xx.	

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 Processing 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
- Monroe Community College
- Niagara County Community College

First-time freshmen who expect to receive an A.A. or A.S. degree from Erie Community College, Genesee Community College, Monroe Community College, or Niagara County 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 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 transfer admission services at Buffalo State or the counseling office at the participating two-year college.

Admission Procedures

The college uses the state's common application form, which may be completed and submitted online at www.suny.edu/student or www.buffalostate.edu/admissions. The paper version of the application may be obtained from the Buffalo State Admissions Office, high school guidance offices, or community college transfer offices. Paper applications must be submitted to the Application Services Center in Albany, New York.

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 also 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.

Nondegree Status

Nondegree 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 nondegree status. To register, complete a one-page application, available from the Admissions Office. Nondegree 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, nondegree students. After completing 15 credit hours of college-level coursework with a minimum GPA of 2.0, they are eligible for degree study. 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; 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.

Readmitted students will be placed in a general education program on the basis of hours earned, corresponding to the current hours of the entering class of 2006. For example, the class entering in fall 2006 could be expected to have 30 credit hours earned by the start of fall semester 2007; therefore, readmitted students with 30 hours or fewer would be placed in Intellectual Foundations; students with 31 hours or more would be placed in General Education 2000.

Readmitted students for fall 2007 will be appropriately placed by the Admissions Office. Readmitted students currently registered who have been placed in Intellectual Foundations may petition to be placed in General Education 2000 and their petitions (and any petitions currently pending) will be granted on the same basis.

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.

Readmission forms are available in the 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 are posted in January online at www.buffalostate.edu/summer.

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

Evening Study

Buffalo State offers 12 undergraduate evening degree programs and four minor programs. The college recognizes that evening students tend to hold daytime jobs and may be somewhat older than the traditional college age. Every effort is made to provide the programs and services necessary for students contemplating career changes.

Adult students will find that 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 71 undergraduate academic majors, the 12 available to evening-only 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. Occasionally courses are offered on weekends.

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 if the student attaches a copy of the award notice with payment.

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 \$2,175 per semester for New York State residents and \$5,305 per semester for out-of-state students. Tuition for part-time undergraduate students is \$181 per credit hour for New York State residents and \$442 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 students is collected by all units of the state university system to finance the operating budget.

Activity Fee

A mandatory activity fee of \$100 per semester for full-time students and \$8.35 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 \$115-per-semester health fee; part-time students pay \$9.60 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 \$125 per semester for full-time students and \$10.50 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.

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 \$2,514 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 \$1,643 per semester.

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 they carry 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 \$849 per year for August 2006 through August 2007. 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 2007–2008 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 2007–2008 Fall and Spring Semesters (*New York State Residents*)

	Commuter	Resident
Fixed Costs (per semester)		
Tuition	\$2,175.00	\$2,175.00
Fees	\$ 512.50	\$ 512.50
Total Fixed Costs	\$ 2,687.50	\$ 2,687.50
Variable Costs (per semester)		
Books and supplies	\$450.00	\$450.00
Maintenance at home	\$ 1,743.00	
Room	—	\$ 2,514.00
Board	—	\$ 1,743.00
Miscellaneous expenses	\$500.00	\$500.00
Transportation	\$500.00	\$500.00
Total Variable Costs	\$ 3,243.00	\$ 5,757.00
Estimated Total Costs/Semester	\$ 5,930.50	\$ 8,444.50
Estimated Annual Cost (<i>two semesters</i>)	\$ 11,861.00	\$16,889.00

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 student's local address of record on file in the Registrar's Office if the student is not a resident student.
3. 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 1.

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

Although the primary responsibility for paying for college rests with the student and family, the goal of the Financial Aid Office is to assist students with finding funding where family resources fall short. Each year between 65 and 70 percent of students receive some form of financial aid while attending Buffalo State. This is usually a combination of grant aid (scholarships and other funding that is considered a gift), student loans (monies that must be repaid at some point), and student employment (work programs where students earn money on a weekly basis to help with their expenses).

Staff in the Financial Aid Office are available year round to assist families with the application process and with questions related to the receipt of their aid. Specific questions can be directed to the Financial Aid Office, Moot Hall, (716) 878-4901. E-mail: finaid@buffalostate.edu. Additional aid information is available at www.buffalostate.edu/financialaid.

Application Procedures

The process of applying for financial aid typically requires time and advance planning. The Financial Aid Office makes a concerted effort to process all aid requests in a timely and accurate fashion. However, students can assist this process by applying early (March or earlier) and by responding to all requests for additional documentation in a timely fashion.

Federal Student Aid

All students must file the Free Application for Federal Student Aid (FAFSA) after January 1 of each year to receive aid for the following fall/spring award year. Award packaging starts on March 1 of each year for the following fall/spring. To receive the maximum aid package, it is important to apply early as some aid has limited funding and is awarded on a first-come, first-served basis. By filing the FAFSA form, students are applying for all federal grant, loan, and work programs administered by the Financial Aid Office.

Though the FAFSA is available in paper form, it is strongly recommended that students complete the FAFSA electronically 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 number. Pin numbers can be requested at www.pin.ed.gov. The pin number serves as the individual's electronic signature on the FAFSA as well as other aid documents and gives access to confidential information on the Internet.

After submitting the FAFSA, a student will receive a Student Aid Report (SAR) from the federal processor. Students who supplied an e-mail address on the FAFSA will receive an e-mail with a link to an electronic version of the SAR on the Web, which they can access and print out. Review the SAR carefully for errors and the appropriate school listing(s). If errors are found, students must correct them. Contact the Financial Aid Office with questions.

At times, Buffalo State may require additional documentation to complete the award process. This may include the submission of tax forms and other documents. This is done to confirm the eligibility of a student to receive aid and/or to ensure the accuracy of information provided on the FAFSA form. If selected, students and parents will be required to provide the office with the requested documentation before aid will be offered or disbursed to the student.

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). Those students who file the FAFSA on the Web will have an opportunity to complete the TAP application on the Web at the same time. New York State residents who don't take advantage of this option can complete it through TAP on the Web, www.tapweb.org, at a later date, or via paper. Those students who want to complete a paper application must contact the New York State Higher Education Services Corporations (HESC) and request that they be sent an Express TAP Application (ETA). After submitting the application, the student will receive a notice of TAP eligibility from HESC for the terms desired.

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 in the Financial Aid Office in the summer for the upcoming fall. The application should be completed and returned to the Financial Aid Office prior to the start of the fall or spring semester to be considered in the pool of candidates that term.

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 students are not admitted to the college through EOP, they cannot join the program at a later time.

Veterans Benefits

Veterans and 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 Certification Office in Moot Hall 141. 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 Office of Vocational and Educational Services for Individuals with Disabilities (VESID). Criteria and funding vary. Applications and eligibility requirements may be obtained at the Buffalo-area VESID office. Further information is available in the Disabilities Services Office, South Wing 120.

Aid to Native Americans

The U.S. Bureau of Indian Affairs offers need-based grants for college study to applicants who are enrolled 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. 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 Office of Indian Education Programs at (202) 208-6123 or www.oiep.bia.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 Indian Education Unit, State Education Department, Room 478 EBA, Albany, NY 12234, (518) 474-0537 or www.emsc.nysed.gov/rss/natamer.

Summer Aid

Summer financial aid at Buffalo State is currently limited to Federal Stafford Loans and, in limited cases, Federal Pell Grants and TAP grants. Students wishing to apply for aid for the summer sessions must complete the supplemental summer aid application that becomes available at the Financial Aid Office during March each year. Since summer aid eligibility is dependent upon a student not having exhausted their eligibility in the fall or spring semesters, it is advisable that students seek advice prior to registering for classes.

Eligibility for Financial Aid

Eligibility for financial aid is based on many factors, including matriculation status, enrollment status, financial need, satisfactory academic progress, and program pursuit.

Matriculation

To be eligible for most forms of financial aid, students must be U.S. citizens or eligible noncitizens 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 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 Stafford 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 financial aid. Students may be eligible for Aid for Part-Time Study (APTS) or a Federal Pell Grant when enrolled less than half time. To receive TAP, students must be enrolled full time (12 credit hours). 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).

Financial Need

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 form. Aid is then awarded based on the resulting comparative measure of need. Students can only be funded up to the amount of the Cost of Attendance.

Satisfactory Academic Progress and TAP/APTS

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 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, below.

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 57 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 in Twin Rise 100.

Satisfactory Academic Progress and Federal Aid

A student must be making satisfactory academic progress at the end of each term to be eligible for federal financial aid. This means a student must have a minimum cumulative GPA of 2.0. Students receiving federal aid must also successfully complete at least two-thirds of the credits attempted at Buffalo State (known as completion rate). The following designations are considered to be attempted but are not considered to be successfully completed: I, N, X, W, U, E, and F grades and courses removed through the academic clemency process. Noncredit remedial courses are counted at their credit equivalence (1 to 3 credits). Courses that are repeated to improve a grade are counted as attempted each time they are taken but are only counted as completed once. Unlike the TAP/APTS programs, every semester is taken into account when measuring a student's progress, whether he or she received federal financial aid or not.

New freshmen are required to successfully complete at least half 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. A student who fails to maintain cumulative GPA or meet completion rate requirements is placed on financial aid probation. If the student is still not making satisfactory academic progress after the probationary semester, he or she may become ineligible for federal financial aid until the required standard is achieved.

In exceptional situations, a student who becomes ineligible may be granted an extension to the probationary period. All appeals of ineligibility should be submitted to the Academic Standards Office, Twin Rise 100. Readmission to the college after an absence does not automatically mean reinstatement of aid eligibility.

All students must be accepted into a major prior to completing 57 credit hours to continue to be eligible for federal aid. Students must also complete their degrees within 150 percent of the published program length as measured in credit hours or they forfeit federal aid eligibility. Generally, that means students can attempt 180 credit hours to complete a bachelor's degree. The 180 credit hours include transfer credit hours and the credit equivalent of noncredit remedial coursework. There is no waiver of the maximum time frame allowed for any reason.

Award Notification

Students who have applied on time should receive an award letter in the late spring or early summer. The award letter will offer the student a package of financial aid, which may include a Federal Pell Grant, a Federal Supplemental Educational Opportunity Grant (FSEOG), an estimated TAP grant, an estimated APTS grant, an EOP grant, Federal Work-Study (FWS), a Federal Perkins Loan, and subsidized or unsubsidized Federal Stafford Loans. Continuing students will receive a notice 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. These steps follow.

Notification and TAP

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.

Notification and Federal Work-Study

Students who have been awarded Work-Study are expected to do an individual job search from among the work-study positions available. Eligible students will receive a letter before the start of the semester with their Work-Study eligibility card to be shown during job interviews. They will also receive a full set of instructions on how to log on to the financial aid Web site to research available positions.

Notification and Federal Perkins Loans

Students who have been awarded a Federal Perkins Loan will be mailed a Perkins Loan Master Promissory Note (MPN) or sent instructions on completing it online at the beginning of the semester for which it was awarded. 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 Perkins MPN is on file at the college, subsequent loans should not require additional MPNs.

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	3	9	21	33	45	60	75	90	105
With at least this cumulative GPA	0.0	1.1	1.2	1.3	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.

Notification and Federal Stafford Loans

First-time borrowers must complete an entrance interview, which explains a borrower's rights and responsibilities. The entrance interview can be done on the Internet and must be completed before loan funds can be disbursed. Each student must submit a Master Promissory Note (MPN) that legally obligates him or her to repay the loan. Most students complete the MPN online through the New York State Higher Education Services Corporation's (HESC's) Web site at www.hesc.com; the note must be signed with the student's HESC PIN. Students who use a lender that does not have loans guaranteed by HESC should bring a completed MPN to the Financial Aid Office for hand certification. Promissory notes must be submitted while the student is enrolled. A promissory note cannot be processed for an enrollment period that has been completed.

If the MPN is signed the first year, subsequent loans do not require additional MPNs. However, in the second year and beyond, when the student receives a Federal Stafford Loan as part of their financial aid package, they will still need to accept, reduce, or decline the load at the self-service Banner site.

Correspondence

The Financial Aid Office will send paper requirement and award letters to all new students until they begin attending Buffalo State. From that time forward, correspondence sent to students will be via campus e-mail. All students are responsible to monitor their e-mail and their account online at the self-service Banner site.

Aid Disbursement

When students are billed for a semester, portions of their financial aid package will also appear on the bill as an offset against the charges. The difference between the two is owed to the school by the due date on the bill. Most grants and loans are considered deferrable aid. Work-study is not deferrable aid, in that it is given to students in the form of a paycheck dependent upon the hours they actually work throughout the semester. Estimates of TAP eligibility are also not deferrable. Students must have a valid TAP award certificate with "SUC Buffalo" listed as the school for TAP to be counted as an offset against the bill.

Disbursement of aid does not actually begin until the second week of the semester, and can take up to one month to be fully disbursed. Aid is credited against the charges owed the school in the order that the aid is disbursed. Once the charges are paid in full, any outstanding aid is given to the student in the form of a refund. All students anticipating receiving a refund of excess aid are strongly encouraged to sign up for direct deposit. Students who have direct deposit will have refunds electronically deposited in their personal bank accounts within 48 hours of the aid being credited to their school account. Students who do not choose to use direct deposit will have a refund check sent to them within 14 days.

Students who have aid in excess of their college bill may also be eligible for a bookstore deferment. A bookstore deferment is a line of credit that allows students to buy their books prior to aid being disbursed. When the financial aid is disbursed, it is then used to repay the bookstore. Students can request book deferments in either the Financial Aid Office or the Student Accounts Office prior to the end of the drop/add period each semester.

The Financial Aid Office also administers an emergency loan program for students needing small amounts of money prior to the disbursement of their aid. To qualify, students must have aid awarded to them in excess of their institutional charges.

Students who have not completed the aid application process and thus have not received an award letter prior to being billed will be charged late fees if the bill is not paid in full by the date due. The same students cannot be granted book deferments or short-term loans. Therefore, it is imperative that all students begin the aid application process in the early spring each year and follow through the process until all steps have been completed prior to the start of the academic year.

Overawards

Each year a number of students receiving aid are over awarded. This occurs in part because students are awarded other forms of assistance (e.g., scholarships, tuition waivers, or loans) 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 college 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 prior to doing so.

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 up to their financial need for participation in exchange programs from the same aid programs offered at Buffalo State. To receive TAP while on exchange, tuition payment must be to a New York State institution.

Scholarships

Buffalo State administers more than 100 scholarships for students demonstrating outstanding leadership qualities, academic abilities, and/or financial need. A partial list of available scholarships appears below. A full list and application details are available at www.buffalostate.edu/scholarship. The Scholarship Office can assist students in locating scholarships offered by agencies not affiliated with Buffalo State. Questions should be directed to the Scholarship Office, Moot Hall 230, (716) 878-4019, scholarship@buffalostate.edu.

The following scholarships are renewable upon maintaining a minimum cumulative GPA and meeting other scholarship requirements:

Presidential Scholarship

Provost Scholarship

All College Honors Scholarship: participation in honors program required

Dr. Anna P. Burrell Diversity Scholarship: participation in Burrell program required

Ross B. Kenzie Family Scholarship

Mildred K. Vogelsang Scholarship: minority students who are science or technology majors

Dr. Marie Dellas and Poppy Dellas Scholarship: juniors and seniors

Genevieve C. and Richard C. Brown Scholarship: female veterans

Gertrude Angert Victor Scholarship: -freshman art education majors

Dougherty Scholarship: EOP freshmen, School of Professions majors

Robert J. Lamendola Scholarship: students graduating from Kenmore East or West High School

Caryl Brennan Scholarship: elementary education majors

M. Robert and Hilda Stein Koren Scholarship: education, speech-language pathology or pre-law majors

Dorothy Mierzwa Pieniadz Scholarship: sophomore elementary education majors

Michael T. Morrissey Scholarships

Canadian Incentive Grant

The following scholarships are not renewable and must be applied for each year:

All Class Year Scholarships

Alpha Sigma Alpha Evelyn G. Bell Memorial Scholastic Excellence Award

Alumni Scholarships

Andrew Brown Choral Arts Scholarship: choral music performance majors

Bridge the Gap Scholarship: preference to seniors

Buffalo Federation of Women's Clubs Scholarship

College Club of Buffalo Scholarship: must live in Erie County

Daniel Upton Scholarship: female education majors

Eleanor Blackburn International Student Scholarship

Frances Siu Lan Tyau International Student Scholarship

Gloria Shea Scholarship: elementary education majors

Hudson Scholarship: preference to Orchard Park High School graduates

Mothers Club at Central Park United Methodist Church

Pano Scholarship: single mothers and underrepresented minorities

Study Abroad Scholarships

William A. and Virginia M. Troy Scholarship: must be resident of Erie or Niagara County

Zan Robinson Family Scholarship: preference to Erie Community College transfers majoring in English

Drs. Paul A. and Margaret Eschner Bacon Scholarship: art education or technology education majors

The Seals Family Memorial Scholarship: elementary education majors

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 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 Educational Opportunity Program (EOP), Success Track for Academic Readiness (STAR), 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 coordinator of 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. Students may also access their audit sheets directly at Degree Navigator.

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 fulfill 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 Education Rights and Privacy Act (FERPA)

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

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. Students should submit to the registrar, dean, head of the academic department, or other appropriate official written requests that identify the record(s) they wish 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 or misleading. Students may ask the college to amend a record that they believe is inaccurate or misleading. They should write the college official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.

If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and advise the student of his or her 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 consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational 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 (such as an attorney, auditor, or collection agent); a person serving on the College Council; 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 responsibility. Upon request, the college 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, e-mail address, telephone number, dates of attendance, part-time/full-time status, class, and academic advisor.
- b. Most recent previous institution attended, major field of study, awards, honors (including dean's list), degree(s) conferred (including dates).
- c. Past and present participation in officially recognized sports and activities, physical factors (height, weight of athletes), 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 are: Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue, SW, Washington, DC 20202-4605.

Academic Calendar

Check 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 required to register within two weeks of their first day of registration eligibility. Procedures for registering can be found on the Registrar's Office Web site. Printed class schedules are available at the Registrar's Office, Moot Hall, in April for the fall semester and in late October for spring. Course listings are also 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 must present proof of advisement before being allowed to register.
- 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 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. The student's academic adviser will review requests for overload.

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.

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.

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 intersemester. 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 intersemester) may file withdrawal forms signed by the appropriate instructor or designee. 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 five 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, 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.

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 in the class schedule 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 intersemester. 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 are:

- 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 (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 (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 (withdrawn) grades may be submitted only when a student has formally withdrawn from a course.

I (incomplete) grades may be submitted only when the department chair or program coordinator has been properly notified.

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 P grade provides credit but no quality points and is not counted in total hours used to determine cumulative average. An 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 intersemester. 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	C	=	2.0
A-	=	3.67	C-	=	1.67
B+	=	3.33	D+	=	1.33
B	=	3.0	D	=	1.0
B-	=	2.67	E	=	0.0
C+	=	2.33			

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 student 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
		<u>14</u>			<u>28.67</u>

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 a clerical 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 for 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 who start as freshmen at the college must declare a major before completing 45 credit hours. It is strongly recommended that new freshmen declare a major upon completing 30 credit hours. Transfer students who have

completed more than 30 credit hours must declare a major at the time of application for admission. Before declaring a major, students should seek the advice of the chair of the department or division responsible for the major. A Change of Major form, available from the chair, 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 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 Registrar'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 28 credit hours
Sophomores	29 to 56 credit hours
Juniors	57 to 88 credit hours
Seniors	89 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/she has earned at least a C in CWP 101. Course challenges will not be permitted.

Students who are considering taking a composition course at another institution that they expect will fulfill the Buffalo 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 6-credit-hour 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) is required in a format appropriate to the field
- Evidence of critical thinking

Satisfactory completion of CWP 102 is a prerequisite for all courses used in fulfillment of the Writing Across the Curriculum requirement. The (W) courses must be completed at Buffalo State and are not transferable from other institutions. Some departments have established an alternate method, whereby their majors may satisfy the Writing Across the Curriculum requirement.

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 English as a Second Language (ESL) students. International students must complete the Basic Writing requirement prior to 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 45 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 two “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 (see page 31) 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 candidates. 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 Web site 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. 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 (AE) 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:

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. No students with outstanding grades of I, U, X, or N may be considered for honors.

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. At the time of printing, 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

The term “in good academic standing” means that a student is eligible or has been allowed to register for and undertake academic coursework at the college for the term in question. In some instances, students may be defined as being “on academic probation.” The mechanism of academic probation, including any accompanying constraints upon students’ activities, is intended as an educational device designed to encourage greater effort on the part of students who appear to be having difficulty in meeting certain academic standards. Placement on academic probation may precede denial of the right to register for academic coursework if certain conditions are not met, but students on academic probation are considered to be in good academic standing. Any questions concerning whether or not an individual student is in good academic standing will be determined by the campus committee on academic standards.

Probation

Students whose cumulative GPA falls below a 2.0 are automatically classified as “on academic probation and not in good academic standing with the college.” The cumulative GPA is determined at the end of each semester and is included on the term grade report. Students on probation have until the completion of the next regular semester to raise the cumulative GPA to a 2.0 or higher. Failure to do so by that time may result in dismissal from the college.

Students facing dismissal because of a low cumulative GPA may appeal that status by seeking a hearing before the appropriate Probation Appeal Board. An appointment may be made in the dean’s office of the faculty responsible for the student’s major program. Undeclared students and Individualized Studies majors may make an appointment to appeal a recommendation of academic dismissal by contacting the Academic Standards Office, Twin Rise 100.

Academic Dismissal

Students may be dismissed from the college for the following reasons:

1. Failing any course for the third time.
2. Failing one-half or more of a semester’s work.
3. Failing to satisfy the probation requirements.
4. Failing to complete basic skills requirements by the end of their sophomore year.
5. Determination of two academic misconduct offenses.

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 at Buffalo State will be considered in computing the cumulative average, unless the student has opted for Academic Clemency. Readmission forms are available in the Admissions Office, Moot Hall.

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 to 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). 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. An Override

Request Form—undergraduate request to enroll in graduate course must be signed by the instructor and the department chair then submitted to the Graduate School. The form is available online at www.buffalostate.edu/graduateschool/forms or from the appropriate academic department.

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 options: individualized, human services administration, public relations management, and environmental research and education), and student personnel 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 education (grades 1–6); childhood education (grades 1–6), including initial teaching certification; early childhood education (birth–grade 2); early childhood education (birth–grade 2), including initial teaching certification; earth science education (7–12); educational computing; English education (7–12); literacy specialist (birth–grade 6); mathematics education (7–12); physics education (7–12); physics education (7–12), alternative certification; social studies education (7–12); special education: adolescence; special education: childhood; special education: early childhood; speech–language pathology; teaching bilingual exceptional individuals; 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, and museum studies. 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, 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 at (716) 878-5601; www.buffalostate.edu/graduateschool; The Graduate School, Cleveland Hall 204; or e-mail gradoffc@buffalostate.edu.

Alternate 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 deadline published in the class schedule 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 300W 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 300W, 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, Cleveland Hall 210, (716) 878-5907.

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 courseload at Buffalo State. They may enroll for no more than one course elsewhere in any semester. Students who fall below the 12-credit-hour courseload 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 intersemester.

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 deadline date published in the class schedule 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 is 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 deadline date published in the class schedule 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

Up to 15 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	30
<i>No more than 18 credit hours may be in general examinations.</i>	
Course challenge	30
Military service courses	15
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 on page [[TK]].

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 (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 ID number or the student's 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've 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/teach.htm. 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 Web site 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 Web site. Students completing an Early Childhood 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://audit.buffalostate.edu/student>. 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 academic 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 Web site at www.buffalostate.edu/academicstandards/x463.xml.

The assistant to the dean for academic standards, University College, makes decisions on requests for waivers that do not relate to a student's major after consulting with the Academic Appeals Committee. The assistant to the 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 A.P. 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, 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 dispute 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:
 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 alternate 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 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

Academic Organization

The college is organized into four schools: the School of Arts and Humanities, the School of Education, the School of Natural and Social Sciences, and the School of the Professions. 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 of the major areas of study or interdisciplinary programs described below fall under the responsibility of one or more of the departments.

At the time this catalog was printed, the college was undergoing academic reorganization; organization stated below is subject to change.

Each program description, beginning on page 42, 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 Humanities, and Theater. The School of Arts and Humanities also offers degree programs in individualized studies.

School of Education

The following undergraduate departments are in the School of Education: Educational Foundations, Elementary Education and Reading, and Exceptional 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, History and Social Studies Education, Mathematics, 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 Professions: Business, Computer Information Systems, Creative Studies, Criminal Justice, Dietetics and Nutrition, Health and Wellness, Hospitality and Tourism, Social Work, Speech-Language Pathology, Student Personnel Administration, and Technology (includes fashion). 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.

COLLEGEWIDE DEGREE REQUIREMENTS FOR BACCALAUREATE DEGREES

Students entering Buffalo State before fall 2006 or who have been readmitted 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 fall 2006 or later. 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 the 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/registrar/documents/intellectualfoundations.htm.

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

*Required in the first year at Buffalo State for all students entering fall 2006 or later with fewer than 57 credits. Students entering with more than 57 credit hours will take BSC 301 Advanced Foundations of Inquiry.

**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 3 years of high school math or attained an SAT math score of 460 or an ACT math score of 16.

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

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

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). Students may use one course from their primary major toward their Intellectual Foundations requirements in any single one of the following categories: arts, humanities, natural sciences, social sciences, American history and civilization, western civilization, and non-western civilization. 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 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 45 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 character code is used to identify which Intellectual Foundations requirement(s) a course fulfills. This information is printed in the undergraduate class schedule. The Intellectual Foundations codes are as follows:

7	=	Basic Writing
X	=	Mathematics/Quantitative Reasoning
J	=	Cognate Foundations: Arts
Q	=	Cognate Foundations: Humanities
K	=	Cognate Foundations: Natural Sciences
Y	=	Cognate Foundations: Social Sciences
1	=	Foundations of Civilizations: American History
4	=	Foundations of Civilizations: Western Civilization
5	=	Foundations of Civilizations: Non-western Civilizations
L	=	Technology and Society
8	=	Diversity
P	=	Basic Oral Communication
W	=	Writing Across the Curriculum
F	=	Foreign Language

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.

Dual 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 IF the student passes the high school Regents exam. Proficiency in foreign language also may be achieved by completing 6 credits on the CLEP test. Sign language may substitute for a foreign language for students in the following majors: childhood education and early childhood education offered through the Elementary Education and Reading Department; exceptional education offered through the Exceptional Education Department; and speech-language pathology offered through the Speech-Language Pathology Department. 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 45 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. For more information, see page 27 of this catalog.

Basic Writing Requirement

The college requires all matriculated students to demonstrate college-level skills in composition. For more information, see page 27 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 only be earned simultaneously 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 the chart on page 41.

Courses that may be used to satisfy the 39–66 credit hour Intellectual Foundations requirement:

Foundations of Inquiry:
BSC 101 (*required in the first year for all students beginning their college career anywhere fall 2006*)

Basic Writing

CWP 101
 CWP 102

Mathematics/Quantitative Reasoning

MAT 103
 MAT 122
 MAT 126
 MAT 161
 MAT 311

Cognate Foundations: Arts

AED 100
 AED 200
 DAN 200
 DAN 220
 DAN 224
 DES 114
 DES 190
 FAR 100
 FAR 101
 FAR 250
 MUS 201
 MUS 208
 MUS 210
 THA 106

Cognate Foundations: Humanities

COM 100
 ENG 151
 ENG 205
 ENG 206
 ENG 210
 ENG 211
 ENG 220
 ENG 221
 ENG 240
 HUM 100
 PHI 101
 PHI 102
 PHI 110
 REL 104
 REL 205
 REL 206
 SPC 103

Cognate Foundations: Natural Sciences

ANT 100
 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/GEG 241
 PHY 100
 PHY 107
 PHY 111
 SCI 100
 SCI 231
 SCI 232

Cognate Foundations: Social Sciences

ANT 144
 ECO 101
 ECO 201
 ECO 202
 GEG 102
 PSY 101
 SOC 100
 SOC 240

Foundations of Civilizations: American History

ECO 103
 HIS 106
 HIS 107

Foundations of Civilizations: Western Civilization

ANT 303
 GEG 364
 HIS 115
 HIS 116
 HIS 117
 PHI 301
 PHI 310
 REL 105

Foundations of Civilizations: Non-western Civilizations

ANT 101
 ANT 301
 ANT 327
 ANT 329
 ANT 377
 ANT 381
 GEG 359
 GEG 360
 HIS 230
 HIS 307
 HIS 310
 HIS 320
 HIS 338
 HIS 373
 REL 303
 REL 321

Technology and Society

CIS 105
 ENS 100
 GES 111
 GES 223
 HIS 332

Diversity

AAS 321
 ATS 325
 EDU 310
 ENG 240
 EXE 100
 GEG 309
 HIS 302
 HIS 322
 HIS/SSE/363
 PSY 387
 SOC 240
 SOC 310
 SOC 312
 SOC 321
 SOC 350
 SOC 351
 SPC 311
 SPC 333
 SWK 319

EXE 100
Basic Oral Communication

GES 460
 SED 407
 SED 408
 SPC 205

Foreign Language

AAS 101/102
 AAS 201/202
 CHI 101/102
 CHI 201/202
 FRE 101/102
 FRE 110
 FRE 201/202
 GER 101/102
 GER 201/202
 GWK 101/102
 ITA 101/102
 ITA 201/202
 LAT 101/102
 SPA 101/102
 SPA 201/202
 SWA 101/102
 SWA 201/202

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.

UNDERGRADUATE MAJOR PROGRAMS AT A GLANCE

*Evening study available. See page 41 for minor programs.

Major Program	Degree	HEGIS code	Buffalo State code	Program description on page	Department
Anthropology	B.A.	2202	0733	42	Anthropology
Art	B.A.	1002	0105	42	Fine Arts
Art Education (K–12) ¹	B.S.	0831	0100	42	Art Education
Art History	B.A.	1003	0130	43	Fine Arts
The Arts	B.A.	1001	0110	44	Theater
Biology	B.A.	0401	0725	44	Biology
Biology Education (7–12) ¹	B.S.	0401.01	0631	45	Biology
Biology Education (7–12; 5–6 Extension) ¹	B.S.	0401.01	0630	45	Biology
Business Administration	B.S.	0506	0425	47	Business
Business and Marketing Education ¹	B.S.	0838.01	0406	47	Educational Foundations
Career and Technical Education ^{1*}	B.S.	0839.03	0800	48	Educational Foundations
Chemistry	B.A.	1905	0726	49	Chemistry
Chemistry Education (7–12) ¹	B.S.	1905.01	0632	49	Chemistry
Chemistry Education (7–12; 5–6 Extension) ¹	B.S.	1905.01	0637	50	Chemistry
Childhood Education (Grades 1–6)	B.S.	0802	0520	52	Elementary Education and Reading
Communication Studies	B.A.	0699	0706	53	Communication
Computer Information Systems*	B.S.	0702	0825	54	Computer Information Systems
Criminal Justice	B.S.	2105	0771	55	Criminal Justice
Design	B.F.A.	1009	0180	55	Design
Design	B.S.	1009	0175	56	Design
Dietetics: Coordinated Program	B.S.	1306	0410	57	Dietetics and Nutrition
Dietetics: Didactic Program	B.S.	1306	0410	58	Dietetics and Nutrition
Early Childhood and Childhood Education (Birth–Grade 6)	B.S.	0802	0522	52	Elementary Education and Reading
Early Childhood Education (Birth–Grade 2)	B.S.	0802	0521	52	Elementary Education and Reading
Earth Science Education (7–12) ¹	B.S.	1917.01	0633	59	Earth Sciences and Science Education
Earth Science Education (7–12; 5–6 Extension) ¹	B.S.	1917.01	0636	59	Earth Sciences and Science Education
Earth Sciences	B.S.	1917	0737	61	Earth Sciences and Science Education
Economics	B.A.	2204	0704	61	Economics and Finance
Economics	B.S.	2204	0702	62	Economics and Finance
Electrical Engineering Technology (Electronics)*	B.S.	0925	0821	62	Technology
Electrical Engineering Technology (Power and Machines)*	B.S.	0925	0820	63	Technology
English	B.A.	1501	0705	63	English
English Education (7–12) ¹	B.S.	1501.01	0610	63	English
Exceptional Education	B.S.Ed.	0808	0299	65	Exceptional Education

(Dual Certification—Teachers of Special Education and Elementary Education)

¹ Postbaccalaureate certification program also available.

Major Program	Degree	HEGIS code	Buffalo State code	Program description on page	Department
Fashion and Textile Technology	B.S.	1303	0401	66	Technology
Forensic Chemistry	B.S.	1999.20	0773	66	Chemistry
French Education (7–12) ¹	B.S.	1102.01	0651	67	Modern and Classical Languages
French Language and Literature	B.A.	1102	0709	67	Modern and Classical Languages
Geography	B.A.	2206	0715	68	Geography and Planning
Geology	B.A.	1914	0727	68	Earth Sciences and Science Education
Health and Wellness	B.S.	0837	0739	69	Health and Wellness
History	B.A.	2205	0716	69	History and Social Studies Education
Hospitality Administration	B.S.	1307	0437	69	Hospitality and Tourism
Humanities	B.A.	4903	0717	70	Philosophy and Humanities
Individualized Studies*	B.S.	4901	0556	70	Deans' Offices
Industrial Technology*	B.S.	0925	0810	71	Technology
Interior Design	B.F.A.	1009	0180	71	Interior Design
Journalism	B.A.	0602	0708	71	Communication
Mathematics	B.A.	1701	0718	72	Mathematics
Mathematics—Applied	B.S.	1703	0719	72	Mathematics
Mathematics Education (7–12) ¹	B.S.	1701.01	0721	73	Mathematics
Mathematics Education (7–12; 5–6 Extension) ¹	B.S.	1701.01	0721	73	Mathematics
Mechanical Engineering Technology*	B.S.	0925	0822	74	Technology
Media Production (Broadcasting)	B.A.	0603	0707	75	Communication
Music	B.A.	1005	0125	75	Music
Music Education (Pre-K–12)	B.Mus.	1005	0126	75	Music
Painting	B.F.A.	1002	0155	76	Fine Arts
Philosophy	B.A.	1509	0720	76	Philosophy and Humanities
Photography	B.F.A.	1011	0160	77	Fine Arts
Physics	B.A.	1902	0728	77	Physics
Physics	B.S.	1902	0778	78	Physics
Physics-Engineering 3-2 Cooperative Program	B.S.	1902	0778	78	Physics
Physics Education (7–12) ¹	B.S.	1902.01	0634	78	Physics
Physics Education (7–12; 5–6 Extension) ¹	B.S.	1902.01	0635	79	Physics
Political Science	B.A.	2207	0722	80	Political Science
Printmaking	B.F.A.	1009	0165	81	Fine Arts
Psychology	B.A.	2001	0723	81	Psychology
Psychology	B.S.	2001	0724	82	Psychology
Public Communication	B.A.	0699	0703	82	Communication
Sculpture	B.F.A.	1002	0170	83	Fine Arts
Social Studies Education (7–12) ¹	B.S.	2201.01	0640	83	History and Social Studies Education
Social Studies Education (7–12; 5–6 Extension) ¹	B.S.	2201.01	0641	84	History and Social Studies Education
Social Work*	B.S.	2104	0435	87	Social Work
Sociology	B.A.	2208	0730	87	Sociology
Sociology—Applied	B.S.	2208	0732	87	Sociology
Spanish Education (7–12) ¹	B.S.	1105.01	0656	88	Modern and Classical Languages
Spanish Language and Literature	B.A.	1105	0714	89	Modern and Classical Languages
Speech-Language Pathology	B.S.	1220	0325	89	Speech-Language Pathology
Technology Education ¹	B.S.	0839.01	0500	90	Technology
Theater	B.A.	1506	0115	91	Theater
Urban and Regional Analysis and Planning*	B.S.	2214	0738	91	Geography and Planning

¹ Postbaccalaureate certification program also available.

UNDERGRADUATE MINOR PROGRAMS AT A GLANCE

**Evening study available.*

Minor Program	Buffalo State Code	Department
African and African American Studies	1734	Dean's Office, Natural and Social Sciences
Aging	1018	Psychology
Anthropology	1733	Anthropology
Art History	1130	Fine Arts
Art Therapy	1006	Art Education
Astronomy	1007	Earth Sciences and Science Education
Biology	1725	Biology
Business Economics	1030	Economics and Finance
Chemistry	1726	Chemistry
Coaching	1008	Coaching and Physical Education
Computer Information Systems*	1825	Computer Information Systems
Creative Studies	1015	Center for Studies in Creativity
Criminal Justice*	1771	Criminal Justice
Dance	1020	Theater
Design (Ceramic, Fiber, Furniture, Jewelry)	1780	Design
Deviance	1009	Sociology
Economic Policy Analysis	1029	Economics and Finance
English	1705	English
Environmental Science	1011	Earth Sciences and Science Education
Forensic Anthropology	1732	Anthropology
French	1709	Modern and Classical Languages
Geography	1715	Geography and Planning
Geology	1727	Earth Sciences and Science Education
German	1710	Modern and Classical Languages
History	1716	History and Social Studies Education
Hospitality and Tourism	1437	Hospitality and Tourism

Minor Program	Buffalo State Code	Department
International Economics	1035	Economics and Finance
International Studies	1036	International and Exchange Office
Italian	1711	Modern and Classical Languages
Mathematics	1718	Mathematics
Meteorology and Climatology	1663	Geography and Planning
Museum Studies	1650	History and Social Studies Education
Painting	1155	Fine Arts
Photography	1160	Fine Arts
Physics	1778	Physics
Planning	1738	Geography and Planning
Political Science	1722	Political Science
Printmaking	1165	Fine Arts
Psychology	1724	Psychology
Public Administration	1019	Political Science
Quality*	1028	Technology
Religious Studies	1017	Philosophy and Humanities
Safety Studies*	1005	Technology
Sculpture	1170	Fine Arts
Social Welfare	1435	Social Work
Sociology	1730	Sociology
Spanish	1714	Modern and Classical Languages
Speech	1120	Communication
Theater	1115	Theater
Women's Studies	1016	Dean's Office, Natural and Social Sciences
Writing	1027	English

ANTHROPOLOGY

(0733)

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, cultural anthropology, folklore, linguistics, and physical anthropology. 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 Requirements39–66 cr

Total Required Credit Hours in Anthropology33

A. Required Courses (12 cr)

ANT 100	Human Origins
ANT 101	Understanding Culture
ANT 315W	Research Methods
ANT 405W	History of Anthropological Thought

B. Electives (15 cr)

Select one course from each of the following areas:

Archaeology (3 cr)

ANT 308	Archaeological Method
ANT 312	Archaeology of North America
ANT 329	World Prehistory
ANT 377	Ancient Civilization
ANT 415	Seminar in Archaeology

Physical Anthropology (3 cr)

ANT 203	Human Variation
ANT 320	Human Growth in Anthropological Perspective
ANT 321	Primate Behavior
ANT 324	The Human Skeleton
ANT 325	Forensic Anthropology
ANT 326	The Human Fossil Record

Regional Courses (3 cr)

ANT 301	Indigenous Peoples of Eastern North America
ANT 303	The Anthropology of Europe
ANT 305	Peoples of Africa
ANT 330	Pacific Islanders

Topical Courses (3 cr)

ANT 102	Introduction to Ethnological Analysis
ANT 144W	Introduction to Folklore and Folklife
ANT 307	Urban Anthropology
ANT 327/HEW 327	Medical Anthropology
ANT 340	Women in Anthropological Perspective
ANT 360	Folklore of Women
ANT 362	Urban Folklore
ANT 365	Practicing Anthropology
ANT 367	Cultural Ecology
ANT 370	The Anthropology of Contemporary Issues
ANT 375	Humanistic Anthropology
ANT 380	Language and Culture
ANT 381	Religion, Magic, and Culture
ANT 382	Culture and Personality
ANT 384	Culture, Social Control, and Law
ANT 411	African Family
ANT 412	Seminar in Anthropology

Experiential Courses (3 cr)

ANT 308	Archaeological Method
ANT 488	Internship
ANT 495	Project
ANT 498	Honors Research
ANT 499	Independent Study

Consult department for additional options.

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

All College Electives21–48 cr

Total Required Credit Hours120 cr

Note: ANT 389 may be used to fill one or more of the elective requirements according to content in any given semester. Please contact your adviser to determine the appropriate designation.

APPLIED SOCIOLOGY

See Sociology—Applied.

ART

(0105)

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 Requirements39–66 cr

Total Required Credit Hours in Art42 cr

A. Required Courses (18 cr)

DES 101	Introductory Design 2D I
DES 103	Introductory Design 3D I
FAR 101	Drawing I
FAR 102	Drawing II
FAR 250	Art History I
FAR 251	Art History II

B. Electives in Fine Arts and/or Design (24 cr)

All College Electives 12–39 cr

Total Required Credit Hours120 cr

ART EDUCATION (K–12)

(0100)

Art Education Department Bachelor of Science (HEGIS 0831)

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

The art education program prepares students for initial certification to teach pre 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

ART EDUCATION (K-12; POSTBACCALAUREATE)

(7010)

Art Education Department Postbaccalaureate Teacher Certification Program (HEGIS 0831)

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

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 program, which includes fine arts, design, and art education 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

(0130)

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 B.A. degree program in art history introduces students to the nature and history of artistic development in the Western world. This program is conceived as one of the disciplines of the liberal arts and is envisioned as a preparation for graduate study in art history, as well as for careers in art librarianship, museum work, slide curatorship, historic preservation, and art conservation.

Intellectual Foundations Requirements	39-66 cr
Total Required Credit Hours in Art History	42 cr

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 primary 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 Requirements39-66 cr

Total Required Credit Hours in Art Education36 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 Design36 cr

A. Required Fine Arts Courses (12 cr)

FAR 101	Drawing I
FAR 102	Drawing II
FAR 250	Art History I
FAR 251	Art History II

B. Required Design Courses (12 cr)

DES 101	Introductory Design 2D I
DES 103	Introductory Design 3D I
Two electives selected by advisement.	

C. Studio Electives Selected by Advisement (12 cr)

All College Electives0-6 cr

Total Required Credit Hours120 cr

BIOLOGY

(0725)

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.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Biology35–36 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, BIO 322 or BIO 324) 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	Microbiology (4)
BIO 450	Recombinant DNA Technology (4)

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

BIO 305	Molecular Biology (4)
CHE 470	Biochemistry
Elective biology course (300–400 level, except BIO 308–BIO 309, BIO 322, or BIO 324) selected by advisement (4 cr)	

Total Required Credit Hours in Other Fields8–18 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
CHE 305	Physical Chemistry I

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 and CHE 305 are required of biotechnology students who choose to take CHE 470.

Recommended Courses in Related Fields

CHE 202, CHE 203, CHE 204, PHY 111, PHY 112, MAT 126
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All College Electives0–38 cr

Total Required Credit Hours120 cr

A. Required Courses (24 cr)

FAR 101	Drawing I
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 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 (18 cr)

Select three courses from the following:

FAR 325	History of Photography
FAR 351	Art of the Ancient World
FAR 352	Art and Culture of Islam
FAR 353	Art and Culture of Egypt and the Near East
FAR 355	Art and Culture of Rome
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 375	Introduction to Asian Art
FAR 376	Indian Art
FAR 377	Art of China and Japan
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 Electives12–39 cr

Total Required Credit Hours120 cr

THE ARTS

(0110)

Theater Department Bachelor of Arts (HEGIS 1001)

Rockwell Hall 203 (716) 878-6416

The arts program is an individually designed series of major courses that emphasize the performing arts and prepare students for graduate study. Students with interests, career goals, and talents that embrace an inter-arts approach work closely with a faculty mentor. Such fields as dance, choreography, pop music and culture, arts criticism, arts management, arts therapy, technical theater, and music theater demand a multidisciplinary approach.

The honors option is highly recommended for interdisciplinary studies. Students should contact the department for information. Nineteen- to 21-credit minor programs in dance, music, and theater enhance other major programs.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in the Arts36 cr

A. Required Courses (15 cr)

Three credit hours in each of the following areas:

Dance
Design
Fine Arts
Music
Theater

B. Elective Courses Selected by Advisement (21 cr)

At least 6 credit hours each from three of the above areas.

All College Electives18–45 cr

Total Required Credit Hours120 cr

BIOLOGY EDUCATION (7–12)

(0631)

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 Requirements39–66 cr

Total Required Credit Hours in Biology30 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 (except BIO 322 or BIO 324).

Total Required Credit Hours in Professional Education24 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 Teaching12 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 Certification30 cr

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

B. Cognate Sciences* (23 cr)

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

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 Hours138–156 cr

BIOLOGY EDUCATION (7–12; 5–6 EXTENSION)

(0630)

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 512. 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 Requirements39–66 cr

Total Required Credit Hours in Biology30 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 (except BIO 322 or BIO 324).

Total Required Credit Hours in Professional Education30 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 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 Teaching12 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 Certification30 cr

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

B. Cognate Sciences* (23 cr)

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

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 Hours137–165 cr

BIOLOGY EDUCATION (7–12; POSTBACCALAUREATE)

(7013)

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 Biology30 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 (except BIO 322 or BIO 324).

Total Required Credit Hours in Professional Education24 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 Teaching12 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 Certification36 cr

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

B. Cognate Sciences (23 cr)

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

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 Hours102 cr

BIOLOGY EDUCATION (7–12; 5–6 EXTENSION; POSTBACCALAUREATE)

(7016)

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 Biology30 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 (except BIO 322 or BIO 324).

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 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 Teaching12 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 Certification36 cr

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

B. Cognate Sciences (23 cr)

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

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 Hours108 cr

BROADCASTING

See Media Production

BUSINESS ADMINISTRATION

(0425)

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, as well as successful completion of BUS 312, CIS 101, and ECO 201 or ECO 202, and have a minimum cumulative GPA of 2.5. Successful completion is defined as achieving a minimum grade of C. Admission requirements for first-year and transfer students are under review and may change. Please contact the business department for current information on admission requirements.

Transfer students must meet the residency requirement of 21 credit hours of upper-level coursework from the department.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Business60 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 328	Advertising Campaign Management
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 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

C. Recommended Business Electives (6 cr)

Any upper-level Business Department course that is not required or included in your concentration may be taken as an elective. Students may participate in the internship program by enrolling in BUS 378: Business Professional Practice. Foreign language competency recommended.

All College Electives0–21 cr

Total Required Credit Hours120–126 cr

BUSINESS AND MARKETING EDUCATION

(0406)

Educational Foundations Department Bachelor of Science (HEGIS 0838.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 306 (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 evidence of successfully completing BUS 312, BUS 324W, and BUS 301W, and have a minimum cumulative GPA of 2.5. Successful completion is defined as achieving a minimum grade of C.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Business36 cr

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

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	Applied Teaching Methods in Business/Marketing Education
BME 415	Student Teaching (6)
BME 416	Student Teaching (6)
EDF 303	Educational Psychology
EDU 416	Teaching Reading in Secondary Schools
EXE 100	Nature and Needs of Individuals with Special Needs

All College Electives0–12 cr

Total Required Credit Hours120–135 cr

BUSINESS AND MARKETING EDUCATION (POSTBACCALAUREATE)

(7019)

Educational Foundations Department Postbaccalaureate Teacher Certification Program HEGIS (0838.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 306 (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 business/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 Core36 cr
Accepted courses per review of Business and Marketing Education Program.

Professional Core33 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	Applied Teaching Methods in Business Education
BME415	Student Teaching (6)
BME 416	Student Teaching (6)
EDF 303	Educational Psychology
EDU 416	Teaching Reading in Secondary Schools
EXE 100	Nature and Needs of Individuals with Special Needs

Total Required Credit Hours69 cr

CAREER AND TECHNICAL EDUCATION*

(0800)

Educational Foundations Department Bachelor of Science (HEGIS 0839.03)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 306 (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 Requirements39–60 cr

Total Required Credit Hours in Career and Technical Education66 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 Vocational Technical Subjects
CTE 413	Practice Teaching and Observation
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 Electives0–15 cr

Total Required Credit Hours120–132 cr

CAREER AND TECHNICAL EDUCATION* (POSTBACCALAUREATE)

(7022)

Educational Foundations Department Postbaccalaureate Teacher Certification Program (HEGIS 0839.03)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 306 (716) 878-4717

For information about this program, contact the Educational Foundations Department.

*Evening study available.

CHEMISTRY

(0726)

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. The chemistry concentration has been 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.

Admission Requirements: None at the freshman level. 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 criteria may be transferred as elective credit.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Chemistry42–44 cr

A. Required Courses (28 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)

B. Concentration Courses

Students are required to complete one of the following concentrations:

Chemistry Concentration¹ (14 cr)

- CHE 310 Literature of Chemistry (1)
- CHE 403 Instrumental Analysis (4)
- CHE 460 Inorganic Chemistry
- CHE 461 Inorganic Chemistry Lab (2)
- CHE 470 Biochemistry I
- CHE 471 Biochemical Techniques (1)

¹In 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 (15–16 cr)

- CHE 310 Literature of Chemistry (1)
- CHE 470 Biochemistry I
- CHE 471 Biochemical Techniques (1)
- 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 Microbiology (4)
- BIO 450 Recombinant DNA (4)
- Research-based course (CHE 495 or BIO 495)

Total Required Credit Hours in Other Fields20–24 cr

- BIO 211 Introduction to Cell Genetics (4)
- 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)
- PHY 111 University Physics I (4)
- PHY 112 University Physics II (4)

Note: BIO 211 is required for biochemistry concentration

All College Electives0–19 cr

Total Required Credit Hours120–128 cr

CHEMISTRY EDUCATION (7–12)

(0632)

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 Requirements39–66 cr

Total Required Credit Hours in Chemistry42 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 Education24 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 Teaching12 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 Certification41 cr**A. One Year (or Equivalent) of a Foreign Language (6 cr)****B. Cognate Sciences* (23 cr)**

GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 111, PHY 112	University 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)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics* (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)

Some of these courses may be counted in the Intellectual Foundations requirements (above) or as electives.*Total Required Credit Hours152–167 cr**

CHEMISTRY EDUCATION (7–12; 5–6 EXTENSION)

(0637)**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 Requirements39–66 cr**Total Required Credit Hours in Chemistry42 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 Education30 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 Teaching12 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 Certification40 cr**A. One Year (or Equivalent) of a Foreign Language (6 cr)****B. Cognate Sciences* (23 cr)**

GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 111, PHY 112	University 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)

Select one course from the following:

GES 111	General Oceanography
GES 131	Introductory Astronomy
GES 241	Meteorology

C. Mathematics* (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)

Some of these courses may be counted in the Intellectual Foundations requirements (above) or as electives.*Total Required Credit Hours155–173 cr**

CHEMISTRY EDUCATION (7–12; POSTBACCALAUREATE)

(7025)

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 Chemistry42 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 Education24 cr

EDF 303	Educational Psychology
EXE 372	Foundations of Teaching Adolescents with Disabilities
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
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 Teaching12 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 Certification35 cr

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

B. Cognate Sciences (23 cr)

GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 111, PHY 112	University Physics I, II (4,4)
<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 (6 cr)

MAT 161	Calculus I
MAT 162	Calculus II

Total Required Credit Hours113 cr

CHEMISTRY EDUCATION (7–12; 5–6 EXTENSION; POSTBACCALAUREATE)

(7028)

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 Chemistry42 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 Education30 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 Teaching12 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 Certification35 cr

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

B. Cognate Sciences (23 cr)

GES 101	Introductory Geology
GES 103	Introductory Geology Laboratory (1)
PHY 111, PHY 112	University Physics I, II (4, 4)
<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 (6 cr)

MAT 161	Calculus I
MAT 162	Calculus II

Total Required Credit Hours119 cr

CHILDHOOD EDUCATION (GRADES 1–6)

EARLY CHILDHOOD EDUCATION (BIRTH–GRADE 2)

EARLY CHILDHOOD AND CHILDHOOD EDUCATION (BIRTH–GRADE 6; COMBINED PROGRAM)

(0520, 0521, 0522)

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 and/or early childhood education program is a two-step process. Initial admission as a preliminary major (0201) is required following acceptance to the college. To be considered for formal admission to the childhood education, early childhood education, or a combined major, students must have successfully completed at least 45 credit hours, which must include ENG 101, ENG 102, and the mathematics basic skills 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 201/EDU 201, EDF 202 and/or EDF 203, 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 (LAST) of the New York State Teacher's Exam. Acceptance into the department enables students to proceed through the curricular courses of their selected major.

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. Childhood, early childhood and 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 101 and ENG 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 either the childhood, early childhood and 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 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/EXE 375.

Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 2 (early childhood) or children in grades 1-6 (childhood education) or birth through grade 6 (combined).

Academic Concentrations: Childhood, early childhood and 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 either the childhood or 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 premajor. Jointly registered program students are admitted directly into the childhood major (0520) only. Students planning to transfer as juniors into the childhood or 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.

Extended Certification (HEGIS 0802): Students can earn degrees and extended certification to teach junior high school grades (7-9) in the areas of English, social studies, mathematics, French, Spanish, and Italian. To do so, they will take additional methods and subject-matter courses pertaining to their specific area and complete student teaching in the selected academic subject in the early secondary grades. Students' advisers will be from the Elementary Education and Reading Department. However, students should consult with the coordinator of secondary education for their academic area of the extension and for their student teaching placement in the early secondary grades.

Childhood Education Major (0520)

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 201/EDU 201	Introduction to Elementary Education
EDF 202	Child Development and Education
EDF 203	School and Society
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)
EDU 375	Computer Applications in Education
EDU 400	Practicum in Teaching (Primary) (6)
EDU 401	Practicum in Teaching (Intermediate)(6)
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities OR
EXE 100	Nature and Needs of Individuals with Special Needs
EDU 402	Seminar in Education

Total Required Credit Hours	137–164 cr
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The total number of required hours will vary with course selection. Students should refer to the Childhood Education Handbook and an academic adviser for more detailed information.

Early Childhood Education Major (0521)

Intellectual Foundations Requirements	39–66 cr
Credit Hours for Concentration	30 cr
Distribution Courses	24 cr
Total Required Credit Hours in Education	51–57 cr

EDF 201/EDU 201	Introduction to Elementary Education
EDF 202	Child Development and Education
EDF 302	Educational Psychology: Elementary Education
EDU 211	Introduction to Literacy
OR	
EDU 426	Emergent 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 375	Computer Applications in Education
EDU 400	Practicum in Teaching (Primary) (6)

EDU 402	Seminar in Education
EDU 410	Practicum in Teaching Early Childhood (6)
EDU 411/EXE 411	Parents, Schools, and Community
ENG 260	Children's Literature
EXE 362	(optional) Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities
OR	
EXE 100	Nature and Needs of Individuals with Special Needs

Total Required Credit Hours120–153 cr

The total number of required hours will vary with course selection. Students should refer to the Childhood Education Handbook and an academic adviser for more detailed information.

Combined Childhood with Early Childhood Education Major (0522)

Intellectual Foundations Requirements39–66 cr

Credit Hours for Concentration30 cr

Distribution Courses24 cr

Total Required Credit Hours in Education69 cr

EDU 201/EDF 201	Introduction to Elementary Education
EDF 202	Child Development and Education
EDF 203	School and Society
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 375	Computer Applications in Education
EDU 411	Parents, Schools, and Community (taken with student teaching)
EDU 400	Practicum in Teaching (6)
EDU 402	Seminar to Accompany Student Teaching
EDU 410	Practicum in Teaching Early Childhood (6)
ENG 260	Children's Literature
EXE 362	Behavior and Classroom Management
EXE 371	Foundations of Teaching Children with Disabilities OR
EXE 100	Nature and Needs of Individuals with Special Needs

Total Required Credit Hours149–176 cr

The total number of required hours will vary with course selection. Students should refer to the Childhood Education Handbook and an academic adviser for more detailed information.

COACHING AND PHYSICAL EDUCATION

(1008)

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 (6 cr)

HPR 300	Athletics in Education
HPR 335	Care and Prevention of Athletic Injuries

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. Electives Selected by Advisement (6 cr)

Select two classes from the following:

BUS 368	Sports Management and Marketing
ECO 220	Economics of Sport
HEW 320	Psychoactive Drugs and Health
HEW 425	Alcohol Problems
HPR 301	Kinesiology
HPR 319	Sociology of Sport
PSY 325	Social Behavior

COMMUNICATION

See Individual Majors

- Communication Studies
- Journalism
- Media Production
- Public Communication

COMMUNICATION STUDIES

(0706)

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.

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 required to register for certain 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 Requirements39–66 cr

Total Required Credit Hours in Communication.....42 cr

A. Communication Core (12 cr)

- COM 100 Media Literacy
- OR
- SPC 103 Introduction to Human Communication
- SPC 205 Introduction to Oral Communication
- COM 210 Introduction to Writing for the Media
- COM 215 Introduction to Visual 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)

- Select one course from the following:*
- COM 306 Advanced Public Speaking
- COM 307 Group Communication

C. Upper-Level Written Communication Course (3 cr)

- Select one course from the following:*
- COM 303 Print News I: Reporting
- COM 304 Writing and Producing
- COM 308 Public Relations Writing
- COM 325 Feature Writing
- COM 390 Specialized Writing

D. Upper-Level Visual Communication Course (3 cr)

- Select one course from the following:*
- COM 322 Communication Graphics
- COM 329 Video Production
- COM 336 Web Communication

E. Communication Theory and Criticism (6 cr)

- Select two courses from the following:*
- COM 310 International Communication
- COM 327 Great Writing and Reporting
- COM 400 Communication Law
- COM 401 Applied Communication Research
- COM 407 Organizational Communication
- COM 410 Communication History
- SPC 309 Persuasion and Propaganda
- SPC 311 Intercultural Communication
- SPC 321 Rhetorical Criticism
- SPC 333 Minorities and the Media
- 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)

H. 300- and 400-level courses in the department (selected by advisement)

All College Electives12–39 cr

Total Required Credit Hours120 cr

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.

**Evening study available.*

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Computer Information Systems42 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 Programming¹
- CIS 315 Computer Organization
- CIS 370 Systems Analysis and Design
- CIS 380 Microcomputer Applications
- CIS 400 Visual Basic Programming for the Windows Environment
- CIS 410 Computer Operating Systems
- CIS 411 Database Systems

B. Electives (18 cr)

- CIS 311 Computer Models for Decision Making
- CIS 351 Structured Programming
- 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 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. Additional Requirements

A minimum of 21 credit hours must be completed in the CIS department. 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 Electives12–39 cr

Total Required Credit Hours120 cr

COMPUTER INFORMATION SYSTEMS*

(0825)

**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.

CRIMINAL JUSTICE

(0771)

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 pre-majors 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.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Criminal Justice42 cr

1. No transfer students may take lower division courses in the major without permission of the department chair.
2. ECO 305, PSY 306, MAT 311, SOC 301, or an approved statistics course is a prerequisite for CRJ 315.
3. No more than one CRJ 499 and/or CRJ 495 course may be used in the major and none may be used in the major if taken prior to successful completion of CRJ 315 without written consent of the department.
4. CRJ 495 and CRJ 499 require senior class standing and a minimum cumulative GPA of 3.0 at Buffalo State.

A. Core Courses (12 cr)

CRJ 101	Introduction to Criminal Justice
CRJ 303	Crime, Ideology, and the Administration of Justice
CRJ 315	Research Methods in Criminal Justice
CRJ 470	Advanced Seminar in Criminal Justice

B. Supporting Courses (12 cr)

Select four courses from the following:

CRJ 201	Criminal Law and Procedures
CRJ 202	The Police Process
CRJ 204	The Correctional Process
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

C. Criminal Justice Electives (9 cr)

Select three 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 425	Race, Ethnicity, and the Administration of Justice ¹
CRJ 430	Gender and the Administration of Justice ¹
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	Skeletal Investigations: Forensic Anthropology
BIO 322	Human Heredity
BUS 312	Financial Accounting
BUS 313	Managerial Accounting
BUS 334	Business Law
BUS 360	Principles of Management

BUS 410	Accounting Analysis
CHE 312	Chemistry and Criminalistics
COM 306	Public Speaking
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
HIS 343	Introduction to American Legal History
LIB 300	Advanced Library Research Methods
MAT 311	Introductory Probability and Statistics
PHI 304	Philosophy of Law
PHI 323	Moral Issues
PSC 315	State and Local Government Politics
PSC 316	Urban Ethnic Politics
PSC 320	U.S. Constitution/Civil Liberties
PSC 350	Introduction to Legal Thought
PSC 360	Public Administration
PSC 364	American Public Policy
PSY 306	Statistics in Psychological Research
PSY 325	Social Behavior
PSY 367	Organizational Behavior
PSY 386	Psychology, Stress, Coping, and Health
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	Juvenile Delinquency
SPA 201	Intermediate Spanish I
SPA 202	Intermediate Spanish II
SWK 319	Dynamics of Poverty
SWK 320	Social Services Organizations
SWK 346	Child Abuse and Neglect

¹ One of these courses must be included as an elective.

² No more than 6 credit hours from one course area (i.e., two PSC courses, two PSY courses, or two SOC courses) allowed.

All College Electives12–39 cr

Total Required Credit Hours120 cr

DESIGN (B.F.A.)

(0180)

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 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 or craft artists.

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 one of the following concentrations: ceramic design, fiber design, furniture design, jewelry design, and communication design. Internship opportunities are available for all concentrations.

The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

All students entering the ceramic, fiber, wood/furniture, or metal/jewelry design concentration enter as bachelor of science (0175) until a portfolio review for admission into the upper division. At that time, the student either applies for continuation in the B.S. degree program or applies for admission into the bachelor of fine arts program (0180). Students entering the communication design concentration enter as bachelor of fine arts (0180) until 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 concentration. To continue in the B.S. degree program, the student must maintain a 2.5 GPA in the major, and 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 instructional charge for materials used in class.

The Design Department is in the process of curricular revision. Please refer to college Web listing or the department for updated information. For current information about the interior design program, contact the Interior Design Department.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Design 67–78 cr

A. Foundation Courses

Ceramic Design, Fiber Design, Furniture Design, Jewelry Design Concentrations (37 cr)

DES 101	Introduction to Design 2D I
DES 102	Introduction to Design 2D II
DES 103	Introduction to Design 3D I
DES 104	Introduction to Design 3D II
DES 105	Mechanical Perspective Drawing (Ceramic Design, Fiber Design, Furniture Design only)
DES 215	Introduction to Design History
DES 307	Color Theory
DES 312W	History of Craft: Industrial Revolution to the Present
DES 414	Senior Seminar/Exhibition (4)
DES 262	AutoCAD I (Furniture Design only)
FAR 101	Drawing I
FAR 250	Art History I (Ceramic Design, Fiber Design, Jewelry Design only)
FAR 251	Art History II
TEC 100	Rapid Visualization (Jewelry Design only)

Communication Design Concentration (37 cr)

DES 101	Introduction to Design 2D I
DES 102	Introduction to Design 2D II
DES 103	Introduction to Design 3D I
DES 215	Introduction to Design History
DES 277	Computer Graphics I
DES 307	Color Theory
DES 314W	History of Graphic Design: Industrial Revolution to the Present
DES 377	Computer Graphics II
DES 414	Senior Seminar/Exhibition (4)
FAR 101	Drawing I
FAR 250	Art History I
FAR 251	Art History II

Interior Design Concentration (21 cr)

DES 101	Introduction to Design 2DI
DES 215	Introduction to Design History
DES 312W	History of Craft: Industrial Revolution to the Present
FAR 101	Drawing I
FAR 250	Art History I
FAR 251	Art History II
IDE 151	Mechanical and Perspective Drawing

B. Major Concentrations

Ceramic Design Concentration (30 cr)

DES 220	Ceramics I
DES 320	Ceramics II
DES 321	Ceramics: Junior Studio (3,6)
DES 421	Ceramics: Senior Studio (6,6)
FAR 240	Introduction to Sculpture

Communication Design Concentration (33 cr)

DES 270	Visual Communication I
DES 271	Lettering and Typography I
DES 370	Visual Communication II
DES 374	Advertising Design
DES 380	Illustration
DES 473	Graphic Design
DES 475	Graphic Design Practicum (6)
DES 479	Multimedia Computer Design
DES 480	Illustration II
FAR 220	Introduction to Photography

Fiber Design Concentration (30 cr)

DES 242	Fibers I
DES 342	Fibers II
DES 344	Fibers: Junior Studio (3,6)
DES 444	Fibers: Senior Studio (3,6)
FTT 304	Print Rendering for Industry
FTT 412	CAD: Apparel and Textile Design for Industry
OR	
FTT 413	CAD: Weave Design for Industry

Furniture Design Concentration (30 cr)

DES 250	Wood Design I
DES 309	Architectural Drafting and Perspective Drawing
DES 350	Wood Design II
DES 351	Wood Design: Junior Studio (3,3)
OR	
ARC 490	Furniture Design (taken at the University at Buffalo)
DES 363	Furniture Theory and Application
DES 451	Wood Design: Senior Studio (3,3)
DES 488	Internship (6)

Jewelry Design Concentration (30 cr)

DES 230	Introduction to Jewelry Making
DES 330	Applied Jewelry Techniques
DES 336	Metalsmithing
DES 337	Metalsmithing: Junior Studio
OR	
DES 331	Jewelry: Junior Studio
DES 431	Jewelry: Senior Studio (3,6)

Interior Design Concentration (54 cr)

The B.F.A. in interior design program is currently under review. Please contact the department for most up-to-date information.

IDE 101	Introduction to Interior Design
IDE 102	Materials and Colors
IDE 152	Introduction to Color Rendering
IDE 153	Spatial Explorations and Model Building
IDE 201	Interior Design I
IDE 202	Construction Fundamentals I
IDE 251	Interior Design II
IDE 252	Construction Fundamentals II
IDE 253	Furniture Theory and Application
IDE 301	Interior Design III
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 488	Internship
FTT 206	Introduction to Textiles

C. Studio Electives Selected by Advisement (0–12 cr)

DES 220	Ceramics I
DES 230	Introduction to Jewelry Making
DES 235	Design in Metal
DES 242	Fibers I
DES 250	Wood Design I
DES 320	Ceramics II
DES 330	Applied Jewelry Techniques
DES 336	Metalsmithing
DES 342	Fibers II

Courses required for a specific major concentration cannot be used for these credits.

All College Electives0–14 cr

Total Required Credit Hours120–144 cr

DESIGN (B.S.)

(0175)

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 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 craft artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, and design history. The major is completed with courses in one of the following concentrations: ceramic design, fiber design, furniture design, jewelry design, theater design, and computer textile design for industry. 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.

All students entering the ceramic, fiber, wood/furniture, or metal/jewelry design concentration enter as bachelor of science (0175) until a portfolio review for admission into the upper division. At that time, the student either applies for continuation in the B.S. degree program or applies for admission into the bachelor of fine arts program (0180). Students entering the communication design concentration enter as bachelor of fine arts (0180) until 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 concentration. To continue in the B.S. degree program, the student must maintain a 2.5 GPA in the major, and to continue in the B.F.A. degree program, must maintain a 3.0 GPA in the major.

Transfer students are urged to submit their portfolios the semester before they transfer 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 for up to one year. 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 is in the process of curricular revision. Please refer to college Web listings or the department for updated information.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Design42 cr

A. Foundation Courses

Ceramic Design, Fiber Design, Furniture Design, Jewelry Design Concentrations (21 cr)

- DES 101 Introduction to Design 2D I
- DES 102 Introduction to Design 2D II
- DES 103 Introduction to Design 3D I
- DES 104 Introduction to Design 3D II
- DES 105 Mechanical and Perspective Drawing (Furniture Design only)
- DES 307 Color Theory (Ceramic Design or Jewelry Design only)
- DES 105 OR DES 307 (Fiber Design only)
- DES 215 Introduction to Design History
- DES 312W History of Craft: Industrial Revolution to the Present

Theater Design Concentration (21 cr)

- DES 101 Introduction to Design 2D I
- DES 102 Introduction to Design 2D II
- DES 103 Introduction to Design 3D I
- DES 104 Introduction to Design 3D II
- DES 105 Mechanical Perspective Drawing
- THA 317 History of Theater: Ancient to Renaissance
- THA 318 History of Theater: Renaissance to Modern

Computer Textile Design for Industry Concentration (21 cr)

- DES 101 Introduction to Design 2D I
- DES 102 Introduction to Design 2D II
- DES 103 Introduction to Design 3D I
- DES 215 Introduction to Design History
- DES 242 Fibers I
- DES 307 Color Theory
- FTT 449 History of Textiles

B. Major Concentrations

Ceramic Design Concentration (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

Computer Textile Design for Industry Concentration

- DES 242 Fibers I
- FTT 206 Introduction to Textiles
- OR
- FTT 303 Fashion Illustration
- FTT 304 Print Rendering for Industry
- FTT 412 CAD: Apparel and Textile Design for Industry
- FTT 413 CAD: Weave Design for Industry
- FTT 450 Issues in Apparel and Textile Industry
- FTT 495 Special Project
- OR
- FTT 488 Internship

Fiber Design Concentration (21 cr)

- DES 242 Fibers I
- DES 342 Fibers II
- DES 344 Fibers: Junior Studio (3,3)
- May replace 3 credits Junior studio with:
- FTT 412 CAD: Apparel and Textile Design for Industry
- OR
- FTT 413 CAD: Weave Design for Industry
- DES 444 Fibers: Senior Studio (3,3)

Furniture Design Concentration (21 cr)

- FTT 304 Print Rendering for Industry
- DES 250 Wood Design I
- DES 350 Wood Design II
- DES 351 Wood Design: Junior Studio (3,3)
- DES 363 Furniture Theory and Application
- DES 451 Wood Design: Senior Studio (3,3)

Jewelry Design Concentration (21 cr)

- DES 230 Introduction to Jewelry Making
- DES 330 Applied Jewelry Techniques
- DES 331 Jewelry: Junior Studio (3,3)
- DES 336 Metalsmithing
- DES 431 Jewelry: Senior Studio (3,3)

Theater Design Concentration (21 cr)

- DES 307 Color Theory
- DES 318/THA 337 Set Design I
- THA 234 Technical Theater
- THA 332 Period Styles for the Theater
- THA 335 Costume Design for the Theater
- THA 336 Lighting Techniques
- OR
- THA 333 Scene Painting
- THA 437 Set Design II
- OR
- THA 435 Advanced Costume Design for the Theater

All College Electives12–39 cr

Total Required Credit Hours120 cr

DIETETICS: COORDINATED PROGRAM

(0410)

**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.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Nutrition and Food Science59 cr

A minimum of 12 credit hours in the major must be completed in the department.

A. Required Courses (32 cr)

NFS 101	Introduction to Food Composition and Preparation
NFS 301	Food Science (4)
NFS 337	Human Nutrition
NFS 338	Nutrition and the Life Cycle
NFS 361W	Principles of Management in Food Service
NFS 440	Applied Nutrition, Part I (4)
NFS 442	Applied Nutrition, Part II (4)
NFS 443	Applied Nutrition, Part III (4)
NFS 462	Management of Food Service Operations (4)

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 Hours120–125 cr

DIETETICS: DIDACTIC PROGRAM

(0410-4482)

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 or undeclared students 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 Requirements39–66 cr

Total Required Credit Hours in Nutrition and Food Science37 cr

NFS 100	Introduction to Food Preparation
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 Electives0–5 cr

Total Required Credit Hours120–142 cr

EARLY CHILDHOOD EDUCATION

See Childhood Education.

EARTH SCIENCE EDUCATION (7–12)

(0633)

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 712. 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 two 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 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 Sciences¹40 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 308	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
EXE 372	Foundations of Teaching Adolescents with Disabilities
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
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 Teaching12 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 Certification28–30 cr

A. One Year (or Equivalent) of a Foreign Language (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 (4, 4)

OR

PHY 107, PHY 108 General Physics I, II (3, 3)

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 Hours140–157 cr

¹ May be applied to geology B.A. program or earth sciences B.S. program.

EARTH SCIENCE EDUCATION (7–12; 5–6 EXTENSION)

(0633)

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 two 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 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 Sciences¹40 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 308	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
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
SCI 323	Science as Inquiry

Total Required Credit Hours in Student Teaching12 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 Certification28–30 cr

A. One Year (or Equivalent) of a Foreign Language (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 (4, 4)

OR

PHY 107, PHY 108 General Physics I, II (3, 3)

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 Hours146–163 cr

¹ May be applied to geology B.A. program or earth sciences B.S. program.

EARTH SCIENCE EDUCATION (7–12; POSTBACCALAUREATE)

(7037)

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 Sciences40 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 308	Structural Geology
GES 405	Geology of North America

One astronomy elective.
One upper-division earth science elective.

Total Required Credit Hours in Professional Education24 cr

EDF 303	Educational Psychology
EXE 372	Foundations of Teaching Adolescents with Disabilities
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy
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 Teaching12 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 Certification28–30cr

A. One Year (or Equivalent) of a Foreign Language (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 (4, 4)

OR

PHY 107, PHY 108 General Physics I, II (3, 3)

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 Hours104–106 cr

EARTH SCIENCE EDUCATION (7–12; 5–6 EXTENSION; POSTBACCALAUREATE)

(7040)

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 Sciences40 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 308	Structural Geology (4)
GES 405	Geology of North America

One astronomy elective.
One upper-division earth science elective.

Total Required Credit Hours in Professional Education30 cr

EDF 303	Educational Psychology
EDU 416	Teaching Literacy in Middle and Secondary Schools
EDU 417	Adolescent Literacy (or equivalent)
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
SCI 323	Science as Inquiry

Total Required Credit Hours in Student Teaching12 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 Certification28–30 cr

A. One Year (or Equivalent) of a Foreign Language (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 (4, 4)

OR

PHY 107, PHY 108 General Physics I, II (3, 3)

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 Hours110–112 cr

EARTH SCIENCES

(0737)

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 available concentrations upon the completion of 9 credit hours in the major. The concentrations, leading in somewhat different career directions, are environmental earth sciences, earth sciences (advised for secondary education earth science candidates), and geology (earth sciences majors may not minor in astronomy).

Coursework in chemistry, calculus, and physics is strongly recommended, particularly for students contemplating graduate study or secondary earth science teacher certification. The recommended courses, or 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 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 Undergraduate Research Office (www.buffalostate.edu/undergraduate_research).

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

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Earth Sciences39–42 cr

A. Required Courses (24 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
GES 308	Structural Geology (4)

B. Concentrations (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 404	Field Geology
GES 409	Fluvial Geomorphology
GES 444	Global Systems Geomorphology

Students should consider completing the environmental sciences minor.
CHE 111 and CHE 112 are strongly 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 404	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 these limits students' future options.

All College Electives12–39 cr

Total Required Credit Hours120 cr

ECONOMICS (B.A.)

(0704)

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 Requirements39–66 cr

Total Required Credit Hours in Economics36 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 Electives18–45 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 Hours120 cr

ECONOMICS (B.S.)

(0702)

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.

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 Requirements39–66 cr

Total Required Credit Hours in Economics39–45 cr

A. Required Courses (27 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 424	Econometrics
ECO 490	Senior Seminar
BUS 312	Financial Accounting
MAT 126	Calculus
OR	
MAT 161	Calculus I

In addition, students are required to select one of two concentrations.

B. Concentrations

Only 3 credit hours of ECO 488, ECO 495, or ECO 499 may be included.

Applied Economics Concentration (12 cr)

Required Courses (6 cr)

ECO 320	Managerial Economics
OR	
ECO 325	Industrial Organization
ECO 405	History of Economic Thought

At least 6 credit hours must be selected from the following:

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

Financial Economics Concentration (18 cr)

Required Courses (9 cr)

BUS 313	Managerial Accounting
ECO 304	Money and Banking
FIN 314	Corporation Finance

At least 9 credit hours must be selected from the following:

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 Hours120 cr

ELECTRICAL ENGINEERING TECHNOLOGY (ELECTRONICS)*

(0831)

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 Requirements¹39–66 cr

Major Requirements48 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

Electives¹16–28 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 Hours124 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)*

(0830)

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
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

Electives¹6–33 cr

¹ The 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 Hours124 cr

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

ENGLISH

(0705)

English Department Bachelor of Arts (HEGIS 1501)

Ketchum Hall 326 (716) 878-5416

The English B.A. program offers three areas of service: a liberal arts English major, the enhancement of writing skills, and electives to satisfy Intellectual Foundations requirements.

Intellectual Foundations Requirements39–66 cr

Total Required Credits in English.....42 cr
(27 credits must be upper-division)

A. Required Courses (15 cr)

- ENG 190 Introduction to Literary Analysis and Interpretation
(Must be taken immediately after completion of freshman composition requirement or within first year of transfer to English Department.)
- Major Figure
Select one course from the following:
ENG 313 Milton
ENG 314 Chaucer
ENG 315 Shakespeare I
ENG 316 Shakespeare II
- ENG 370 Foundations of Language
- ENG 390 Literary Criticism and Theory
- ENG 490W Senior Seminar

B. Area Courses in English (27 cr)

- Three courses in British literature, at least two before 1900 and at least one before 1800.
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 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.
- 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.
- 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 131, ENG 310, ENG 330, ENG 331, ENG 332, 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, ITA 336, MCL 337, MCL 338, HUM 320, HUM 328.
- 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 Electives12–39 cr

Total Required Credit Hours120 cr

ENGLISH EDUCATION (7-12)

(0610)

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.

ENGLISH EDUCATION (7–12; POSTBACCALAUREATE)

(7043)

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, Room 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 Education24 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 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 Educational Psychology
OR
EDF 529 Adolescent Psychology
- EDF 692 The Teaching of Writing

Total Required Credit Hours in Student Teaching*12 cr

ENG 464/ENG 465 Supervised Student Teaching

*Students certified in another secondary area are exempt from this requirement.

Total Required Credit Hours36 cr

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 Requirements39–66 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 370 Foundations of Language
- ENG 354 Ethnic American Literature
- ENG 461 Young Adult Literature

B. Area Courses in Literature (24 credits)

- Three courses in British Literature, at least two before 1900 and at least one before 1800
Pre-1800 options: ENG 210, ENG 314, ENG 313, ENG 415, ENG 416, ENG 417
Pre-1900 options: ENG 211, ENG 418, ENG 419, ENG 420 OR ENG 421
Other options: ENG 252, ENG 455
- 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
- One course in World Literature.
Options: ENG 130, ENG 131, ENG 230, ENG 310, ENG 330, ENG 331, ENG 332, 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, ITA 336, MCL 337, MCL 338, HUM 320, HUM 328

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 390 | Literary Criticism and Theory |
| ENG 301W | Advanced Composition |
| ENG 305W | Creative Writing: Narrative |
| ENG 306W | Creative Writing: Poetry |
| ENG 356 | Futuristic Fiction |
- 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)

- | | |
|---------|---|
| EXE 100 | Nature and Needs of Individuals with Special Needs |
| EDU 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 |

B. English Education (27 cr)

- | | |
|---------|---|
| ENG 200 | Field Experience in Secondary English Education |
| ENG 309 | Teaching and Evaluating Writing |
| ENG 311 | 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) ² |

Students are encouraged to utilize their exceptional education course (EXE 100) to fulfill Intellectual Foundations/CORE requirements. Doing so will offer more flexibility to their program.

¹ENG 200, EDF 303, EDU 416, EDF 403, ENG 309, ENG 463 are prerequisites for student teaching ENG 464 and ENG 465).

²Students must have 2.0 overall GPA, 2.75 GPA in English courses and in education courses to student teach.

All College Electives0 cr

Total Required Credit Hours120–141 cr

EXCEPTIONAL EDUCATION

(0299)

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 Requirements39–66 cr

Total Required Credit Hours for Concentration30 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 Major65 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 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 in Evaluation and Assessment in Special Education (1)
EXE 367W	Curriculum for Children with Mild Disabilities
EXE 368	Field Experience in Curriculum for Children with Mild Disabilities (2)
EXE 375	Integration of Technology into Education
EXE 420	Practicum in Special Education (6)

Distribution Courses24 cr

6 credit hours can be in each of the following areas: English, math, science, and social studies.

Total Required Credit Hours161–179 cr

FASHION AND TEXTILE TECHNOLOGY

(0401)

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 career preparation 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 industry. 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, historic costume/textiles conservators, 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, Federated, Fisher-Price, Foresight Design, GAP and GAP Kids, Hartmarx, Lord & Taylor, Bureau Veritas testing labs, Limited, Oxford Industries, Springs Industry, Swavelle Home Fashion, Tobin Home Fashions, Toppers, Tommy Hilfiger, Graco Home Fashions International, Park B. Smith, Appollo Patio Furniture Design, Target, Dillard's, 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 Footwear Association endorses the program and offers \$5,000 in scholarships for majors every year.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Fashion Technology48 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 (27 cr)

Select one concentration:

Fashion Merchandising Concentration

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
BUS 320	Principles of Marketing
FTT 488	Internship

Select three courses from the following:

FTT 308	Fashion CAD (Computer Aided Design)
FTT 355	Research in Fashion Merchandising
BUS 325	Human Resource Management
BUS 365	Entrepreneurship
ECO 201	Principle of Macroeconomics
ECO 202	Principle of Microeconomics
COM 210	Introduction to Writing for the Media
COM 303*	Writing for News Publications

Apparel Design Concentration¹

FTT 109	Apparel Design Processes
FTT/THA 303	Fashion Illustration
FTT 325	Pattern Drafting and Grading
FTT 326	Apparel Design I: Flat Pattern
FTT 327	Apparel Design II: Computerized Flat Pattern
FTT 328	Apparel Design III: Draping
FTT 451 or 488	Senior Project or Internship

Select two courses from the following:

FTT 300	Knit Technology I
FTT 329*	Designing Knit Apparel
FTT 308	Fashion CAD (Computer Aided Design)
FTT 411	CAM: Apparel Manufacturing Software Systems
FTT 412	CAD: Apparel/Textile Design for Industry

Product Development Concentration

FTT 109	Apparel Design Processes
FTT 300	Knit Technology I
FTT 325	Pattern Drafting and Grading
FTT 326	Apparel Design I: Flat Pattern
FTT 410	Advanced Product Development
FTT 411	CAM: Apparel Manufacturing Software Systems
FTT 451 or 488	Senior Project or Internship

Select two courses from the following:

FTT 308	Fashion CAD (Computer Aided Design)
FTT 327	Apparel Design II: Computerized Pattern Making
FTT 400*	Knit Technology II: Computerized Software
FTT 412	CAD: Apparel/Textile Design for Industry
TEC 200	Total Quality Management

Fashion/Textile Design Technologies Concentration¹

FTT 303 or FAR 101	Fashion Illustration or Drawing 1
FTT 304	Print Rendering 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 488	Senior Project or Internship
DES 242	Fibers I

Select one course from the following:

FTT 348	History of Costume
FTT 349	History of Textiles
DES 215	Design History
THA 332	Period Styles

Select one course 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 400*	Knit Technology II: Commercial Software
FTT 410*	Advanced Product Development

C. Recommended Electives:

FTT 150	Introduction to Merchandising
FTT 200	Introduction to Hand Knitting
FTT 348	History of Costume
FTT 349	History of Textiles
FTT 355*	Research in Fashion Merchandising
FTT 400*	Knit Technology II: Commercial Software
FTT 410*	Advanced Product Development
FTT 412	CAD: Apparel/Textile Design for Industry
FTT 413	CAD Weave for Industry
FTT 451	Senior Project
FTT 452	Fashion Show Production
FTT 488	Internship
DES 101	Introduction to Design: Two Dimensional I
DES 102*	Introduction to Design: Two Dimensional II
DES 307*	Color Theory
TEC 200	Total Quality Management

**Courses that may have additional prerequisites.*

¹A minor in design is strongly recommended.

All College Electives6–33 cr

Total Required Credit Hours120 cr

FINE ARTS

See Individual Majors

- Art
- Art History
- Painting
- Photography
- Printmaking
- Sculpture

FORENSIC CHEMISTRY

(0773)

**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 these requirements will be accepted into the pre-forensic chemistry program (0774) and will be formally admitted to the major upon completion of the previously stated requirements.

Admission Recommendations: Transfer students from two-year colleges should also have earned credit for courses equivalent to CHE 201, CHE 202, CHE 203, CHE 204, CHE 301, MAT 126, PHY 107, PHY 108, and CRJ 101 to avoid possible delays in the completion of the degree program.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Chemistry32 cr

- CHE 201, CHE 202 Organic Chemistry I, II
- CHE 203, CHE 204 Organic Chemistry Laboratories I, II (1, 1)
- CHE 301 Analytical Chemistry (4)
- CHE 312 Chemistry and Criminalistics
- CHE 331 Principles of Physical Chemistry
- CHE 403 Instrumental Analysis (4)
- CHE 412 Internship in Criminalistics
- CHE 414 Forensic Chemistry Laboratory
- CHE 470 Biochemistry I
- CHE 471 Biochemical Techniques (1)

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.

Total Required Credit Hours in Criminal Justice6 cr

- CRJ 101 Introduction to Criminal Justice
- CRJ 201 Criminal Law and Procedures

Total Required Credit Hours in Biology8 cr

- BIO 211 Introduction to Cell Biology and Genetics (4)
- BIO 303 Genetics (4)

Total Required Credit Hours in Other Fields12 cr

- MAT 126 Calculus
- MAT 311 Introductory Probability and Statistics
- PHY 107, PHY 108 General Physics I, II (3, 3)

All College Electives0–23 cr

Total Required Credit Hours120–124 cr

FRENCH EDUCATION (7–12)

(0651)

Modern and Classical Languages Department Bachelor of Science (HEGIS 1102.01)

National Council for Accreditation of Teacher Education (NCATE) 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 and study the structure and sound system of French, the literature and culture of French-speaking peoples, and, in the professional education component, the growth and role of the public school, adolescent development and psychology, and the teaching/learning of foreign languages in school settings. The curriculum includes a series of field experiences. Students must have a minimum GPA of 2.5 (overall and in the major) to student teach.

Students desiring this program may be admitted into the B.A. language and literature program (0709), which functions as a pre-major for the B.S. program. Students must apply for admission to the B.S. program by filling out a form in the Modern and Classical Languages Department office (Bishop 122) after they have successfully completed 30 credit hours in French, including two 300-level courses. Transfer students who enter with more than 30 hours in French may apply as soon as they have completed two 300-level courses in French at Buffalo State. No student will be admitted with less than a 2.5 overall GPA, or with less than a 2.5 GPA in French courses.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in French36 cr

A. Required Courses (27 cr)

- FRE 301, FRE 302 French Conversation and Composition
- FRE 305 Phonetics and Orthography
- FRE 306 The Civilization of France
- FRE 307, FRE 308 Survey of French Literature
- FRE 309 Survey of Nineteenth- and Twentieth-Century French Literature
- FRE 415 Advanced Grammar and Composition
- FRE 416 Advanced Conversation and Composition

B. Electives (9 cr)

Select three courses from the following:

- 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 Education24 cr

- EDF 303 Educational Psychology
- EDF 403 Historical and Philosophical Forces Influencing Secondary Education
- EDU 416 Teaching Reading in Secondary Schools
- EXE 372 Foundations of Teaching Secondary Students with Disabilities
- FLE 200 Field Experience in Foreign Language Education
- FLE 316 Teaching Reading in the Second Language in the Middle School
- FLE 405 Methods and Materials for Teaching Foreign Languages in the High School
- FLE 406 Techniques for Teaching and Evaluating Foreign Languages in the Middle School

Total Required Credit Hours in Student Teaching12 cr

- FLE 407/SED 407 Student Teaching of Foreign Languages in the Middle/Junior High School (6)
- FLE 407/SED 408 Student Teaching of Foreign Languages in the High School (6)

All College Electives0–6 cr

Total Required Credit Hours120 cr

FRENCH EDUCATION (7–12; POSTBACCALAUREATE)

(0651)

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

For information about this program, contact the Modern and Classical Languages Department.

FRENCH LANGUAGE AND LITERATURE

(0709)

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 and introduces students to the masterpieces of the literature of France and the most significant aspects of French and Francophone culture. Students are encouraged to study in France for a semester in an approved program.

This program also serves as a pre-major for new students who wish to enter the French B.S. secondary education (7–12) program (0651). When students have successfully completed 30 credit hours with a minimum GPA of 2.5, they may apply for entrance to the French Education (7–12) program. Transfer students with more than 30 credit hours may apply when they have successfully completed two French courses at the 300- or 400-level. Applications are available in the departmental office.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in French36 cr

A. Required Courses (18 cr)

- FRE 301, FRE 302 French Conversation and Composition
- FRE 306 The Civilization of France
- FRE 307, FRE 308 Survey of French Literature
- FRE 309 Survey of Nineteenth- and Twentieth Century French Literature

B. Electives Selected by Advisement (18 cr)

- FRE 303 Translation
- FRE 305 Phonetics and Orthography
- FRE 331 French Literature in Translation¹
- FRE 341 Francophone Literature in Translation¹
- 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

¹These 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 Hours120 cr

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 370 Principles of Water Resource Planning
- GEG 375 Principles of Hydrology
- GEG 382 Weather Forecasting
- GEG 384 Atmospheric Science
- GEG 386 Applied Climatology
- GEG 420 Economic Evaluation of Water Resources
- GEG 421 Watershed Analysis
- GEG 425 Fundamentals of GIS
- GEG 428 Environmental Assessment and Planning Applications in GIS
- GEG 480 Air Pollution Modeling
- GEG 488 Internship
- GES 307 Geomorphology
- GEG 452 Hydrogeology
- GEG 241/GES 241 Meteorology

C. Human Geography Concentration Electives (15 cr)

Selected by advisement

- GEG 305 Principles of Economic Geography
- GEG 307 Conservation and Environmental Management
- GEG 309 Introduction to Urban Geography
- GEG 310 Geography of Transportation
- GEG 320 Historical Geography of the United States
- GEG/PLN 330 Land Resource Analysis and Planning
- GEG 350 Comparative Canadian-U.S. Metropolitan Systems
- GEG 405 Advanced Urban Geography
- GEG 406 Geography of Retailing
- GEG 425 Fundamentals of GIS
- GEG 427 Corporate Applications in GIS

All College Electives15–42 cr

Total Required Credit Hours120 cr

GEOGRAPHY

(0715)

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 Requirements39–66 cr

Total Required Credit Hours in Geography39 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 390 Quantitative Methods in Geography and Planning
- GEG 430 Senior Thesis

Select one course from the following:

- GEG 357 Geography of Buffalo and the Niagara Frontier
- GEG 359 Arctic Geography
- GEG 360 Geography of Asia
- GEG 362 Geography of the United States and Canada
- GEG 363 Geography of Middle America
- GEG 364 Geography of Europe

Select one course from the following:

- PSC 300 Political Analysis
- SOC 300 Methods in Social Research¹

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.

GEOLOGY

(0727)

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 fieldwork provide a base for careers related to energy, the environment, and the exploration for and production of petroleum and mineral resources.

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, www.buffalostate.edu/undergraduateresearch.

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

Intellectual Foundations Requirements39–66 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 308 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, astronomy, or oceanography.

All College Electives12–39 cr

Total Required Credit Hours120 cr

HEALTH AND WELLNESS

(0739)

Health and Wellness Department Bachelor of Science (HEGIS 0837)

Houston Gymnasium 205 (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. Concentrations are available in adult fitness, social issues, and site-based health promotion.

Admission Requirements: Applicants must have a minimum cumulative GPA of 2.5.

The programs in the Health and Wellness Department are under revision. Contact the department for current program requirements.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Health and Wellness42 cr

A. Required Courses (33 cr)

- HEW 204 Personal Health
- HEW 225 Introduction to Disease Prevention
- HEW 302 Exercise Principles
- HEW 305 Community Health and Wellness
- HEW 310 Health Standards and Emergency Care
- HEW 312W Methods and Materials in Health and Wellness
- HEW 401 Assessment and Evaluation in Health and Wellness
- HEW 412 Health and Wellness Programs
- BIO 308 Human Anatomy and Physiology¹

Select one course from the following:

- NFS 105 Food and People: Interactions and Issues
- NFS 334 Contemporary Nutrition

¹ BIO 100 is a prerequisite for BIO 308.

B. Concentration Courses (9 cr)

Adult Fitness Concentration

Select three courses from the following:

- HEW 307 Exercise, Fitness, and Nutrition
- HEW 345 Wellness, Fitness, and Aging
- HEW 488 Internship
- HPR 301 Kinesiology

Social Issues Concentration

Select three courses from the following:

- HEW 308 Women's Health Issues
- HEW 320 Psychoactive Drugs and Health
- HEW 411 Critical Issues in Health and Wellness
- HEW 425 Alcohol Problems

Site-Based Health Promotion Concentration

Select three courses from the following:

- HEW 303 Planning, Management, and Evaluation of Health and Wellness Facilities
- HEW 320 Psychoactive Drugs and Health
- HEW 425 Alcohol Problems
- HEW 488 Internship

All College Electives12–39 cr

Total Required Credit Hours120 cr

HISTORY

(0716)

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 Requirements39–66 cr

Total Required Credit Hours in History39 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

Research and Writing Seminar (3 cr)

- HIS 300W Research and Writing Seminar

Historiography Seminar (3 cr)

- HIS 490W Senior Seminar in Historiography

Upper-Division History Electives (15 cr)

- Three 300-level history courses
- Two 400-level history courses

All College Electives15–42 cr

Total Credit Hours120 cr

HOSPITALITY ADMINISTRATION

(0437)

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, catering operations, health care, school food service, sales, production, travel and tourism, and other components of industry/business.

The department's mission is to educate and develop enterprising students to become leaders in regional and global hospitality-tourism professions. The faculty is dedicated to frequent student interactions leading to effective learning and higher achievement.

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 Requirements39–66 cr

Total Required Credit Hours in Hospitality Administration42 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
NFS 334	Contemporary Nutrition
HTR 361W	Principles of Management in Food Service

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 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 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 Electives12–39 cr

Total Required Credit Hours120 cr

HUMANITIES

(0717)

Philosophy and Humanities Department Bachelor of Arts (HEGIS 4903)

Bishop Hall 207 (716) 878-5136

Humanities is an interdisciplinary program that provides students with a broad liberal arts education and ample opportunity to pursue their own interests. Humanities majors must:

1. Complete and submit an application form.
2. Be interviewed by the coordinator of the program.
3. Have a minimum GPA of 2.0.

Second-semester sophomores, or juniors or seniors, will normally be expected to have taken a minimum of three courses in humanities, with no grade lower than C and at least one grade higher than C.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Humanities42 cr

HUM 100	Introduction to Humanities
HUM 300	Humanistic Perspectives
HUM 490	Senior Seminar

Two courses in philosophy.

Three courses in English.

Two courses in a foreign language.

An additional 12 credit hours from communication, English, modern and classical languages, humanities, or philosophy.

All College Electives12–39 cr

Total Required Credit Hours120 cr

INDIVIDUALIZED STUDIES*

(0556)

Bachelor of Science (HEGIS 4901)

Continuing Professional Studies
Cleveland Hall 210 (716) 878-5907

Dean's Office, School of Arts and Humanities
Rockwell Hall 222 (716) 878-6326

Dean's Office, School of Education
Caudell Hall 230 (716) 878-4106

Dean's Office, School of Natural and Social Sciences
Classroom Building 113 (716) 878-6434

Dean's Office, School of the Professions
Cleveland Hall 214 (716) 878-4698

Dean's Office, University College
100 Twin Rise or 310 South Wing (716) 878-5303

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 Requirements39–66 cr

Total Required Credit Hours in Individualized Studies39–45 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 Electives9–42 cr

Total Required Credit Hours120 cr

INDUSTRIAL TECHNOLOGY*

(0810)

Technology Department Bachelor of Science (HEGIS 0925)

National Association of Industrial Technology (NAIT) Accredited
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 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 organization in obtaining the maximum level of quality performance in providing products or services. 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, quality-assurance specialists, operations supervisors, trainers, and technical sales and marketing specialists.

Admission Requirements: This program accepts freshmen, sophomores, and transfer students.

**Evening study available.*

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Technology/Core Courses24 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 Concentration18 cr

A. Manufacturing Concentration¹

TEC 400/BUS 320	Marketing
TEC 302	CAD/CAM
TEC 351	Energy Systems
TEC 404	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 200	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 Accreditation12 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 Hours120 cr

INTERIOR DESIGN

(0180)

Interior Design Department Bachelor of Fine Arts (HEGIS 1009)

National Association of Schools of Art and Design (NASAD) Accredited
Council for Interior Design Accreditation
Upton Hall 212 (716) 878- 6032

For up-to-date information about this program, contact the department.

The interior design program at Buffalo State achieved a three-year accreditation from the Foundation for Interior Design Education Research (FIDER) in 2000 followed by a six-year accreditation in 2004. The current accreditation expires in 2010.

The design B.F.A. degree with interior design concentration 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, as well as 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 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. As an accredited program, graduates are eligible to apply and sit for the professional, nationally recognized NCIDQ licensing exams, earning a Certified Interior Designer designation and a right to practice in New York State.

Primary to the mission of interior design is a commitment to the intellectual, personal, and professional growth of students. Through varied and increasingly complex coursework coupled with a strong community-based project component, the students and faculty 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, and inspire students to both expand their horizons and become lifelong learners. The program is rigorous and comprehensive, resulting in professional and innovative designers that regional employers actively seek out after graduation.

Acceptance to Major Requirements:

1. Successful completion of the Skills Competency Exam following IDE 151, IDE 152, IDE 153. The test evaluates entry-level ability to visualize, design, and communicate spatial solutions to a simple problem through scaled drafting, rendering, and modeling. This is a series of exams given on one day. The final product includes a drafted solution, a rendering, and a three-dimensional component.
2. A minimum cumulative GPA of 2.6 after the freshman year.
3. Transfer students acceptance to major is determined after reviewing a portfolio of work; transcripts are evaluated on a case-by-base basis.

Please see design B.F.A with interior design concentration for a listing of program requirements.

JOURNALISM

(0708)

Communication Department Bachelor of Arts (HEGIS 0602)

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.

Career Opportunities: Students in the print/online-news sequence of journalism prepare for careers as reporters, editors and columnists on newspapers (daily, weekly and special interest), as well as on magazines and Internet-based media. Students in the electronic-news sequence of journalism prepare for careers as reporters, anchors, news directors, and commentators in radio and television settings, as well as with Internet-based 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 in the major is required to register for certain 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 Requirements39–66 cr

Total Required Journalism Courses42 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 (9 cr)

COM 302	Principles of Journalism
COM 400	Communication Law
COM 405	News Lab (Bengal News Online)
COM 450	Communication and Society

C1. Print/Online Sequence (9 cr)

COM 303	PrintNews I: Reporting
COM 319	PrintNews II: Editing
COM 325	Feature Writing

OR

C2. Electronic News Sequence (9 cr)

COM 337	Electronic News I: Producing
COM 338	Electronic News II: Reporting
COM 348	Electronic News III: Advanced Reporting
COM 450	Communication and Society

D. Senior Seminar (3 cr)

COM 450	Communication and Society
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E. Communication Electives (9 cr)

300- and 400-level courses in the department (selected by advisement)

All College Electives12–39 cr

Total Required Credit Hours120 cr

MATHEMATICS (B.A.)

(0718)

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 Requirements39–66 cr

Total Required Credit Hours in Mathematics39 cr

A. Required Courses (27 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 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 401	Introduction to Turing Machines and Abstract 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 Electives15–42 cr

Total Required Credit Hours120 cr

MATHEMATICS—APPLIED (B.S.)

(0719)

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: MAT 161, MAT 162 and MAT 241 with a grade of C or higher in each. Students interested in this program should declare a mathematics major (0718) until admission requirements are met.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Mathematics48 cr

A. Required Courses (36 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 202	Introduction to Linear Algebra
MAT 241	Computer Mathematics I
MAT 263	Calculus III
MAT 264	Using Technology to Explore Calculus III (1)
MAT 270	Discrete Mathematics
MAT 366	Computer Mathematics II
MAT 381	Probability
MAT 382	Topics in Mathematical Statistics
MAT 390	Introduction to Operations Research
MAT 495	Project

B. Concentration Courses Selected by Advisement (12 cr)

Students must choose one of two concentrations:

Concentration in Numeric Computation

Select 3 courses from the following:

MAT 315	Differential Equations
MAT 316	Intermediate Differential Equations
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 417	Introduction to Real Analysis I
MAT 461	Numerical Analysis
MAT 471	Introduction to Topology
MAT 490	Seminar
MAT 499	Independent Study

Concentration in Computational Discrete Mathematics

Select 3 courses from the following:

MAT 301	Fundamentals of Abstract Algebra
MAT 309	Discrete Mathematics II
MAT 351	Elementary Theory of Numbers
MAT 370	Applied Networks
MAT 401	Introduction to Turing Machines and Abstract Computability
MAT 431	Mathematical Logic
MAT 490	Seminar
MAT 499	Independent Study

All College Electives6–33 cr

Total Required Credit Hours120 cr

MATHEMATICS EDUCATION (7–12)

(0721)

**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: High school mathematics through Regents Course III is recommended.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Mathematics39 cr

A. Required Courses (30 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 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	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 401	Introduction to Turing Machines and Abstract 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 Education25 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	Methods in the Teaching of Secondary School Mathematics Field Experience
MED 307	Uses of Technical Aids in the Teaching of Mathematics
MED 308W	Methods in the Teaching of Secondary School Mathematics
MED 383W	Learning and Teaching Problem Solving

**EXE 100 fulfills an Intellectual Foundations requirement.*

Total Required Credit Hours in Student Teaching12 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 Electives0–2 cr

Total Required Credit Hours121–136 cr

MATHEMATICS EDUCATION (7–12; 5–6 EXTENSION)

(0721)

**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: High school mathematics through Regents Course III is recommended.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Mathematics39 cr

A. Required Courses (30 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 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	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 401	Introduction to Turing Machines and Abstract 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.....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 307	Uses of Technical Aids 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 Teaching12 cr

MED 406	Student Teaching of Mathematics in the Lower Middle Grades (6)
MED 408	Student Teaching of Mathematics in Senior High School (6)

All College Electives0-2 cr

Total Required Credit Hours124-142 cr

MATHEMATICS EDUCATION (7-12; POSTBACCALAUREATE)

(7055)

MATHEMATICS EDUCATION (7-12; 5-6 EXTENSION; POSTBACCALAUREATE)

(7058)

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 these programs, see the Graduate Catalog.

MECHANICAL ENGINEERING TECHNOLOGY*

(0832)

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

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 Requirements39-66 cr

Major Requirements.....48 cr

ENT 300	Analytical Methods for Technologists
ENT 301	Mechanics I
ENT 302	Mechanics II
ENT 303	Kinematics
ENT 311	Thermodynamics
ENT 312	Fluid Mechanics
ENT 331	Electrical Circuits and Devices I
ENT 371	Electric Machines
ENT 401	Stress Analysis
ENT 402	Shock and Vibration Analysis
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

Electives6-33 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
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 Hours124 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

(0707)

Communication Department Bachelor of Arts (HEGIS 0603)

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.

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 studies 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 required to register for certain 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 Requirements39–66 cr

Total Required Credit Hours in Media Production42 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 304	Writing and Producing
COM 317	Media Management
COM 328	Audio Production
COM 329	Video Production
COM 400	Communication Law
COM 428	Advanced Audio Production
OR	
COM 429	Advanced News Production
OR	
COM 431	Advanced Video Production

C. Senior Seminar (3 cr)

COM 450 Communication and Society

D. Communication Electives (9 cr)

300- and 400-level courses in the department (selected by advisement)

All College Electives12–39 cr

Total Required Credit Hours120 cr

MUSIC

(0125)

Music Department Bachelor of Arts (HEGIS 1005)

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.

The Music Department is in the process of attaining accreditation from the National Association of Schools of Music. For current information regarding policies and procedures for music program acceptance, continuance, and completion, visit www.buffalostate.edu/music/documents/handbook.pdf.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Musicianship43 cr

MUS 122	Introduction to Music Studies (2)
MUS 206	Jazz and Rock Foundations
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
MUD 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 340	Ethnomusicology
MUS 495	Capstone Project (1)

Total Required Credit Hours in Musical Performance10 cr

MUS 171-273	Applied Instruction (4 semesters; 4 cr)
MUS 314 or 335	Ensemble Requirements (6 semesters; 6 cr)

Music Electives10 cr

All College Electives (not Music)1–28 cr

Total Required Credit Hours120 cr

MUSIC EDUCATION (PRE-K–12)

(0126)

Music Education in Music Department Bachelor of Music (HEGIS 1005)

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.

The Music Department is in the process of attaining accreditation from the National Association of Schools of Music. For current information regarding policies and procedures for music program acceptance, continuance, and completion, visit www.buffalostate.edu/music/documents/handbook.pdf.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Basic Musicianship and Performance70 cr

MUS 171 or 473	Applied Instruction (7 semesters; 7 cr)
MUS 314 or 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 117	Vocal Pedagogy
MUS 122	Introduction to Music Studies (2)
MUS 206	Jazz and Rock Foundations
MUS 218	Aural Perception I (1)
MUS 219	Aural Perception II (1)
MUS 220	Technology Applications (2)
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 322	Instrumental Conducting (2)
MUS 330	Music Theory III
MUS 331	Music Theory IV
MUS 333	Choral Conducting (2)
MUS 340	Ethnomusicology
MUS 345	Elementary Methods
MUS 346	Elementary Field Experience (1)
MUS 353	Special Needs Field Experience (1)
MUS 360	Secondary Instrumental Methods
MUS 361	Secondary Instrumental Field Experience (1)
MUS 362	Secondary Choral Methods
MUS 363	Secondary Choral Field Experience (1)

Total Required Credit Hours in Professional Education30 cr

EDF 203	School and Society
EDF 211	Introduction to Literacy Instruction
EDF 303	Educational Psychology
EDF 403	Historical and Philosophical Forces Influencing Secondary Education
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 Hours130 cr

NUTRITION

See Dietetics

PAINTING

(0155)

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

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 student 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 Requirements39-66 cr

Total Required Credit Hours in Fine Arts78 cr

A. Required Courses (42 cr)

DES 101	Two-Dimensional Design
FAR 101	Drawing I
FAR 102	Drawing II
FAR 103	Modeling
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 (15 cr)

All College Electives0-3 cr

Total Required Credit Hours120-144 cr

PHILOSOPHY

(0720)

Philosophy and Humanities Department Bachelor of Arts (HEGIS 1509)

Bishop Hall 207 (716) 878-5136

The B.A. degree in philosophy is basic to a well-rounded liberal arts education, especially in its emphasis on careful, critical thinking. It challenges students to examine their societal and personal beliefs and values so that their own philosophy is more creatively and responsibly chosen. It is a solid preparation for law school and other specializations requiring a liberal arts background, as well as for graduate studies in philosophy. The department also offers a minor in religious studies that deepens students' understanding of various religious traditions and their own religious choices.

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

Intellectual Foundations Requirements39-66 cr

Total Required Credit Hours in Philosophy27 cr

A. Required Courses (9 cr)

PHI 103	Introduction to Logic
OR	
PHI 307	Beginning Symbolic Logic
PHI 317	The History of Philosophy I: The Greeks
PHI 318	The History of Philosophy II: The Seventeenth and Eighteenth Centuries

B. Electives (18 cr)*Select six courses from the following:*

PHI 101	Introduction to Philosophy
PHI 102	Introduction to Moral and Social Philosophy
PHI 106	Critical Thinking
PHI 110	The Meaning of Life
PHI 202	Philosophy of Human Nature
PHI 204	Philosophy of Religion
PHI 207	Philosophy in Literature
PHI 210	Existentialism
PHI 212	History of American Philosophy
PHI 300	Problems of Philosophy
PHI 301	Wealth and Justice
PHI 302	Philosophy of Art and Beauty
PHI 304	Philosophy of Law
PHI 305	Analytic Philosophy I: Philosophy of Language
PHI 308	Philosophy of Love and Sex
PHI 309	Knowledge and Truth
PHI 310	History of Ethics
PHI 312	Analytic Philosophy II: Philosophy of Mind
PHI 314	Contemporary Ethical Theory
PHI 316	Freedom and the Self
PHI 323	Moral Issues
PHI 324	Zen Buddhism
PHI 328	Business and Ethics
PHI 339	Friendship
PHI 401	Problems in Philosophy Seminar
PHI 402	Seminar in History of Philosophy
PHI 495	Project
PHI 499	Independent Study

All College Electives27–54 cr**Total Required Credit Hours120 cr**

PHOTOGRAPHY

(0160)**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

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 student 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 charge for materials used in class.

Intellectual Foundations Requirements39–66 cr**Total Required Credit Hours in Fine Arts78 cr****A. Required Courses (42 cr)**

DES 101	Two-Dimensional Design
FAR 101	Drawing I
FAR 102	Drawing II
FAR 103	Modeling
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 (15 cr)**All College Electives0–3 cr****Total Required Credit Hours120–144 cr**

PHYSICS (B.A.)

(0728)**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 Requirements39–66 cr**Total Required Credit Hours in Physics31 cr****A. Required Core Courses (18 cr)**

PHY 111	University Physics I (or equivalent) (4)
PHY 112	University Physics II (or equivalent) (4)
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 Major12 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 Electives11–38 cr**Total Required Credit Hours120 cr**

PHYSICS (B.S.)

(0778)

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 Requirements39–66 cr

Total Required Credit Hours in Physics42 cr

A. Required Core Courses (20 cr)

PHY 111	University Physics I (4)
PHY 112	University Physics II (4)
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 Major15 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 Hours120–123 cr

PHYSICS EDUCATION (7–12)

(0634)

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 Requirements39–66 cr

Total Required Credit Hours in Physics32 cr

PHY 111	University Physics I (4)
PHY 112	University Physics II (4)
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 Education24 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 Teaching12 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 Certification47 cr

A. One Year (or Equivalent) of a Foreign Language (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

Total Required Credit Hours157–175 cr

PHYSICS EDUCATION (7–12; 5–6 EXTENSION)

(0635)

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 Requirements39–66 cr

Total Required Credit Hours in Physics32 cr

PHY 111	University Physics I (4)
PHY 112	University Physics II (4)
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 Education30 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 Teaching12 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 Certification44 cr

A. One Year (or Equivalent) of a Foreign Language (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

Choose two of the following courses:

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 Hours160–178 cr

PHYSICS EDUCATION (7–12; POSTBACCALAUREATE)

(7064)

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.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Physics32 cr

PHY 111	University Physics I (4)
PHY 112	University Physics II (4)
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 Education24 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 Teaching12 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 Certification44 cr

A. One Year (or Equivalent) of a Foreign Language (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

Choose two of the following courses:

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 Hours112 cr

PHYSICS EDUCATION (7–12; 5–6 EXTENSION; POSTBACCALAUREATE)

(7067)

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.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Physics32 cr

PHY 111	University Physics I (4)
PHY 112	University Physics II (4)
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 Education30 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
SCI 323	Science as Inquiry
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 Teaching12 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 Certification44 cr

A. One Year (or Equivalent) of a Foreign Language (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 any 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 Hours118 cr

POLITICAL SCIENCE

(0722)

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 are offered in each of these areas. Minors are offered in both public administration and political science.

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.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Political Science36 cr

(18 of the 36 credit hours must be in 300- or 400-level courses)

A. Required Courses (12 cr)

PSC 101	Introduction to Government and Politics
PSC 102	Introduction to American Government
PSC 300	Political Analysis
PSC 301	Political Statistics

B. Distribution Requirements (12 cr)

American Government and Politics (3 cr)

Select one course from the following:

PSC 210	The American Presidency
PSC 215	Urban Government
PSC 218	African American Political Culture
PSC 220	The Development of American Constitutional Law
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 320	U.S. Constitution/Civil Liberties
PSC 325	Politics of Welfare
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

International Relations (3 cr)

Select one course from the following:

PSC 230	International Relations
PSC 309	International Political Economy
PSC 330	American Foreign Policy
PSC 333	African International Relations
PSC 335	International Relations of the Middle East

Comparative Government (3 cr)

Select one course from the following:

PSC 240	European Political Systems
PSC 340	Politics of Developing Countries
PSC 345/HIS 313	Politics and History of the Middle East
PSC 368	Comparative Public Administration
PSC 370	Canadian Public Administration

Political Theory and Philosophy (3 cr)

Select one course from the following:

PSC 350	Introduction to Legal Thought
PSC 351	History of Western Political Theory I
PSC 352	History of Western Political Theory II
PSC 355	American Political Thought
PSC 375	Race/Sex/Politics of Myth and Story
PSC 450	Contemporary Political Thought

C. Electives in Political Science (12 cr)

Courses in section B may also count as electives if not used to fulfill distribution requirements.

PSC 103	Great Political Issues
PSC 306	Politics of Energy
PSC 389	Topics in Political Science
PSC 470	Senior Seminar
PSC 488	Internship
PSC 495	Project
PSC 497	Washington Semester
PSC 499	Independent Study

All College Electives18–45 cr

Total Required Credit Hours120 cr

PRINTMAKING

(0165)

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 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 student 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 Requirements39–66 cr

Total Required Credit Hours in Fine Arts78 cr

A. Required Courses (42 cr)

DES 101	Two-Dimensional Design
FAR 101	Drawing I
FAR 102	Drawing II
FAR 103	Modeling
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 322	Intermediate Printmaking II
FAR 333	Advanced Printmaking (three courses) (9)
FAR 420	Senior Studio in Printmaking (6)

C. Art Electives (15 cr)

All College Electives0–3 cr

Total Required Credit Hours120–144 cr

PSYCHOLOGY (B.A.)

(0723)

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 Requirements39–66 cr

Total Required Credit Hours in Psychology36 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)

- 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

- Any additional 3 credit hours of psychology at the 300-level.

C. Electives Selected by Advisement: 400-level (9 cr)

- 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 Electives15-42 cr

Total Required Credit Hours120 cr

PSYCHOLOGY (B.S.)

(0724)

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.

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.

Intellectual Foundations Requirements39-66 cr

Total Required Credit Hours in Psychology39-42 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)

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)

Environmental Psychology Concentration (24 cr)

PSY 370 Environmental Psychology I
PSY 470 Environmental Psychology II
Elective courses selected by advisement (18)

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)

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)

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)

All College Electives18-39 cr

Biological Psychology (18-36)
Clinical Psychology (18-36)
Environmental Psychology (24-36)
Industrial/Organizational Psychology (18-36)
Psychology of Aging (21-39)
Psychology of Infancy (21-39)

Total Required Credit Hours120 cr

PUBLIC COMMUNICATION

(0703)

Communication Department
Bachelor of Arts (HEGIS 0699)

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.

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 required for certain 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 acceptance into public relations and advertising.

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 Requirements39–66 cr

Total Requirements42 cr

A. Communication Core (12 credits)

- 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 credits)

- COM 301 Principles of Public Relations and Advertising
- COM 307 Group Communication
- COM 308 Public Relations Writing
- COM 322 Communication Graphics
- 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 credits)

300- and 400-level courses in the department (selected by advisement)

All College Electives12–39 cr

Total Required Credit Hours120 cr

SCULPTURE

(0170)

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

All freshmen and transfer students enter the B.F.A. degree 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 student 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 Requirements39–66 cr

Total Required Credit Hours in Fine Arts78 cr

A. Required Courses (42 cr)

- DES 101 Two-Dimensional Design
- FAR 101 Drawing I
- FAR 102 Drawing II
- FAR 103 Modeling
- 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 (15 cr)

All College Electives0–3 cr

Total Required Credit Hours120–144 cr

SOCIAL STUDIES EDUCATION (7–12)

(0640)

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, and achieve acceptable evaluations on the PRAXIS II: Subject Assessment in Social Studies Content Knowledge exam. An interview with the program coordinator, department chair, or other designated official is mandatory, and formal acceptance into the program is necessary.

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 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 Requirements39–66 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 civilizations requirements, with the understanding that only 3 credit hours will “double dip.”

Total Required Credit Hours in Social Sciences42 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)

- Select two courses from the following:*
- HIS 115 Foundations of Western Civilization
- HIS 116 Europe Since 1500
- HIS 117 Twentieth-Century Europe
- HIS 230 World Civilizations
- 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 Education30 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 407 The Teaching of History

Total Required Credit Hours in Student Teaching12 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 Language6 cr

Total Required Credit Hours132–150 cr

SOCIAL STUDIES EDUCATION (7–12; 5–6 EXTENSION)

(0641)

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, and achieve acceptable evaluations on the PRAXIS II: Subject Assessment in Social Studies Content Knowledge exam. An interview with the program coordinator, department chair, or other designated official is mandatory, and formal acceptance into the program is necessary.

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 488, is available and 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 Requirements39–66 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, with the understanding that only 3 credit hours will “double dip.”

Total Required Credit Hours in Social Sciences42 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)

- Select two courses from the following:*
- HIS 115 Foundations of Western Civilization
 - HIS 116 Europe Since 1500
 - HIS 117 Twentieth-Century Europe
 - HIS 230 World Civilizations
- Two upper-division electives (any Asian, African, or Middle-Eastern world history courses)

C. Geography (3 cr)

- GEG 300 World Regional Geography

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. Seminar (3 cr)

- HIS 300W Research and Writing Seminar

Total Required Credit Hours in Professional Education30 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 407 The Teaching of History

Total Required Credit Hours in Field Experience and Student Teaching15 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 488 Internship: Middle Childhood and Adolescence Education

One Year (or Equivalent) of a Foreign Language6 cr

Total Required Credit Hours135–153 cr

SOCIAL STUDIES EDUCATION (7–12; POSTBACCALAUREATE)

(7070)

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 existing 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; and achieve acceptable evaluations on the PRAXIS II: Subject Assessment in Social Studies Content Knowledge exam. An interview with the program coordinator, department chair, or other designated official is mandatory, and formal acceptance into the program is necessary.

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 Courses50 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)

- Select two courses from the following:*
- HIS 115 Foundations of Western Civilization
 - HIS 116 Europe Since 1500
 - HIS 117 Twentieth-Century Europe
 - HIS 230 World Civilizations

C. Other World History (6 cr)

Two Asian, Middle-Eastern, or African history courses

D. 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

E. 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

F. Economics (3 cr)

Select one course from the following:

- ECO 101 The Economic System
- ECO 201 Principles of Macroeconomics
- ECO 202 Principles of Microeconomics

G. Cultural Diversity (3 cr)

- SSE 363 American Identity in Transition: Diversity and Pluralism in the United States

H. History/Social Science Electives (11 cr)

Total Required Credit Hours in Professional Education30 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 407 The Teaching of History

Total Required Credit Hours in Student Teaching12 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 cr)
- SSE 410 Student Teaching of Social Studies in Senior High School (6 cr)

Total Required Credit Hours92 cr

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 488, is available and will be used by students to complete the additional 50 clock hours in field experience required for the 56 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 Courses50 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)

Select two courses from the following:

- HIS 115 Foundations of Western Civilization
- HIS 116 Europe Since 1500
- HIS 117 Twentieth-Century Europe
- HIS 230 World Civilizations

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 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 363 American Identity in Transition: Diversity and Pluralism in the United States

G. History/Social Science Electives (11 cr)

Total Required Credit Hours in Professional Education30 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 407 The Teaching of History

Total Required Credit Hours in Student Teaching15 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 cr)
- SSE 410 Student Teaching of Social Studies in Senior High School (6 cr)
- SSE 488 Internship: Middle Childhood and Adolescence Education (3 cr)

Total Required Credit Hours95 cr

**SOCIAL STUDIES EDUCATION
(7-12; 5-6 EXTENSION;
POSTBACCALAUREATE)**

(7073)

**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) postbaccalaureate 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; and achieve acceptable evaluations on the PRAXIS II: Subject Assessment in Social Studies Content Knowledge exam. An interview with the program coordinator, department chair, or other designated official is mandatory, and formal acceptance into the program is necessary.

SOCIAL WORK*

(0435)

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.
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 study available.

Intellectual Foundations Requirements39–66 cr

BIO 101 or equivalent in human biology

Total Required Credit Hours in Social Work42 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 Electives12–39 cr

Total Required Credit Hours120 cr

SOCIOLOGY (B.A.)

(0730)

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 Requirements39–66 cr

Total Required Credit Hours in Sociology40 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 Gender and Sex Roles
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 Electives14–41 cr

Total Required Credit Hours120 cr

SOCIOLOGY—APPLIED (B.S.)

(0732)

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 Requirements39–66 cr

Total Required Credit Hours in Sociology40 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 only be applied 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 Life

- SOC 320 Sociology of the Family
- SOC 322 Sociology of Childhood and Youth
- SOC 323 Sociology of Education
- 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 420 Sociology of Religion

Deviance and Social Control

- SOC 240 Social Problems
- SOC 370 Sociology of Deviant Behavior
- SOC 380 Sociology of Crime
- SOC 381 Sociology of Violence
- SOC 382 Sociology of Law
- SOC 383 Sociology of Punishment and Corrections
- SOC 390 Juvenile Delinquency
- SOC 391 Sociology of Addiction
- SOC 393 Sociology of Mental Illness

Community, Work, and Organizations

- SOC 323 Sociology of Education
- 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

Sociological Practice

- SOC 199 Social Science Computer Applications
- SOC 300W Methods of Research
- OR
- SOC 302W Applied Social Research
- SOC 330 Social Psychology
- SOC 362 Sociology of Organizations
- SOC 408W Contemporary Sociological Theory
- SOC 415 Population Analysis (OR GEG 309)
- SOC 499 Independent Study in Advanced Statistical Analysis

C. Inequality Electives (6 cr)

Select two courses from the following:

- SOC 310 Sociology of Gender and Sex Roles
- SOC 312 Women in Society
- SOC 321 African American Family
- SOC 333 Social Movements
- 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

D. Sociology electives; two courses (6 cr)

Students may take any two courses in the major.

All College Electives14–41 cr

Total Required Credit Hours120 cr

SPANISH EDUCATION (7–12)

(0656)

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 enables students to earn provisional certification to teach Spanish in New York State secondary schools. Students develop Spanish language skills and study the structure and sound system of Spanish, the literature and culture of Spanish-speaking peoples, and, in the professional education component, the growth and role of the public school, adolescent development and psychology, and the teaching/learning of foreign languages in school settings. The curriculum includes a series of field experiences. Students must have a minimum GPA of 2.5 (overall and in the major) to student teach.

Students desiring this program may be admitted into the B.A. language and literature program (0714), which functions as a pre-major for the B.S. program. Students must apply for admission to the B.S. program by filling out a form in the Modern and Classical Languages Department office (Bishop 122) after they have successfully completed 30 credit hours in Spanish, including two 300-level courses. Transfer students who enter with more than 30 hours in Spanish may apply as soon as they have completed two 300-level courses in Spanish at Buffalo State. No student will be admitted with less than a 2.5 overall GPA, or with less than a 2.5 GPA in Spanish courses.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Spanish36 cr

A. Required Courses (27 cr)

- SPA 301, SPA 302 Spanish Conversation and Composition
- SPA 305 Spanish Phonetics
- SPA 306 The Civilization of Spain
- SPA 307, SPA 308 Survey of Spanish Literature
- OR
- SPA 310, SPA 311 Survey of Spanish American Literature
- 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 Education24 cr

- EDF 303 Educational Psychology
- EDF 403 Historical and Philosophical Forces Influencing Secondary Education
- EDU 416 Teaching Reading in Secondary Schools
- EXE 372 Foundations of Teaching Secondary Students with Disabilities
- FLE 200 Field Experience in Foreign Language Education
- FLE 316 Teaching Reading in the Second Language in Middle Schools
- FLE 405 Methods and Materials for Teaching Foreign Languages in High Schools
- FLE 406 Techniques for Teaching and Evaluating Foreign Languages in Middle Schools

Total Required Credit Hours in Student Teaching12 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 Electives0–6 cr

Total Required Credit Hours120 cr

SPANISH EDUCATION (7–12; POSTBACCALAUREATE)

(0656)

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

For information about this program, contact the Modern and Classical
Languages Department.

SPANISH LANGUAGE AND LITERATURE

(0714)

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 for a semester in an approved program.

This program also serves as a pre-major for new students who wish to enter the Spanish B.S secondary education (7–12) program (0656). When students have successfully completed 30 credit hours, with a minimum GPA of 2.5, they may apply for entrance to the Spanish Education (7–12) program. Transfer students with more than 30 credit hours may apply when they have successfully completed two Spanish courses at the 300- or 400- level. Applications are available in the department office.

Intellectual Foundations Requirements39–66 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
SPA 306	The Civilization of Spain
SPA 307, SPA 308	Survey of Spanish Literature
OR	
SPA 301, SPA 302	Spanish Conversation and Composition
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 Electives30–42 cr

Total Required Credit Hours120 cr

SPEECH-LANGUAGE PATHOLOGY

(0325)

Speech-Language Pathology Department Bachelor of Science (HEGIS 1220)

Ketchum Hall 209 (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 disorders. The undergraduate program provides students with necessary prerequisite courses for application to graduate study. The speech-language pathology master's degree program is accredited by the American Speech-Language-Hearing Association.

The master's degree is necessary for the initial teaching certificate, as well as for the license to practice speech-language pathology, and for the Certificate of Clinical Competence (CCC) awarded by the American Speech-Language-Hearing Association.

Admission Requirements: Students are not admitted to the major as a first-semester freshman. Students may apply for admission to the department after a minimum of one semester of college study. A minimum GPA of 2.8 is required.

Academic Performance Policy: Students who have a GPA of 2.0 or less 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 2.0 or greater in SLP-prefixed required courses or they will be dismissed from the department.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in the Major43 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 and Language Programs
SLP 428	Acoustics Lab
SLP 429	Clinical Observation

All College Electives 11–38 cr

Recommended speech-language pathology electives:

PSY 306	Statistics in Psychological Research
OR	
MAT 311	Introductory Probability and Statistics

Total Required Credit Hours120 cr

TECHNOLOGY

See Individual Majors

- Electrical Engineering Technology (Electronics)
- Electrical Engineering Technology (Power and Machines)
- Fashion and Textile Technology
- Industrial Technology
- Mechanical Engineering Technology
- Technology Education

TECHNOLOGY EDUCATION

(0500)

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 Requirements39–66 cr

Total Required Credit Hours in Technology33 cr

TEC 101	Technical Drawing
TED 123	Principles of Manufacturing
TEC 201	Materials Processing
TED 300	Construction Systems
TEC 302	CAD/CAM
TEC 311	Materials Science and Testing
TEC 314	ElectroMechanicals
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 Sequence27 cr

EDF 303	Educational Psychology
CTE 301/BME 301	Principles of Occupational Education
CTE 302/BME 302	Curriculum and Evaluation in Occupational Education
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 Certification15 cr

CHE XXX	Core Chemistry (3)
EXE 372	Foundations of Teaching Adolescents with Disabilities
MAT XXX	Core Math (3)
MAT 124	Pre-Calculus Mathematics
PHY 107	General Physics I

All College Electives0–6 cr

Total Required Credit Hours120–141 cr

TECHNOLOGY EDUCATION (POSTBACCALAUREATE)

(7079)

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 Education6 cr

TED 100	Introduction to Technology Education
TED 360W	Technology Education Methods and Evaluation

Total Required Credit Hours in Other Education15 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 Semesters12 cr

TED 450W	Professional Semester (6)
TED 451W	Professional Semester (6)

Total Required Credit Hours33 cr

THEATER

(0115)

Theater Department Bachelor of Arts (HEGIS 1506)

Rockwell Hall 203 (716) 878-6416

The theater program introduces students to all aspects of theater art. 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, design/technical, and general study. High standards in this program afford a foundation for careers in professional, as well as educational, theater. A 19-credit-hour minor program in theater is also available.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in Theater42 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	Technical Theater
THA 316	Script Analysis
THA 317	History of Theater: Ancient to Renaissance
THA 318	History of Theater: Renaissance 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 Electives12–39 cr

Total Required Credit Hours120 cr

URBAN AND REGIONAL ANALYSIS AND PLANNING*

(0738)

Geography and Planning Department Bachelor of Science (HEGIS 2214)

Classroom Building A213 (716) 878-6216

Urban and regional analysis and planning provides students with an understanding of how communities are structured, what their needs are, and how they are governed. Planners develop long-term and short-term plans to use land for the growth and revitalization of urban, suburban, and rural communities, while helping local officials make decisions concerning social, economic, and environmental problems.

*Evening study available.

Intellectual Foundations Requirements39–66 cr

Total Required Credit Hours in the Major40–42 cr

A. Required Courses for Both Concentrations (24 cr)

GEG 199	Computers in Social Science
GEG 307	Conservation and Environmental Management
GEG 390	Quantitative Methods in Geography and Planning
PLN 315	Principles of Urban and Regional Planning
PLN 325	Remote Sensing and Mapping
PLN 412	Community Planning Agencies and Issues
PLN 430	Senior Thesis

Select one course from the following:

PSC 300	Political Analysis
SOC 300	Methods in Social Research ¹

¹Prerequisites for SOC 300 are waived by the Sociology Department for urban and regional analysis and planning majors.

B. Concentration Electives (16–18 cr)

Select one of two concentrations:

1. Urban and Regional Planning Concentration Electives (18 cr)

GEG 309 Introduction to Urban Geography

Select five courses from the following (by advisement):

ECO 412	Urban Economics
ECO 424	Business and Economic Forecasting
GEG 305	Principles of Economic Geography
GEG 310	Geography of Transportation
GEG 425	Fundamentals of GIS
GEG 427	Corporate Applications in GIS
PLN 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 botany. 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 370	Principles of Water Resource Planning
GEG 375	Principles of Hydrology
GEG 386	Applied Climatology
GEG 420	Economic Evaluation of Water Resources
GEG 421	Watershed Analysis
GEG 425	Fundamentals of GIS
GEG 428	Environmental Assessment and Planning Applications in GIS
PLN 360	Environmental Impact Assessment
PLN 488	Internship (3 cr maximum)

All College Electives: Urban-Regional Planning Concentration 0–23 cr

All College Electives: Environmental Planning Concentration 0–23 cr

Total Required Credit Hours (Either Concentration)120–126 cr

COURSE LISTINGS

Course Prefixes

AAS	AFRICAN AND AFRICAN AMERICAN STUDIES	HEW	HEALTH AND WELLNESS
AED	ART EDUCATION	HIS	HISTORY
ANT	ANTHROPOLOGY	HON	HONORS
ATS	ART THERAPY STUDIES	HPR	HEALTH AND PHYSICAL RECREATION
BIO	BIOLOGY	HTR	HOSPITALITY AND TOURISM
BME	BUSINESS AND MARKETING EDUCATION	HUM	HUMANITIES
BSC	INTELLECTUAL FOUNDATIONS	IDE	INTERIOR DESIGN
BUS	BUSINESS	INS	INDIVIDUALIZED STUDIES
CHE	CHEMISTRY	ITA	ITALIAN
CHI	CHINESE	LAT	LATIN
CIS	COMPUTER INFORMATION SYSTEMS	LIB	LIBRARY RESEARCH
COM	COMMUNICATION	MAT	MATHEMATICS
CRJ	CRIMINAL JUSTICE	MED	MATHEMATICS EDUCATION
CRS	CREATIVE STUDIES	MCL	MODERN AND CLASSICAL LANGUAGES
CTE	CAREER AND TECHNICAL EDUCATION	MUS	MUSIC
CWP	COLLEGE WRITING PROGRAM	NFS	NUTRITION AND FOOD SCIENCE
DAN	DANCE	PHI	PHILOSOPHY
DES	DESIGN	PHY	PHYSICS
ECO	ECONOMICS	PLN	PLANNING
EDF	EDUCATIONAL FOUNDATIONS	PSC	POLITICAL SCIENCE
EDU	EDUCATION	PSY	PSYCHOLOGY
ENG	ENGLISH	REL	RELIGIOUS STUDIES
ENS	ENVIRONMENTAL SCIENCE	SAF	SAFETY STUDIES
ENT	ENGINEERING TECHNOLOGY	SCI	GENERAL SCIENCE
EXE	EXCEPTIONAL EDUCATION	SED	SCIENCE EDUCATION
FAR	FINE ARTS	SLP	SPEECH-LANGUAGE PATHOLOGY
FIN	FINANCE	SOC	SOCIOLOGY
FLE	FOREIGN LANGUAGE EDUCATION	SPA	SPANISH
FRE	FRENCH	SPC	SPEECH COMMUNICATION
FST	FOOD TECHNOLOGY	SSE/SST	SOCIAL STUDIES EDUCATION
FTT	FASHION AND TEXTILE TECHNOLOGY	SWA	SWAHILI
GEG	GEOGRAPHY	SWK	SOCIAL WORK
GER	GERMAN	TEC	TECHNOLOGY
GES	GEOSCIENCES	TED	TECHNOLOGY EDUCATION
GRK	GREEK	THA	THEATER ARTS
		TVA	TELEVISION ARTS
		UNC	UNIVERSITY COLLEGE

Course Coding System

At the time of the printing of this catalog, new students at Buffalo State College are required to fulfill Intellectual Foundations requirements. Students starting their education before fall 2006 are required to fulfill general education (GE2K) requirements and should consult their department adviser and the catalog covering their year of entry. See page 00 of this catalog for more information.

A character code is used to identify which Intellectual Foundations requirement(s) a course fulfills. The Intellectual Foundations codes are as follows:

7	=	Basic Writing
X	=	Mathematics/Quantitative Reasoning
J	=	Cognate Foundation: Arts
Q	=	Cognate Foundations: Humanities
K	=	Cognate Foundations: Natural Sciences
Y	=	Cognate Foundations: Social Sciences
1	=	Foundations of Civilizations: American History
4	=	Foundations of Civilizations: Western Civilization
5	=	Foundations of Civilizations: Non-Western Civilizations
L	=	Technology and Society
8	=	Diversity
P	=	Basic Oral Communication
W	=	Writing Across the Curriculum
F	=	Foreign Language

Here's a sample course listing:

ANT 101
UNDERSTANDING CULTURE
3, 3/0; 5

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.

Here's what it means:

ANT 101

This is an anthropology course, number 101.

UNDERSTANDING CULTURE

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.

5

This course satisfies the Foundations of Civilizations: Non-Western Civilizations.

Prerequisites:

Prerequisites or requirements you must fulfill before registering for a course. The remainder of the course listing describes the subject matter.

AAS

AFRICAN AND AFRICAN AMERICAN STUDIES

Dean's Office, Natural and Social Sciences

AAS 100 INTRODUCTION TO AFRICANA STUDIES 3, 3/0

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/SWA 101 BEGINNING SWAHILI I 3, 3/0; F

The fundamentals of Swahili with emphasis on the spoken and written language.

AAS/SWA 102 BEGINNING SWAHILI II 3, 3/0; F

Prerequisite: AAS/SWA 101 or permission of instructor. Continuation of AAS/SWA 101.

AAS 189 TOPICS COURSE 3, 3/0

AAS/SWA 201 INTERMEDIATE SWAHILI I 3, 3/0; F

Prerequisite: AAS/SWA 102 or permission of instructor. Further development of basic skills with emphasis on reading and writing.

AAS/SWA 202 INTERMEDIATE SWAHILI II 3, 3/0; F

Prerequisite: AAS/SWA 201 or permission of instructor. Continuation of AAS/SWA 201.

AAS/HIS 211 HISTORY OF MODERN AFRICA SINCE 1919 3, 3/0

Partition of Africa by European nations. Impact of colonial regimes. African resistance movements. Drive toward independence. Problems of economic and social change. Cultural and intellectual currents in modern Africa.

AAS/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.

AAS/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 to improve or retard education for blacks.

Approaches for providing meaningful education for blacks now and in the future.

AAS/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 effects on social and political issues in Africa and abroad.

AAS/EDF 225 ETHNIC STUDIES IN 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.

AAS/DAN 230 SURVEY OF AFRICAN AMERICAN DANCE 3, 3/0

Technique, practice, readings, and projects in dance and black culture; current practices of black dance in relation to Euro-American techniques.

AAS/DAN 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.

AAS/ENG 240 AFRICAN AMERICAN LITERATURE 3, 3/0; Q, 8

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.

AAS/ENG 241 AFRICAN AMERICAN LITERATURE SINCE 1940 3, 3/0

Realism, naturalism, modernism, and post-modernism 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/MUS 305 MODERN JAZZ 3, 3/0

Prerequisite: MUS 206. An explanation of the history and development of modern jazz from 1941 to the present.

AAS/ANT 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.

AAS/HIS 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.

AAS/SOC 321 THE AFRICAN AMERICAN FAMILY 3, 3/0; 8

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.

AAS/HIS 322 AFRICAN AMERICAN HISTORY 3, 3/0; 8

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.

AAS/PSC 333 3, 3/0 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.

AAS/MUS 340 ETHNOMUSICOLOGY 3, 3/0

Prerequisite: MUS 303. Lectures, readings, and recordings introducing principal musical traditions of selected non-Western cultures, such as African, Indic, and Sinitic. Consideration of the African American tradition, including jazz and rock. Includes individual projects of music or cultural analysis. Required for music majors.

AAS/HIS 341 AFRICAN AMERICAN 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.

AAS/SOC 351 SOCIOLOGY OF RACE AND ETHNICITY 3, 3/0; 8

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.

AAS/ANT 411 AFRICAN FAMILY 3, 3/0

The family, kinship, and marriage among the peoples of Africa. Emphasis on the interrelationships of kinship with other aspects of culture.

AAS/THA 421 BLACK DRAMA IN AMERICA 3, 3/0

Thematic and technical development of black American drama.

AAS/CRJ 425 RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE 3, 3/0

Prerequisite: CRJ 101 and upper-division status. 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.

AAS/HIS 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.

AAS/HIS 469 BLACK PROTEST AND LEADERSHIP IN THE U.S. IN THE TWENTIETH CENTURY 3, 3/0

Prerequisite: Upper-division status. The black protest movements and leaders in twentieth-century America.

AAS 485 ADVANCED SEMINAR IN AFRICANA STUDIES 3, 3/0

Prerequisites: 12 credits of AAS and senior standing. Detailed exploration of contemporary issues affecting African and African American peoples. Capstone course that seeks to integrate the knowledge acquired in the interdisciplinary study of African and African American peoples. Emphasis on analysis of issues, evaluation of solutions, and creative problem solving.

AAS 499 INDEPENDENT STUDY 3, 0/0

Prerequisite: Faculty adviser permission must be secured prior to registration.

AED

ART EDUCATION

Art Education Department

AED 100 ESSENTIALS OF VISUAL ARTS 3, 4/0; J

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.

AED 200 FUNDAMENTALS OF ART INQUIRY 3, 3/0; J

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.

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. Introductory course that serves as an entry to the professional program. Provides basic understanding of art education and its relationship to the arts/education careers and society. Required for art education majors.

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. Specific information and theories relevant to the teaching of art. Teaching models based on art education theories formulated to accommodate the student's preprofessional interests and needs in the context of observed and theoretically stimulated teaching situations. Required for art education majors.

AED 302 FUNCTIONS AND PRACTICE IN ART EDUCATION 3, 3/0

Prerequisites: Art education major; AED 300W, AED 301W, and one course in sociology or anthropology. Identification of art content and processes necessary in the design of instructional planning, implementation, and evaluation of art concepts. Skills are gained and tested through practicum in mini-teaching and/or participation teaching. Required for art education majors.

AED 303 ELEMENTARY STUDENT TEACHING IN ART 6, 0/0

Prerequisites: Art education major; AED 302W, ATS 325, satisfaction of departmental

requirements, and approval of AED coordinator of student teaching. Supervised student teaching at assigned levels from kindergarten through sixth grade in various types of schools and communities. Seminar discussions on professional problems of the beginning teacher.

AED 304 SECONDARY STUDENT TEACHING IN ART 6, 0/0

Prerequisites: Art education major; AED 302W, ATS 325, satisfaction of departmental requirements, and approval of AED coordinator of student teaching. Supervised student teaching at assigned levels from seventh grade through senior high school in various types of schools and communities. Seminar discussions on planning and evaluating teaching experiences and professional problems of the beginning teacher. Required for art education majors.

AED 310 ART MATERIALS EXPLORATION FOR GROUP ACTIVITIES 3, 4/0

Exploratory materials experiences basic to art activities. Activities-oriented processes and their ultimate use in group art activities that occur in a variety of agency, institutional, and recreational contexts. Required for art therapy studies minors.

AED 315 ARTS IN LIVING 3, 4/0;

Contemporary and historic art forms as they apply to everyday living. Analysis of the individual significance and interrelatedness of architecture, industrial design, the graphic arts, painting, sculpture, music, and the theater arts. Participation in creative activities related to the course. Required for art education majors.

AED 318 ART EDUCATION AND MULTICULTURALISM 3, 3/0

Prerequisite: Upper-division status. Multiculturalism as it relates to the theory and practice of art education. Teachers in training develop their cultural competence in preparation for working with diverse student populations. Students design culturally relevant art lessons and increase their awareness of and appreciation for the arts and lifeways of various peoples and cultures.

AED 319 ART FOR ELEMENTARY AND EXCEPTIONAL EDUCATION CLASSROOM TEACHERS 3, 4/0

Prerequisite: Elementary education, exceptional education, or social work major, or permission of instructor. Children's expressive abilities, interests, and needs in relation to art at several developmental levels. The management of media as an agent for developing skills, inquiry, and appreciation of the artistic process. Studio experiences with processes and materials used in elementary school settings.

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.

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 Variable credit

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

Prerequisite: Upper-division status. Project undertaken and meeting hours arranged individually with instructor.

AED 499 INDEPENDENT STUDY

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.

ANT

ANTHROPOLOGY

Anthropology Department

ANT 100 HUMAN ORIGINS 3, 3/0; K

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 dating 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; 5

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 102 INTRODUCTION TO ETHNOLOGICAL ANALYSIS 3, 3/0

Introduction to scientific ethnology and quantitative techniques used to describe, analyze, and test hypotheses within the distribution of linguistic and social characteristics of world nations. Linguistic characteristics include speech sounds, word shapes, morphemes, and word order. Social characteristics include marriage types, family forms, residence rules, descent, kinship types, community settlements, political organizations, subsistence systems, and religions.

ANT 144 INTRODUCTION TO FOLKLORE AND FOLKLIFF 3, 3/0; Y

Introduction to the major genres of folklore and folklife and their function in contemporary society. Includes ethnic and occupational folklore; rites of passage and calendar customs; roots music; and the relationship of folklore, popular culture, and the Internet.

ANT 189 TOPICS COURSE 3, 3/0

ANT 203 HUMAN VARIATION 3, 3/0

Examination of and relationship between physical variations in human populations. Relationship between attributes and cultural patterns. Genetic basis of human evolution and variation. Ecological distribution of human physical varieties with special emphasis on modern human populations.

ANT 300 INDIANS OF WESTERN NORTH AMERICA 3, 3/0

Origins of Native Americans. Routes of migration of Western Indians and affiliations with Asiatic peoples. Language families. Cultures of Indians of the Northwest coast, Mackenzie-Yukon area, plateau, Great Basin, plains, California, and Southwest.

ANT 301 INDIGENOUS PEOPLES OF EASTERN NORTH AMERICA 3, 3/0; 5

Prerequisite: ANT 100 or permission of instructor. 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; 1

Introduction to the anthropology of Europe and European cultures; the diverse peoples and cultures of Western and Eastern Europe, folklife, peasantry, folkarts, and European and Euro-American worldviews. European colonialism and European attitudes about and practices toward other cultural groups.

**ANT/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 historic and recent population migrations on the African continent and the surrounding islands.

**ANT 307
URBAN ANTHROPOLOGY**

3, 3/0

Study of the origin 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, 6/0

Prerequisite: ANT 100 or permission of instructor. Laboratory and field methods in archaeology. Opportunity for practical experience with various archaeological techniques.

**ANT 312
ARCHAEOLOGY OF NORTH
AMERICA**

3, 3/0

Prerequisite: ANT 100 or permission of instructor. 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: Any anthropology course. Research methods in cultural anthropology covering fieldwork, participant observation, sampling, measurements, documentation, statistical and cross-cultural methods.

**ANT 320
HUMAN GROWTH IN
ANTHROPOLOGICAL
PERSPECTIVE**

3, 3/0

The human growth pattern from both a biological and cultural perspective, utilizing a global approach. Growth studies, nutritional studies, anthropometric techniques, social and environmental factors that influence growth, the short- and long-term impact of the "cycle of poverty," variation in growth among different populations.

**ANT 321
PRIMATE BEHAVIOR**

3, 3/0

Prerequisite: ANT 100, ANT 101 or permission of instructor. Social behavior among nonhuman primates, with particular attention to monkeys and apes.

**ANT 324
THE HUMAN SKELETON**

3, 3/0

Skeletal remains of past human societies. Structure and function of the skeleton; age, sex, illness, and injury to the individual; reconstructing the population, demography, health status, growth patterns, and genetic affinities.

**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.

**ANT 326
THE HUMAN FOSSIL RECORD**

3, 3/0

Prerequisite: ANT 100 or permission of instructor. Human evolution as derived from the fossil record. Major fossil hominid discoveries, their interpretation, and their place in the development of the human species.

**ANT 327/HEW 327
INTRODUCTION TO MEDICAL
ANTHROPOLOGY**

3, 3/0; 5

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.

**ANT 329
WORLD PREHISTORY**

3, 3/0; 5

Prerequisite: ANT 100 or upper-division status. The aims and methods of prehistoric research and the interpretation of archaeological materials. Major stages in the development of culture illustrated in Old and New World contexts.

**ANT 330
PACIFIC ISLANDERS**

3, 3/0

General introduction to the prehistory, physical anthropology, ethnography, and ethnology of Polynesia, Micronesia, Melanesia, and Australia, focusing on special problems of current interest.

**ANT 340
WOMEN IN
ANTHROPOLOGICAL PERSPECTIVE**

3, 3/0

Prerequisite: One course in the natural or social sciences, upper-division status, or permission of instructor. Women's position in human society, with attention to biological, social, and cultural influences on female status in cross-cultural and evolutionary perspective.

**ANT 341
ART AND CULTURE IN
ANTHROPOLOGICAL PERSPECTIVE**

3, 3/0

Prerequisite: One course in art, one course in the natural and social sciences, or permission of instructor. 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.

**ANT 360
FOLKLORE OF WOMEN**

3, 3/0

Prerequisite: ANT 144 or upper-division status. Survey of women's folklore and contemporary culture. Includes the role of folklore in the formation of gender roles, women's folklore as feminism, and women as traditional creative artists and performers.

**ANT 362
URBAN FOLKLORE**

3, 3/0

Prerequisite: ANT 144 or upper-division status. Folklore and folklife in the urban environment. The survival and reshaping of rural and Old World tradition. The function of folklore in the preservation of ethnic identity. Craft, industrial, and labor traditions. Festivals and celebrations of folklore in the media and popular culture. Folklore and technology.

**ANT 365
PRACTICING ANTHROPOLOGY**

3, 3/0

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: Upper-division status. 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 or permission of instructor. 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.

**ANT 375
HUMANISTIC ANTHROPOLOGY**

3, 3/0

Prerequisite: Upper-division status or permission of instructor. Expanded forms of anthropological representation (fiction, poetry, and film) and their relationship to traditional anthropological narrative forms. Comparison

of humanistic and traditional ethnographic accounts of the same cultures. Literature-based representations of anthropological material.

**ANT 377
ANCIENT CIVILIZATION**

3, 3/0; 5

Prerequisite: ANT 100 or permission of instructor. 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; 5

Prerequisite: One anthropology course. World religious beliefs and practices, and universal phenomena with many manifestations. 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 382
CULTURE AND PERSONALITY**

3, 3/0

Prerequisite: One course in the natural and social sciences, upper-division status, or permission of instructor. Cross-cultural study of the role of individual variable genetic potentials and socioculturally variable norms. Structures of modal and deviant personalities.

**ANT 384
CULTURE, SOCIAL CONTROL,
AND LAW**

3, 3/0

Prerequisites: ANT 101, CRJ 101, or SWK 105, or permission of instructor. An evolutionary, comparative cross-cultural, and ethnographic approach to the anthropology of law and social control. Conflict resolution, legal culture in various cultural groups (egalitarian, peasant, "deviant" subcultures, industrial bureaucracies, the legal profession). Practical issues for the study of legal systems, legal and illegal behavior.

**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.

ANT 402
CULTURAL ANTHROPOLOGY
3, 3/0

Prerequisite: ANT 101 or ANT 102. Intensive, comparative approach to the content and process of culture problems in the interpretation of cultural materials. Cross-disciplinary approaches. Applied anthropology.

ANT 405
HISTORY OF
ANTHROPOLOGICAL THOUGHT
3, 3/0

Prerequisite: ANT 101. Important contributions to the development of anthropological theory from the pre-anthropological philosophers, such as Locke, to the present. Includes theories of Boas, Darwin, Kroeber, Lévi-Strauss, Malinowski, Rivers, Sapir, and Tylor. Required for all anthropology majors.

ANT 409
SOCIAL STRUCTURE
3, 3/0

Prerequisite: ANT 101 or ANT 102. Comparative study of social structure in different cultures, emphasizing the tribal. Includes kinship, occupational groups, government, social classes, and clubs.

ANT 411
AFRICAN FAMILY
3, 3/0

The family, kinship, and marriage among the peoples of Africa. Emphasis on the interrelationships of kinship with other aspects of culture.

ANT 412
SEMINAR IN ANTHROPOLOGY
3, 3/0

Critique of the literature of one of the four areas of anthropological research: physical anthropology, archaeology, ethnology, and linguistics. Research may be required.

ANT 415
SEMINAR IN ARCHAEOLOGY
3, 3/0

Prerequisite: Permission of instructor. Survey of the field of archaeology that includes the examination of particular cultures, as well as discussion of major methodological and theoretical issues.

ANT 488
INTERNSHIP IN
ANTHROPOLOGY
Variable credit

Prerequisites: Anthropology major or minor, upper-division status, and departmental approval. 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 495
SPECIAL PROJECT
3, 3/0

ANT 498
HONORS RESEARCH
3, 3/0

ANT 499
INDEPENDENT STUDY
3, 3/0

ATS

ART THERAPY STUDIES

Art Education Department

ATS 320
INTRODUCTION TO ART
THERAPY
3, 4/0

Initial exploration of art as a mode of human expression for children and adults in therapeutic settings, such as special education classes, mental health clinics, developmental centers, community centers, etc. Volunteer work in human-services agency.

ATS 325
ART AND SPECIAL NEEDS
3, 4/0; 8

In-depth exploration of theoretical and practical relationships within art programs designed to serve people with exceptional needs in schools and other human-services agencies. Art activities as a diagnostic agent and as a means for establishing settings that promote individual growth, self-awareness, self-concept development, and self-expression. Supervised fieldwork in special-education settings.

BIO

BIOLOGY

Biology Department

BIO 100
PRINCIPLES OF BIOLOGY
3, 3/0; K

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; K

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; K

Non-majors only. Biological aspects of global environmental problems. Principles of ecology.

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; K

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; K

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; K

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 303
GENETICS
4, 3/3

Prerequisites: BIO 211, CHE 111 and CHE 112. Principles of heredity. Inheritance of specific plant, animal, and human traits. Biochemical aspects of the gene. Relationship of genetics to evolution.

BIO 305
MOLECULAR BIOLOGY
4, 3/3

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 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, 0/3

Prerequisites: BIO 100 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, 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.

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.

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.

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 324
BIOLOGY OF HUMAN
REPRODUCTION
3, 3/0

Prerequisites: BIO 100 and upper-division status. Non-majors only. Anatomy and physiology of the human reproductive system, development of the human embryo, and the processes of birth and lactation.

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

Prerequisites: BIO 211, BIO 213, 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.

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, 2/3

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
Variable credit

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

Prerequisites: Faculty adviser and department chair permission.

BIO 498
HONORS RESEARCH
3, 0/9

Prerequisites: Acceptance by the Biology Honors Committee and faculty adviser permission. Individual investigation of an original problem. After two semesters of honors research, students submit written papers and present data orally at a scientific meeting or in a department seminar. Minimum of 6 credit hours required for honors certification.

BIO 499
INDEPENDENT STUDY

Prerequisites: Faculty adviser and department chair permission.

BME

BUSINESS AND MARKETING EDUCATION

Educational Foundations Department

BME 301/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.

BME 302/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.

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.

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.

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.

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.

BSC

INTELLECTUAL FOUNDATIONS

University College

BSC 101
FOUNDATIONS OF INQUIRY
3, 3/0

Introduction to the Intellectual Foundations program, 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.

BUS

BUSINESS

Business Department

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, 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.

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

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

Prerequisite: Upper-division status.
Workforce diversity as the positive acknowledgement of the way in which people are different. Recognizes gender, age, religion, and cultural background, and work and life responsibilities. Teamwork develops an understanding and awareness of cultural diversification in the workforce.

BUS 312
FINANCIAL ACCOUNTING
3, 3/0

Prerequisites: Sophomore status and math competence. 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 focusing on accumulating, processing, reporting, and interpreting decision-relevant financial information that is used in managing organizations. 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 practices in product marketing and service. The decision-making process in marketing.

**BUS 321
MARKETING ON THE INTERNET**
3, 3/0

Prerequisite: BUS 320. 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

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.

**BUS 324
BUSINESS COMMUNICATION**
3, 3/0

Prerequisites: Successful completion of English composition/basic communication competency requirement and upper-division status. Fundamental principles and tools for effective communication within organizations. Experiential exercises will be used to assist in developing written and oral communication skills.

**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 326
INTRODUCTION TO
MERCHANDISING**
3, 3/0

The science of merchandising management together with the trends of merchandising.

**BUS 327
ADVERTISING CONCEPTS AND
PRACTICES**
3, 3/0

Prerequisite: BUS 320. 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 328
ADVANCED ADVERTISING
CAMPAIGN MANAGEMENT**
3, 3/0

Prerequisite: BUS 327. Principles of communication and advertising in non-print media. Coordination of sales promotion activities and its effect on business, organizations, industries and individuals.

**BUS 329
SALES MANAGEMENT**
3, 3/0

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, 3/0

Prerequisite: BUS 320. 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. The advisory and judicial systems; business organizations. 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. 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 336
VISUAL MERCHANDISING**
3, 3/0

Principles of display through application, experimentation, and evaluation of basic techniques and its importance in selling merchandise. Use of color, harmony, and arrangement.

**BUS 340
SECURITIES**
3, 3/0

Prerequisite: Upper-division status. Securities and securities markets. Emphasis on investment markets and their interaction with the macroeconomics system.

**BUS 341
COMMODITIES**
3, 3/0

Prerequisite: Upper-division status. Commodities futures trading. Special emphasis on terminology, hedging procedures, trading procedures, and price-making influences.

**BUS 347
RETAIL MANAGEMENT**
3, 3/0

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**

Prerequisites: Business major and BUS 320.

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

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.

**BUS 363
BUSINESS IN THE WESTERN
HEMISPHERE**
3, 3/0

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

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. 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

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

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. 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**
3, 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. 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. 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 upper-division 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

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. 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. 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

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, upper-division 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.

**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.

**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.

**BUS 473
INTERNATIONAL MANAGEMENT**
3, 3/0

Through an approach that blends theory and practical exercises, students will learn the fundamentals of managing in a global economy.

**BUS 490
FIELD EXPERIENCE**
Credit to be arranged.

Prerequisites: Upper-division 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
Chemistry Department

**CHE 100
CHEMISTRY AND SOCIETY**
3, 3/0; K

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; K

Basic principles of chemistry, including atomic and molecular structure; gases, 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; K

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 201 or concurrent registration. 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 corequisite: 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 300
MEDICATIONS: CHEMICALS
FOR YOUR HEALTH**
3, 3/0

Prerequisite: CHE 100, CHE 101, or CHE 111. The structure, uses, and physiological effects of common medications, at a level appropriate for the nonscience major. Emphasis on consumer issues related to safe and effective use of prescription and nonprescription drugs; drug development and approval; alternative medicines, vitamins, generic drugs, and consumer guides for using drugs wisely. Not open to chemistry or forensic chemistry majors.

**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 202 and PHY 112. Prerequisite or corequisite: 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. 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, 0/3

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.

**CHE 308
PHYSICAL CHEMISTRY
LABORATORY II**
1, 0/3

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.

CHE 310
LITERATURE OF CHEMISTRY
1, 1/0

Prerequisite or corequisite: 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
3, 3/0

Prerequisite: CHE 112 or CHE 102. Discussion of chemical reactions in air, water, and soil. Effect of human activities on the chemical environment. Pollution-control methods and devices.

CHE 321
PRINCIPLES OF ORGANIC CHEMISTRY
4, 3/3

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, 3/3

Prerequisite: CHE 321 or CHE 202. Structure and functions of the substances of biochemical interest found in living systems, supplemented by illustrative laboratory work. Not open to chemistry majors.

CHE 331
PRINCIPLES OF PHYSICAL CHEMISTRY
3, 3/0

Prerequisite: CHE 202, MAT 126, PHY 108, 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 399
INTERNSHIP IN CHEMISTRY
Variable credit

Prerequisite: Permission of instructor. Hands-on experience in approved research and/or development project of current interest to local chemical industry. Student is a full-time employee of the industry, drawing full pay for the designated period.

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 412
INTERNSHIP IN CRIMINALISTICS
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.

CHE 414
FORENSIC CHEMISTRY LABORATORY
3, 1/6

Prerequisites: CHE 301, CHE 312, and MAT 311. This course will provide laboratory experience in forensic chemistry including analytical experiments in blood work, hair and fiber analysis, arson, toxicology, and explosive residue analysis.

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.

CHE 461
INORGANIC CHEMISTRY LABORATORY
2, 0/6

Prerequisite: CHE 301. *Prerequisite or corequisite:* CHE 460. Laboratory experience in the synthesis and characterization of selected inorganic compounds using a variety of techniques.

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.

CHE 471
BIOCHEMICAL TECHNIQUES
1, 0/3

Prerequisites: CHE 202 and CHE 301. *Prerequisite or corequisite:* CHE 470. Introduction to techniques in the modern biochemistry laboratory. Participation in laboratory experiments illustrating these techniques and general biochemical principles.

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

Prerequisite: Faculty project adviser permission.

CHE 499
INDEPENDENT STUDY

Prerequisite: Faculty project adviser permission.

CHI

CHINESE

See Modern and
Classical Languages

CIS

COMPUTER INFORMATION SYSTEMS

Computer Information Systems Department

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.

CIS 105
INFORMATION TECHNOLOGY AND SOCIETY
3, 3/0; L

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 111
INTRODUCTION TO PROGRAMMING
3, 3/0

Prerequisite: CIS 101 or equivalent. Description of computers. Concepts of languages and programming. Computer language programming, including basic properties of languages such as branching, looping, table handling, and subprograms and their application to problem solving. Enhancement of programming skills through practical experience.

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 enhance-

ment 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.

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.

CIS 311
COMPUTER MODELS FOR DECISION MAKING
3, 3/0

Prerequisite: CIS 370 or permission of instructor. Introduction to concepts of management science and techniques of operations research. The development and use of paradigms in the process of decision making. The use of pre-written computer programs to solve problems in management science. Computer laboratory work is required.

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.

CIS 351
STRUCTURED PROGRAMMING
3, 3/0

Prerequisite: CIS 251 or CIS 361. Introduction to additional structured techniques or structured programming languages. Programs, assignments, and examples to extend the student's knowledge of data structures and file structures, as well as to illustrate language features.

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.

**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 micro-computer 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.

**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. In contrast to conventional sequential programming, Visual Basic is used to write Windows-based, object-oriented, event-driven programs. Hardware and software necessary for multimedia productions are discussed and used to write Visual Basic programs.

**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.

**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.

**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.

**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.

**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 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.

**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. 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**
Variable credit

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.

**CIS 495
SPECIAL PROJECT**

**CIS 499
INDEPENDENT STUDY**

**COM
COMMUNICATION**

**Communication
Department**

**COM 100
MEDIA LITERACY**
3, 3/0; Q

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.

**COM 210
INTRODUCTION TO 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.

**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 and professional base; focuses on news sources, with practice in information-gathering techniques.

**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.

**COM 304
BROADCAST COPYWRITING**
3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 210; COM 215. Discussion and laboratory practice organizing and writing copy for various electronic media, including commercials, promotional announcements, corporate video, and narrative scripts.

**COM 308
PUBLIC RELATIONS WRITING**
3, 2/2

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.

**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.

**COM 313
AFRICAN AMERICAN
COMMUNICATION**
3, 3/0

Prerequisite: Upper-division status. An examination of the cultural perspective and communication characteristics that define African American communication as demonstrated in public communication, interpersonal communication, literature, music and the media. Develops an increased understanding

of individuals from a traditionally underrepresented population by examining the cultural and historical circumstances that have shaped African American communication.

**COM 317
MEDIA MANAGEMENT**
3, 3/0

Prerequisite: GPA of 2.6 in a communication major. Theory and practice in broadcast management for radio and television stations, cable networks and systems; focuses on structure, budget, sales, regulations; focuses on audience-building aspect of programming and management.

**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.

**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.

**COM 324
TECHNICAL PRODUCTION
FOR TELEVISION AND RADIO**
3, 3/0

In-depth analysis of digital and analog technologies used in television and radio production; covers media computer systems, television systems, and sound design.

**COM 325
FEATURE WRITING**
3, 3/0

Prerequisites: GPA of 2.6 in a communication major; COM 210 or ENG 191. Analysis of and practice in magazine article and newspaper feature writing, including freelancing procedures.

**COM 327
GREAT WRITING AND
REPORTING OF AMERICAN
JOURNALISM**
3, 3/0

Exploration of excellence in reporting and writing; analysis of great journalistic writings and why they enjoy enduring fame.

**COM 328
AUDIO PRODUCTION**
3, 2/2

Prerequisite: GPA of 2.6 in a communication major. Introduction to the theory, aesthetics, and fundamentals of audio production; emphasis on commercial production for radio and other audio media; introduction to in-studio production setting.

**COM 329
VIDEO PRODUCTION**
3, 2/2

Prerequisite: GPA of 2.6 in a communication major. Introduction to the theory, aesthetics, and fundamentals of video production; emphasis on visual, auditory, and motion elements of communication through TV; practice in studio production setting.

**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.

**COM 338
ELECTRONIC NEWS II:
REPORTING**
3, 2/2

Prerequisite: COM 337. Discussion and practice in television field reporting and news writing techniques used in reporting on location; includes working under deadline pressure for writing, editing, and reporting packages.

**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 348
ELECTRONIC NEWS III:
ADVANCED REPORTING**
3, 3/0

Prerequisites: GPA of 2.6 in a communication major; COM 338. Advanced techniques of news reporting for electronic media in non-studio locations; practice in reporting, writing, and news presentation under deadline pressure.

**COM 388
BROADCAST PRACTICUM**
Variable credit

Prerequisites: GPA of 2.6 in a communication major; upper-division status. Practicum experience in radio and television; participation in campus productions and broadcasting workshops as crew members, technicians, anchors, reporters, or announcers. One credit awarded for every 3.3 hours of crewing per week.

**COM 389
TOPICS COURSE**
0, 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.

**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.

**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.

**COM 405
NEWS REPORTING**
3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 303 or COM 337; COM 319 or COM 338. Supervised reporting experience through laboratory practice with Bengal News Online. News gathering and writing, with emphasis on developing news stories, interviewing and reporting, covering news beats, dealing with sources, research, accuracy, journalistic ethics.

**COM 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.

**COM 408
PUBLIC RELATIONS CASE
STUDIES**
3, 3/0

Prerequisite: COM 301. Exploration of various genres of public relations; application of strategic principles, techniques, and programs to real-life organizational problems and opportunities.

**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.

**COM 415
COMPUTER-ASSISTED REPORTING**
3, 2/2

Prerequisite: COM 210. Computer assisted research and reporting, including use of online sources, the Internet, and spreadsheets and database managers to analyze data.

**COM 418
CAMPAIGNS IN PUBLIC
RELATIONS AND ADVERTISING**
3, 3/0

Prerequisites: GPA of 2.6 in a communication major; COM 301, 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.

**COM 428
ADVANCED AUDIO
PRODUCTION**
3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 328. Continuing practice in audio production; emphasis on multitrack recording, mixing, and music and voice editing.

**COM 429
ADVANCED VIDEO
PRODUCTION**
3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 328. Capstone experience in producing a continuing video program 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 431
ADVANCED VIDEO PRODUCTION**
3, 3/0

Prerequisite: COM 329. Capstone experience in producing a continuing video program for on-campus/off-campus viewing; students specialize in a specific area of video production.

**COM 432
NONLINEAR EDITING**
3, 3/0

Prerequisite: COM 329 or permission of instructor. Students study the process and art of nonlinear editing using digital editors to develop skills required to successfully compete professionally using nonlinear video editing. Students will produce their own video project using the nonlinear video editing machine.

**COM 439
TELEVISION DIRECTING AND
PRODUCING**
3, 2/2

Prerequisites: GPA of 2.6 in a communication major; COM 329. Advanced television directing and producing. Students produce and direct television programs using campus facilities. Field trips to local professional television centers offered.

**COM 440
ELECTRONIC NEWS GATHERING**
3, 2/2

Prerequisite: COM 329. A perspective of electronic news-gathering based on its history; the techniques of shooting and editing videotaped news stories. With 3/4" portable equipment, students shoot stories for news and feature programs.

**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.

**COM 488
INTERNSHIP**
Variable credit

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**

Prerequisites: GPA of 2.6 in a communication major and permission of instructor.

**COM 499
INDEPENDENT STUDY**

Prerequisites: GPA of 2.6 in a communication major and permission of instructor.

CRJ

CRIMINAL JUSTICE

Criminal Justice Department

**CRJ 101
INTRODUCTION TO
CRIMINAL JUSTICE**
3, 3/0

The structure, function, practices, policies, and objectives of the criminal justice system. Emphasis on three underlying themes: resource scarcity, discretionary powers, and interdependence or exchange relationships among criminal justice agencies.

**CRJ 201
CRIMINAL LAW AND
PROCEDURES**
3, 3/0

Prerequisite: CRJ 101. The substantive and procedural processes used by the criminal justice system. Various laws and procedures applied by law enforcement, prosecutors, attorneys, and the judiciary presented and discussed.

**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.

**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 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.

**CRJ 303
CRIME, IDEOLOGY, AND THE
ADMINISTRATION OF JUSTICE**
3, 3/0

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.

**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.

**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 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.

**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.

**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/AAS 425
RACE, ETHNICITY, AND THE
ADMINISTRATION OF JUSTICE**
3, 3/0

Prerequisites: CRJ 101 and upper-division status. 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.

**CRJ 430
GENDER AND THE
ADMINISTRATION OF JUSTICE**
3, 3/0

Prerequisites: CRJ 101 and upper-division status. Gender differences and their effects on criminal behavior, law, and the criminal justice process. Perspectives on the historical subordination of women in American society and culture, crimes of which women are disproportionately victims. Extent, types, characteristics, and

theories of female criminality. Criminal justice policies and practices that result in the differential treatment of female victims, offenders, and practitioners.

**CRJ 470
ADVANCED SEMINAR IN
CRIMINAL JUSTICE
3, 3/0**

Prerequisites: CRJ 101, CRJ 303, CRJ 315, upper-division status, and a minimum of 24 credit hours of criminal justice coursework. Integration of knowledge acquired throughout the criminal justice curriculum into a holistic conceptualization of theory, practice, research, and planning. Emphasis on developing advanced scholarship, conceptualization, and critical thinking through writing within the discipline.

**CRJ 488
INTERNSHIP IN CRIMINAL
JUSTICE
3, 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**

**CRJ 499
INDEPENDENT STUDY**

CRS

CREATIVE STUDIES

International Center for Studies in Creativity

**CRS/UNC/BUS 101
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.

**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.

**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 305
SEMINAR/METAPHORICAL
PROBLEM SOLVING
1, 1/0**

Prerequisites: CRS 205, CRS 302, and permission of instructor. Topics of current interest related to theories, methods, and models of metaphorical problem solving, with a particular emphasis on synectics.

**CRS 306
SEMINAR/CRITICAL
AND ANALYTIC PROBLEM
SOLVING
1, 1/0**

Prerequisites: CRS 205, CRS 302, and permission of instructor. Topics of current interest related to methods, techniques, and models of problem solving with particular emphasis on creative analysis and Kepner-Tregoe approaches.

**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.

CTE

CAREER AND TECHNICAL EDUCATION

Educational Foundations Department

**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.

**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.

**CTE 301/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.

**CTE 302/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.

**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.

**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.

**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.

**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.

**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.

**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 479
POSTSECONDARY INSTRUCTION
PRACTICUM**

6, 1/5

Prerequisites: CTE 302, CTE 404, and NOCTI Trade Examination or equivalent; career and technical education major; completion of at least 18 credit hours in required CTE courses. Part- or full-time teaching assignment in a post secondary-level, career-technical education program. Develops and refines skills and understandings of the teaching-learning process as it relates to career-technical teaching, under the guidance and supervision of college faculty. S or U grade only.

**CTE 489
INDUSTRIAL TRAINER
PRACTICUM**

6, 3/3

Prerequisites: CTE 302, CTE 404, and NOCTI Trade Examination or equivalent; career and technical education major; completion of at least 18 credit hours in CTE required courses; CTE program coordinator approval. Part- or full-time assignment in a business or industrial training program. Develops and refines skills and understanding of occupational training practices, under the guidance and supervision of business and industry training personnel and college faculty. S or U grade only.

**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**

**CTE 497
SPECIAL WORKSHOP**

**CTE 499
INDEPENDENT STUDY**

CWP

COLLEGE WRITING PROGRAM

University College

CWP 099

**CWP 101
COLLEGE WRITING I**

3, 3/0
Initiation into all phases of the writing process and the features of good writing. 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.

**CWP 102
COLLEGE WRITING II**

3, 3/0
Prerequisite: CWP 101 or its equivalent. (See College Writing Program Office, 130 South Wing for placement procedures.) Further development of students' writing (beyond CWP 101). Writing assignments emphasize argument and persuasion, advanced rhetorical strategies, analysis/synthesis, and research methods.

DAN

DANCE

Theater Department

**DAN 200
BEGINNING MODERN
TECHNIQUE**

3, 1/4; J

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 220
BEGINNING BALLET**

3, 1/4; J

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; J

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/AAS 230
SURVEY OF AFRICAN AMERICAN
DANCE**

3, 3/0

Technique, practice, readings, and projects in dance and black culture; current practices of black dance in relation to Euro-American techniques.

**DAN/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.

**DAN 250
JAZZ DANCE**

3, 1/4

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, 1/4

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, 1/4

Techniques of composition; practical research in choreography through improvisation; creation of individual and group compositions.

**DAN 310
DANCE FOR THE MUSIC
THEATER**

3, 1/4

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, 1/4

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, 0/2

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**

3, 1/4

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**

3, 1/4

Continuation of DAN 330. Intermediate-level ballet technique course with emphasis on applications of idiokinetics.

**DAN 350
TAP DANCE FOR THE STAGE:
ELEMENTARY**

1, 0/2

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, 0/2

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**

**DAN 499
INDEPENDENT STUDY**

DES

DESIGN

Design Department

**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, 0/6

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, 0/6
Prerequisite: DES 103. Advanced concepts and manipulation skills related to three-dimensional design. Conceptualization, visualization, and evaluation related to design objectives.

DES 105
MECHANICAL AND PERSPECTIVE
DRAWING
3, 0/6
Descriptive drawing, including orthographic, isometric, and perspective projection, as an aid in visualizing and planning the construction of three-dimensional art objects.

DES 114
WORKSHOP IN CRAFTS
3, 0/6; J
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
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 215
INTRODUCTION TO DESIGN
HISTORY
3, 3/0
General introduction to design history and criticism, tracing the evolution of form and meaning from primitive cultures through the contemporary world. Special emphasis on the Industrial Revolution and modern and postmodern culture.

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, 0/6
Prerequisite: DES 101. Exploration of materials and processes in jewelry making, emphasizing creative design.

DES 235
DESIGN IN METAL
3, 0/6
Metalworking as a medium for expression and object design, utilizing the unique qualities of various metals and working techniques.

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.

DES 250
WOOD DESIGN I
3, 0/6
Wood as a medium for expression and object design; technical and aesthetic problems.

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.

DES 271
LETTERING AND TYPOGRAPHY I
3, 0/6
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, 0/6
Prerequisite: DES 102. Origins, meaning, and dimensions of color; lectures and studio problems in various media, exploring the compositional effects of color.

DES 308
FORM AND FUNCTION
3, 0/6
Prerequisites: DES 101 and DES 103. Practical application of two- and three-dimensional design principles to the analysis, evolution, and development of utilitarian forms in a changing environment.

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.

DES 314
HISTORY OF GRAPHIC DESIGN:
INDUSTRIAL REVOLUTION TO
THE PRESENT
3, 3/0
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.

DES 316
DESIGN IN THE NINETEENTH
CENTURY
3, 3/0
Prerequisite: DES 215. Historical and theoretical foundations of design from the end of the eighteenth century to World War I. Emphasis on the effects of the Industrial Revolution on graphic design, industrial design, interiors, costume, and crafts.

DES 317
DESIGN IN THE TWENTIETH
CENTURY
3, 3/0
Prerequisite: DES 215 or permission of instructor. Historical and theoretical foundations of design in the twentieth century, concentrating on developments in graphic, industrial, and craft design from the 1890s to the present, and emphasizing the unique conditions of the present century with respect to new technology and new media.

DES 318
SET DESIGN I
3, 0/6
Prerequisite: Upper-division status or one theater or design course. Introduction to theatrical set design. Basic design components of line, form, mass, composition, balance, color and texture as they relate to set design; development of skills in script analysis, research, color theory, drafting techniques, and mechanical perspective drawing.

DES 320
CERAMICS II
3, 0/6
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.

DES 321
CERAMICS: JUNIOR STUDIO
3, 0/6
Prerequisite: DES 320. Advanced study and experience in the total ceramic process through assigned problems according to individual personal interests.

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.

DES 331
JEWELRY: JUNIOR STUDIO
3, 0/6
Prerequisite: DES 330. Advanced exploration of materials and processes used in jewelry making with emphasis on design aspects. Individually selected projects.

DES 336
METALSMITHING
3, 0/6
Prerequisite: DES 235 or DES 330. Advanced concentration in metalworking as a continuation of forming techniques introduced in DES 235.

DES 337
METALSMITHING: JUNIOR
STUDIO
3, 0/6
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, 3/0
Prerequisites: DES 104. Craft majors only. 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.

DES 351
WOOD DESIGN: JUNIOR STUDIO
3, 0/6
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.

DES 363
FURNITURE THEORY AND
APPLICATION
3, 3/0
Exploration of furniture elements found within interior design. Interrelationship of construction, strength of materials, and style. Evolutionary influence of mass production, material development, and ergonomics. Field trips.

DES 371
LETTERING AND TYPOGRAPHY II
3, 0/6
Prerequisite: DES 370. A continuation of the exploration of typography as an expressive and functional communication medium. Emphases on design criteria, theories of interpretation and personal creativity. Review of current technology.

DES 374
ADVERTISING DESIGN
3, 0/6
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.

DES 378 INTRODUCTION TO WEB DESIGN
3, 0/6

Prerequisites: DES 374, DES 377, upper-division status, and admission to communication design program upon passing portfolio review. 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 419 EXHIBITION TECHNIQUES
3, 0/6

Basic design theory and communications in the field of exhibits, displays, and signage. Emphasis on structural concepts, lighting, kinetics, function, materials, and aesthetics. Additional credit by special arrangement with instructor.

DES 421 CERAMICS: SENIOR STUDIO
312 (3 hrs/sem); 0/60/12

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
312 (3 hrs/sem); 0/60/12

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 437 METALSMITHING: SENIOR STUDIO
312 (3 hrs/sem); 0/60/12

Prerequisite: DES 337. 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 444 FIBERS: SENIOR STUDIO
312 (3 hrs/sem); 0/60/12

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
312 (3 hrs/sem); 0/60/12

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, 0/6

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 474 ADVERTISING DESIGN II
3, 0/6

Prerequisite: DES 384. Advanced problems in advertising design. Integration of computer design software with creative problem solving techniques in advertising. Course assignments may include print campaigns, trade advertising, television commercials, and direct mail pieces.

DES 475 GRAPHIC DESIGN PRACTICUM
Variable credit

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
Variable credit

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

DES 499 INDEPENDENT STUDY

ECO

ECONOMICS

Economics and Finance Department

ECO 101 THE ECONOMIC SYSTEM
3, 3/0; Y

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. May not be taken concurrently with or subsequent to ECO 201 or ECO 202.

ECO 103 ECONOMIC HISTORY OF THE UNITED STATES
3, 3/0; 1

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.

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 TOPIC COURSE
1, 1/0

ECO 201 PRINCIPLES OF MACROECONOMICS
3, 3/0; Y

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; Y

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, 3/0

Prerequisite: ECO 201 or ECO 202 recommended. Women's position in the U.S. economy, how it has changed, how it compares to that of men and to the economic positions of women in other countries. Theoretical and empirical issues in analyzing women's economic status.

ECO 304 MONEY AND BANKING
3, 3/0

Prerequisites: ECO 201 and MAT 110 or equivalent. 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

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.

**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.

**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.

**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 and MAT 110 or equivalent; ECO 307 recommended. 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.

**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
3, 3/0**

**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.

**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.

**ECO 404
ECONOMIC DEVELOPMENT
3, 3/0**

Prerequisite: Minimum of two economics courses, not including ECO 101. 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.

**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.

**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.

**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.

**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.

**ECO 488
INTERNSHIP
Variable credit**

Prerequisites: ECO 201, ECO 202, and one relevant elective; minimum cumulative GPA of 2.5; 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 IN
ECONOMICS AND FINANCE
3, 3/0**

Prerequisites: Economics major with senior status; ECO 305, ECO 307, and ECO 308; ECO 424 recommended. Capstone course in economics. Required of all senior economics majors. Investigation and presentation of findings of selected advanced topics in economics. Senior paper on a topic in economics or financial economics required.

**ECO 495
SPECIAL PROJECT**

Prerequisites: Minimum cumulative GPA of 3.0 (in major and overall); ECO 307 and ECO 308 or Curriculum Committee permission. A maximum of 3 credit hours of ECO 488, ECO 495, ECO 499 may be applied toward the major.

**ECO 498
HONORS RESEARCH
Variable Credit**

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**

Prerequisites: Minimum cumulative GPA of 3.0 (in major and overall); ECO 307 and ECO 308 or Curriculum Committee permission. A maximum of 3 credit hours of ECO 488, ECO 495, or ECO 499 may be applied toward the major.

EDF

EDUCATIONAL FOUNDATIONS

Educational Foundations Department

**EDF 200
INTRODUCTION TO
EDUCATION IN THE INNER CITY
3, 3/0**

The formation and development of the inner city from early immigration to the present. School development's inextricable link to socioeconomic and political development of the inner city. Inner-city schools' responses to changing demographics and the implications such changes have for policy making and educational practice. Students spend 10 hours in an inner-city school setting.

**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.

**EDF/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 in order to improve or retard education for blacks. Approaches for providing meaningful education for blacks now and in the future.

**EDF/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 effect on social and political issues in Africa and abroad.

**EDF/AAS 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.

**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.

**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.

**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.

**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.

**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.

**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 362
BEHAVIOR AND CLASSROOM
MANAGEMENT
3, 3/0**

Prerequisites: EDF 202; EDU 211 (childhood education majors only). *Prerequisites or corequisites:* EDU 400 and EDU 401. Managing the classroom environment to facilitate effective instruction. Includes various models of behavior management. Exceptional education majors must take concurrently with EXE 363.

**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.

**EDF 410
PHILOSOPHY OF EDUCATION
3, 3/0**

Influential theories of education and their effect upon education, past and present. Effect of democratic, as opposed to authoritarian, concepts of the "good life" upon school policy and practice. Nature and function of academic freedom. The public school and the religious dimension of life. Importance of continuity between avowed educational values and actual practices.

**EDF 412
COMPARATIVE EDUCATION
3, 3/0**

Education's influence in world affairs. Comparison of educational problems and solutions in various countries. Relationship of education programs to cultural heritage and its future. Selection of program studies in terms of student interests and current developments.

**EDF 495
SPECIAL PROJECT**

**EDF 497
WORKSHOP**

**EDF 499
INDEPENDENT STUDY**

EDU

EDUCATION

Elementary Education and Reading Department

**EDU 121
TUTORING NATIVE AMERICAN
STUDENTS**

Variable credit

Prerequisites: Successful completion of English composition/basic communication and mathematics competency requirements; permission of instructor. Develops sociocultural awareness and trains tutors for community-based experiences in tutoring Native American students at the Buffalo Native American Magnet School. Prepares students for experiences with unique interactions between culture and education.

**EDU 201/EDF 201
INTRODUCTION TO
EDUCATION
3, 3/0**

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 discipline; participation in the reflective writing process emphasized. Field experience required.

**EDU 211
INTRODUCTION TO LITERACY
3, 3/0**

Prerequisite: Prechildhood major. *Prerequisite or corequisite:* 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 activities that support course objectives are required.

**EDU 220
PROGRAMS FOR INFANTS
AND TODDLERS
3, 3/0**

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.

**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 310W
TEACHING SOCIAL STUDIES IN
THE ELEMENTARY SCHOOL
3, 3/0; 8**

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.

**EDU 311W
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.

**EDU 312
THE TEACHING OF SCIENCE
AND MATHEMATICS
6, 6/0**

Majors only. Prerequisite: Admission to program; upper-division status; overall cumulative GPA 2.5 or higher; cumulative GPA of 2.5 in these courses: EDF 202 and EDF 203; EDU 201/EDF 201, EDF 302, EDU 211 and a C or higher in EDU 311W (exceptional education students may substitute EXE 360 for EDU 201/EDF 201.) 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 329
INTEGRATED THEMATIC
INSTRUCTION FOR YOUNG
CHILDREN
6, 6/0**

Majors only. Prerequisites: 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 development of preschool, kindergarten, and primary-grade children. Lessons are taught in a professional development school.

**EDU 375
COMPUTER APPLICATIONS
IN EDUCATION
3, 3/0**

Prerequisite: Admission to program.

Introduction to educational technology. Development of a productivity portfolio that documents competence in word processing, databases, print merging, spreadsheets, and charting. Instructional strategies for using Macintosh and IBM-compatible computer programs for presentations, small-group lessons, or computer lab settings. Educational use of telecommunications, hypermedia, scanners, digitizers, liquid crystal display panels, videodisc players, CD-ROM drives, interactive multimedia, and local area networks.

**EDU 400
PRACTICUM IN TEACHING
6, 0/0**

Prerequisites: Minimum overall 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. Supervised teaching experience in two school settings at two developmental levels 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. Only EXE/EDF 362 or EDU/EDF/EXE 375 (EDU 411 for early childhood certification) may be taken with student teaching. Extension students or exceptional education majors also take EDU 404. Early childhood majors also take EDU 410.

**EDU 401
PRACTICUM IN TEACHING:
INTERMEDIATE
6, 0/0**

Prerequisites: Minimum cumulative GPA of 2.50; 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. Supervised teaching in elementary grades five full days a week for approximately seven 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 management, record keeping, evaluation techniques.

**EDU 402
SEMINAR IN EDUCATION
3, 3/0**

Nature and function of a philosophy of education. Teaching research methods and techniques, crucial issues in education, problems of beginning teachers. To be taken concurrently with EDU 400, EDU 401 and/or EDU 410. Required for all childhood, early childhood, and combined education majors.

**EDU 404
PRACTICUM IN ELEMENTARY
SCHOOL TEACHING
6, 30/0**

Prerequisites: Minimum cumulative GPA of 2.5; minimum grade of C in methods courses

in 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. Supervised teaching experience in an elementary-grade setting 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. Only EXE/EDF 362 or EDU/EXE 375 (EDU 411 for early childhood and combined majors) may be taken with student teaching. This course is for extension or exceptional education majors.

**EDU 410
PRACTICUM IN EARLY
CHILDHOOD TEACHING
6, 0/0**

Prerequisites: 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. Provides supervised teaching experience in an early childhood classroom five full days per 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.

**EDU 411
PARENTS, SCHOOLS,
AND COMMUNITY
3, 3/0**

Prerequisite: This course is taken concurrently with student teaching. This course is for early childhood and combined childhood and early childhood majors. Designed to assist students in building partnerships 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 linking families with services offered in the school and community.

**EDU 416
TEACHING LITERACY IN MIDDLE
AND SECONDARY SCHOOLS
3, 3/0**

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.

**EDU 417
ADOLESCENT LITERACY
3, 3/0**

Prerequisites: EDU 416 and fulfillment of English composition/basic communication requirement, upper-division status. The development of literacy in adolescents. Topics will include adolescents' multiple literacies, assessing reading and writing abilities, reading materials other than the textbook, teaching reading and writing across the curriculum, and strategies for working with struggling readers and writers.

**EDU 426
EMERGENT LITERACY3, 3/0**

Areas of literacy development typical to pre-school and primary-grade children. Emphasis on strategies and practices that foster various aspects of early reading, writing, speaking, and listening in young children. Introduction to components of a literate early-childhood environment, classroom management, and literacy-assessment techniques currently endorsed for educators of emergent readers.

**EDU 499
INDEPENDENT STUDY
3, 0/0**

ENG

ENGLISH

English Department

**ENG 130
BIBLICAL AND CLASSICAL
LITERATURE
3, 3/0**
Greek, Roman, and Biblical literature.

**ENG 131
MIEVAL AND RENAISSANCE
LITERATURE
3, 3/0**
Major European writers before 1600.

**ENG 151
INTRODUCTION TO POETRY
3, 3/0; Q**
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.

**ENG 190
INTRODUCTION TO LITERARY
ANALYSIS AND INTERPRETATION
3, 3/0**

Prerequisites: CWP 101 and CWP 101, or the equivalent. An introduction to the basics of literary analysis and interpretation. The basic types of responses to literature, the defining characteristics of poetry and fiction, and skills of close reading of literary texts (literary interpretation). Students should take this class immediately after completing freshman writing requirement or within the first year of transferring into the English major.

**ENG 200
FIELD EXPERIENCE IN
SECONDARY ENGLISH
EDUCATION
3, 3/0**

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, K-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; Q**

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; Q**

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.

**ENG 210
BRITISH LITERATURE I:
SPECIAL TOPICS
3, 3/0; Q**

A study of selected topics, themes, and authors in British literature before 1700.

**ENG 211
SURVEY OF BRITISH LITERATURE II:
SPECIAL TOPICS
3, 3/0; Q**

A study of selected topics, themes, and authors in British literature from 1700 to 1900.

**ENG 220
AMERICAN LITERATURE I:
SPECIAL TOPICS
3, 3/0; Q**

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.

**ENG 221
AMERICAN LITERATURE II:
SELECTED TOPICS
3, 3/0; Q**

A study of topics, themes, and authors in American literature after the Civil War.

**ENG 230
COMPARATIVE LITERATURE
3, 3/0**

Recurring ideas, themes, and theories in world literature.

**ENG 231
WOMEN IN LITERATURE:
SELECTED TOPICS
3, 3/0**

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.

**ENG/AAS 240
AFRICAN AMERICAN
LITERATURE TO 1940
3, 3/0; Q, 8**

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.

**ENG/AAS 241
AFRICAN AMERICAN
LITERATURE SINCE 1940**
3, 3/0
Black revolutionary thought and artistry in such writers as Richard Wright, William Demby, Ralph Ellison, LeRoi Jones, James Baldwin, Don L. Lee, Gwendolyn Brooks, Nikki Giovanni, John Henrik Clarke, and Ed Bullins.

**ENG 245
WRITING ABOUT THE ARTS**
3, 3/0
Prerequisite: ENG 102 and one arts Intellectual Foundations course. Practicum in writing about the arts. Teaches skills essential to developing a discerning critical eye and to communicating critical insights in various forms of writing about the arts. Includes participation in projects that highlight both traditional and contemporary subjects and approaches to arts criticism.

**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
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 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.

**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.

**ENG 303
LITERATURE IN FILM**
3, 3/1
The motion picture as a vehicle for literature. Analysis and comparison of verbal and pictorial forms.

**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.

**ENG 305
CREATIVE WRITING: NARRATIVE**
3, 3/0
Prerequisite: Fulfillment of English composition/basic communication requirement. The writing of narrative.

**ENG 306
CREATIVE WRITING: POETRY**
3, 3/0
Prerequisite: Fulfillment of English composition/basic communication requirement. The writing of poetry.

**ENG 307
TUTORING AND TEACHING
WRITING**
3, 3/0
Prerequisite: Fulfillment of English composition/basic communication requirement. Writing-intensive course for undergraduate students who wish to develop better writing skills and gain a theoretical foundation and practical experience in Writing Center tutoring. Explores the role and the craft of the writing tutor. Students gain practical experience in the Writing Center.

**ENG 308
PEER TUTORING PRACTICUM
Variable Credit**
Prerequisites: Fulfillment of English composition/basic communication requirement; minimum cumulative GPA of 2.5 in English courses. Students meet weekly with Writing Center director, conduct tutoring sessions, and gain practical experience as writing tutors in the Writing Center.

**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.

**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.

**ENG 313
MILTON**
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Representative works of John Milton.

**ENG 314
CHAUCER**
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Representative works of Geoffrey Chaucer.

**ENG 315
SHAKESPEARE I**
3, 3/0
Prerequisite: ENG 190 or permission of instructor. The earlier comedies, tragedies, and histories of William Shakespeare.

**ENG 316
SHAKESPEARE II**
3, 3/0
Prerequisite: ENG 190 or permission of instructor. Shakespeare's later comedies, tragedies, and histories.

**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 325
CREATIVE NON-FICTION**
3, 3/0
Prerequisite: ENG 201 or permission of instructor. Reading and writing creative non-fiction, 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.

**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.

**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.

**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.

**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
Prerequisites: Upper-division status and fulfillment of English composition/basic communication requirement. Selected aspects of traditional and contemporary Native American literature in its cultural, historical, and aesthetic contexts.

**ENG 354
ETHNIC AMERICAN MINORITY
LITERATURE**
3, 3/0
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.

**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.

**ENG 360
REALISTIC FICTION FOR CHILDREN**
3, 3/0
Literary characteristics, recurring themes, significant authors, and major categories of realistic fiction for children. Reading and discussion of classic and contemporary realism. Study and discussion of illustrations in realistic fiction in terms of their relationship to literary elements.

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.

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.

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.

ENG 410
COMPOSITION AND
RHETORICAL THEORY
3, 3/0

Prerequisite: ENG 201 and senior class standing. 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.

ENG 416
EIGHTEENTH-CENTURY ENGLISH
LITERATURE
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Literature of eighteenth-century England.

ENG 417
ENGLISH NOVEL TO 1800
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. The English novel before 1800.

ENG 418
ENGLISH NOVEL: 1800–1900
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of

literature, or permission of instructor. Representative nineteenth-century English novels.

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.

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.

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.

ENG 441
ROMANTIC MOVEMENT IN
AMERICAN LITERATURE
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. American romantic writers.

ENG 442
AMERICAN NOVEL TO 1900
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. The nineteenth-century American novel.

ENG 443
AMERICAN POETRY AFTER 1900
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. The rich and diverse terrain of American poetry of the twentieth century from a historical perspective. Major figures and 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 permission of instructor. 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. Possible topics include the realist, modernist, naturalist, or postmodernist novel; working-class novels; the domestic novel; the psychological novel; the historical novel.

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 450
STUDIES IN POETRY
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. A particular aspect of poetry: theme, motif, philosophy, concept, or literary movement in English, American, or world literature. May be taken for credit more than once when content varies.

ENG 451
STUDIES IN FICTION
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Selected aspects of the novel, novella, or short story: theme, motif, concept, or movement in English, American, or world literature. May be taken for credit more than once when content varies.

ENG 452
STUDIES IN DRAMA
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Particular aspects of drama: theme, motif, philosophic concept, or literary movement in English, American, or world literature. May be taken for credit more than once when content varies.

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 postmodernism, and the cultural climate since 1900 explored.

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.

ENG 462
METHODS AND MATERIALS
IN TEACHING SECONDARY
SCHOOL ENGLISH
3, 3/0

Prerequisites: EDF 303 and minimum cumulative GPA of 2.0. Secondary school curriculum materials and methods of instruction. Open only to upper-division students majoring in secondary English or elementary education majors seeking certification in English. To be taken the semester before student teaching.

ENG 463
METHODS, MATERIALS, AND
PROFESSIONAL DEVELOPMENT
FOR TEACHERS OF ENGLISH
6, 3/6

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, 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 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 490
ENGLISH SEMINAR
3, 3/0

Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Specific writers, genre, period, theme, etc. May be taken for credit more than once when content varies.

ENG 495
SPECIAL PROJECT
3, 3/0

ENG 499
INDEPENDENT STUDY
3, 0/0

ENS

ENVIRONMENTAL SCIENCE

Earth Sciences and Science Education Department

ENS 100
URBAN ENVIRONMENT SCIENCE
3, 3/0; K, L

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 STUDIES
3, 3/0

Prerequisite: BIO 104, CHE 100, or SCI 231. Introduction to classical environmental literature. Global environmental problems, environmental legislation, and the status of global environmental policy.

ENGINEERING TECHNOLOGY

Technology Department

ENT 101 TECHNICAL DRAWING 3, 2/3

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 201 ADVANCED MATERIALS PROCESSING 3, 2/3

Prerequisite: ENT 101. A study of the process and problems associated with the conversion of materials into useful forms and goods. Practical experience is acquired through laboratory activities exemplifying the major processes studied.

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 308 APPLICATIONS OF ELECTRONICS IN SCIENCE AND ART 3, 2/3

Overview of current and future applications of electronics in various fields. Combines lectures and on-campus field trips for exposure to specific applications, supported by laboratory experiments to provide visual and tangible reinforcement of basic concepts.

ENT 311 THERMODYNAMICS 3, 2/3

Corequisite: 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 313 COMPUTER METHODS FOR TECHNOLOGISTS 3, 3/0

Prerequisite: ENT 300. The applications of commercial software for analysis and design problems in engineering technology.

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, 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, PLCs, and data acquisition. Laboratory exercises provide practical applications of the industrial electronics that engineering technology graduates are likely to encounter.

ENT 332 ELECTRICAL CIRCUITS AND DEVICES II 3, 2/3

Prerequisite: ENT 331. Study of electro-mechanical energy conversion, magnetic fields and circuits, magnetic materials, single and polyphase circuits, AC and DC machines and electrical power distribution.

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, 2/3

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, 2/3

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, 3/2

Prerequisites: ENT 302 and ENT 401. 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 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.

ENT 422 MACHINE DESIGN II 3, 2/3

Prerequisites: ENT 332, ENT 411, and ENT 421. Advanced topics in machine design. Students design a major project involving preliminary analysis, working drawings, fabrication, and testing of a prototype.

ENT 431
DIGITAL SYSTEMS I
3, 2/3

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, 2/3

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, 2/3

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, 2/3

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.

ENT 465
ELECTRICAL DESIGN
3, 2/3

Prerequisite: Senior status. 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.

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

ENT 497
WORKSHOP

ENT 499
INDEPENDENT STUDY

EXE

EXCEPTIONAL EDUCATION

Exceptional Education Department

EXE 100
NATURE AND NEEDS OF
INDIVIDUALS WITH SPECIAL
NEEDS
3, 3/0

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
1-3, 1-3/3-9

Service in community agencies with individuals who are exceptional. May be taken for 1, 2, or 3 credit hours.

EXE 314
PSYCHOLOGY OF INDIVIDUALS
WITH SPECIAL NEEDS
3, 3/0

Behavior trends common to various types of exceptionality. Description, analysis, examination of educational implications.

EXE 325
FOUNDATIONS OF TEACHING
YOUNG CHILDREN WITH
DISABILITIES
3, 3/0

Prerequisite: Admission to undergraduate program in early childhood special education. Introduction to the field of early childhood special education and its relationship to early childhood education. Includes eligibility criteria and specialized services and techniques for young children with special needs.

EXE 345
ASSESSMENT OF YOUNG
CHILDREN WITH DISABILITIES
3, 3/0

Prerequisites: EXE 100, EXE 325. Introduction to the assessment of typically developing young children and children with special needs. Principles of measurement and assessment strategies for young children.

EXE 355
CURRICULUM FOR EARLY
CHILDHOOD SPECIAL
EDUCATION
3, 3/0

Prerequisite: EXE 345. Instructional strategies, methods, and materials for developing a curriculum for young children with special needs in a variety of settings.

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.

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; *exceptional 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.

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

Prerequisites: EXE 100, EXE 360, EXE 361, EXE 362, EXE 363. *Corequisite:* EXE 368. Description and discussion of curricular design and implementation for children with disabilities.

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 369
CURRICULUM FOR
ADOLESCENTS WITH MILD
DISABILITIES**
3, 3/0

Prerequisites: EXE 100 and EXE 372. *Corequisite:* EXE 370. Adaptations and instructional procedures necessary for effective instruction of students with disabilities in high school and middle school.

**EXE 370
FIELD EXPERIENCES IN
CURRICULUM FOR
ADOLESCENTS WITH MILD
DISABILITIES**
2, 2/0

Corequisite: EXE 369. Application of adaptations and instructional procedures necessary for effective instruction of students with disabilities in high school and middle school.

**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

Prerequisite: EDF 202. Course enrollment is limited to childhood, early childhood, secondary and special 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.

**EXE 380
PARTICIPATION FOR EARLY
CHILDHOOD SPECIAL
EDUCATION**
3, 1/0

Prerequisites: EXE 325 and EXE 345. Knowledge of assessing and teaching young children with disabilities to provide opportunities that support their physical, cognitive, communicative, social-emotional, and adaptive development in an urban field-based experience with children ages 3-6. Integrated curriculum focusing on children's needs in a culturally and linguistically diverse setting developed, implemented, and evaluated.

**EXE 385
OBSERVATION AND
PARTICIPATION IN SPECIAL
EDUCATION**
6, 0/0

Prerequisites: Minimum cumulative GPA of 2.5. Classroom observation and participation.

Selection, organization, and presentation of curriculum material at different grade levels. Evaluation of pupil progress in classes for students with disabilities. By advisement only.

**EXE 389
TOPICS COURSE**
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**

**EXE 499
INDEPENDENT STUDY**

FAR

FINE ARTS

Fine Arts Department

In addition to regular class meetings, all fine arts studio courses require at least 3 hours per week of outside preparation. Students are expected to assume the costs of materials they use in fine arts courses.

**FAR 100
INTRODUCTION TO FINE ARTS**
3, 0/6; J

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, 0/6; J
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, 0/6
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 210
INTRODUCTORY PAINTING**
3, 0/6
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, 0/6

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, 0/6

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; J

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

The history of painting, sculpture, architecture, and the related arts from the Renaissance to the modern period in Europe and the United States.

**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, 0/6

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, 0/6

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, 0/6

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, 0/6

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 megapixel or better), 35mm camera, electronic flash, and tripod required.

**FAR 323
ADVANCED PHOTOGRAPHY**
3, 0/6

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 327
NONSILVER PHOTOGRAPHIC
PROCESSES**
3, 0/6

Prerequisite: FAR 220. Investigation of light-sensitive, nonsilver photographic processes: cyanotype, Vandyke brown, casein, and gum bichromate. Instruction in basic processes, followed by individually assigned problems. Papers, fabrics, and other working materials and supplies are provided by the student.

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, 0/6

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, 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, 0/6

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, 0/6

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, 0/6

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
3, 0/6

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, 0/6

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, 0/6

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 351
ART OF THE ANCIENT WORLD
3, 3/0

Prerequisite: Junior status or permission of instructor. Art of the Ancient World from earliest prehistory through the Roman era. Styles and regional variations in Greek, Near Eastern and Egyptian art within their cultural contexts. The Roman imprint on the civilizations of the Mediterranean and Near East and its multicultural effects.

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.

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.

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.

FAR354W
ART AND CULTURE OF GREECE
3,3/0;

Prerequisite: FAR250, FAR251. 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.

FAR 355
ART AND CULTURE OF ROME
3, 3/0

Prerequisites: FAR 250 and FAR 251. The history of Roman art during its two main periods, the Republican period and the Roman Empire (circa third century B.C. through fourth century A.D.). Consideration of early influences on the art and culture of Latium, including the art of the Near East and culture of the Villanovans and Etruscans, and the art of Archaic, Classical, and Hellenistic Greece.

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.

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.

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.

FAR 360
LATE GOTHIC AND RENAISSANCE ART
3, 3/0

Prerequisites: FAR 250 and FAR 251. Artistic production, including illuminated manuscripts, in the Netherlands, France, Germany, and England from the late fourteenth through the early sixteenth centuries.

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.

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.

FAR 368
OTTONIAN AND ROMANESQUE ART
3, 3/0

Prerequisites: FAR 250 and FAR 251. Architecture, sculpture, painting, and decorative arts of Europe from the origins of a Romanesque style in the eleventh century through its culmination in the late twelfth century, from the era of the Bayeux Tapestry and the churches of Pilgrimage Road to the age of Abbot Suger.

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 370
METHODS IN ART HISTORY
3, 3/0

Prerequisite: Junior status or permission of instructor. The history of methods in art historical research and an introduction to the range of methodologies that have contributed to the development of art historical practice in the twentieth century.

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, 3/0

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.

FAR 375
INTRODUCTION TO ASIAN ART
3, 3/0

Prerequisites: FAR 250 and FAR 251; upper-division status. The principle concepts in the art of China, Japan, and India. The relevance of the philosophies of Hinduism, Buddhism, Jainism, Zen tradition, Taoism, and Confucianism to the development of Asian art. Brief histories of civilizations as frameworks for understanding aesthetic and philosophical Asian concepts.

FAR 376
INDIAN ART
3, 3/0

Prerequisites: FAR 250 and FAR 251; upper-division status. Introduction to the principal thoughts and concepts of the art of India and its relevance to the philosophies of Hinduism, Buddhism, and Jainism. Includes comparisons with Western art and a brief history of Indian civilization as a framework for the understanding of Indian aesthetic and philosophical concepts as presented in works of art.

FAR 377
ART OF CHINA AND JAPAN
3, 3/0

Prerequisite: FAR 250 and FAR 251; upper-division status. Introduction to the principal thoughts and concepts of Chinese and Japanese art and its relevance to the philosophies of Buddhism, Zen tradition, Taoism, and Confucianism. Includes comparisons with Western art and brief histories of Eastern civilizations as frameworks for the understanding of Eastern aesthetic and philosophical concepts as presented in works of art.

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, 0/12

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, 0/12

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, 0/12

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, 3/0

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.

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
Variable credit

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

FAR 497
WORKSHOP

FAR 499
INDEPENDENT STUDY

FIN

FINANCE

Economics and Finance Department

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.

FIN 314
CORPORATION FINANCE
3, 3/0

Prerequisites: ECO 202, BUS 312, and CIS 101 or equivalent. 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.

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.

FIN 370
3, 3/0
TECHNICAL ANALYSIS OF FINANCIAL MARKETS

Prerequisite: ECO 202. 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.

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.

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.

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.

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.

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.

FLE

FOREIGN LANGUAGE EDUCATION

See Modern and
Classical Languages

FRE

FRENCH

See Modern and
Classical Languages

FST

FOOD TECHNOLOGY

Dietetics and Nutrition
Department

FST 304 FOOD PROCESSING I

3, 2/2
Prerequisite: NFS 200 or CHE 321.
Introduction to the basic principles of food processing for food preservation, with a view of the relationship among chemistry, microbiology, and engineering as they apply to food processing. Topics include high and low temperature processes, moisture control, concentration and dehydration processes, and novel food processing methods such as pasteurization, sterilization, chilling, and freezing as methods of food preservation.

FST 310 INTRODUCTION TO FOOD TECHNOLOGY

3, 3/0
Prerequisite: CHE 321 or NFS 200.
Engineering principles relevant to food processing operations; units and dimensions used in process calculations, as well as physical properties of foods that are important in mass and energy balances; mass and energy balances reviewed for different types of food processing operations: batch and continuous, steady- and unsteady-state systems; transport phenomena: fluid flow, heat and mass transfer; analysis of food processing systems and use of basic engineering equations. Includes lectures, tutorials, and problem-solving exercises.

FST 320 PLANT SANITATION AND QUALITY CONTROL

3, 2/2
Prerequisite: NFS 200 and FST 370.
Importance of sanitation practices in food industry including legal requirements for sanitation programs, modern sanitation practices in food processing facilities, and sanitation programs for specific food processes; cleaners and sanitizers used in food processing establishments; Hazard Analysis Critical Control Points (HACCP) and prevention of food-borne illness.

FST 340 FOOD ANALYSIS

3, 1/4
Prerequisite: NFS 200. Principles of food analysis; basic analytical techniques and methods for physical, chemical, and biological properties and quantitative essays; instruments for analyses and evaluation of analytical data including analysis of ash, crude fat, protein, carbohydrates, vitamins, minerals, and other methods for pH and titratable acidity; application of enzymes in food analysis; key contemporary food analytical methods such as agricultural biotechnology and analysis of pesticide, mycotoxin, and drug residues in food.

FST 370 FOOD MICROBIOLOGY

3, 2/2
Prerequisite: BIO 210. General biology of microorganisms found in foods. Primary food microbiology course in the food technology curriculum for the food technology degree.

FST 420 SENSORY EVALUATION IN FOODS

3, 2/2
Prerequisite: NFS 200. The scientific discipline used to assess all qualities of a food item as perceived by human senses; the scientific basis of sensory evaluation and its link to product development; food tasting, color, texture, flavor, aroma, tactile response, and auditory response.

FST 440 PERSONNEL AND OPERATIONS IN FOOD MANUFACTURING

3, 2/0 (2 field)
Prerequisite: FST 380. Management principles and concepts in food manufacturing; theories in human resources management, financial management, strategic marketing, and operation management in today's competitive global market respective to the food manufacturing and processing industry.

FST 450 QUALITY ASSURANCE

3, 1/2 (2 field)
Prerequisite: NFS 200 and FST 370. Modern methods and procedures of quality assurance for food products and manufacturing facilities, including cleaning, sanitizing, and monitoring daily food quality and safety; official records of processing and daily follow-up procedures of Hazard Analysis Critical Control Points (HACCP) in food processing and packaging.

FST 480 FOOD PRODUCT DEVELOPMENT

3, 2/2
Prerequisite: FST 404. Capstone course that requires application of the knowledge and skills learned throughout the degree program, demonstrated by product development project and presentations.

FST 485 SEMINAR IN FOOD TECHNOLOGY

1, 1/0
Prerequisite: Upper-division status, approval of instructor. Basic food technology, manufacturing of various food products, regulatory aspects of food manufacturing, sanitation and quality control, marketing and management in food manufacturing, product development, etc. Students report findings from independent or collaborative projects and become familiar with the format and style of oral presentation.

FST 488 INTERNSHIP

Variable credit
Prerequisite: Upper division status, approval of faculty intern supervisor and program coordinator. Guided, supervised field experiences (experiential learning) from on-site activities at food manufacturing companies for qualified students with training sessions, seminars, and reports.

FST 495 PROJECT

3, 3/0
Prerequisite: Approval of a faculty sponsor. Studies undertaken by one or more individuals on a problem of special interest; must be submitted in acceptable form according to directions given by the department.

FST 499 INDEPENDENT STUDY

Variable credit
Prerequisite: Approval of a faculty adviser and program coordinator. Study of a subject of individual interests under supervision of a faculty adviser.

FTT

FASHION AND TEXTILE TECHNOLOGY

Technology Department

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 APPAREL ASSEMBLY PROCESSES

3, 2/2
Development of the principles and techniques of design, good fit, and garment construction using commercial patterns. Emphasis on techniques to achieve proper-fitting garments, sizing systems used in the apparel industry, appropriate selection of style and color, construction of garments, and information about sewing, equipment, and industrial construction techniques.

FTT 110 SURVEY OF THE FASHION AND TEXTILE INDUSTRY

3, 3/0
Survey course of the textile and fashion industry; overview of the textile/apparel product development process; design principles and elements, terminology; industrial construction processes; quality of the finished product; career opportunities in the field.

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. Appropriate for majors and non-majors with little or no background in chemistry.

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.

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 knit knitting; understanding the relationships of yarn, color, stitch types, and gauge; charting and producing stitch designs by machine.

FTT 303/THA 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.

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; colorway development based on awareness of current color and graphic trends, marketability, and industry standards.

FTT 306 TEXTILE EVALUATION

3, 3/1
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.

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 309
TECHNICAL FASHION DRAWING
 1, 1/0
Prerequisite: FTT 303. Encompasses technical drawing knowledge and digital skills for entrance into computerized apparel industry technical spec development employment positions.

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.

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 329
DESIGNING KNIT APPAREL
 3, 2/2
Prerequisites: FTT 109, FTT 206, FTT 300, FTT 325, FTT 326 or permission of instructor.

Design/construction of garments utilizing various types of knit fabrics. Pattern-making practices of the knitwear industry, including industrial methods of measuring, sewing, and finishing original knit 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
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.

FTT 350
FASHION MERCHANDISING APPLICATIONS
 3, 2/2
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 400
KNIT TECHNOLOGY II: COMMERCIAL SOFTWARE SYSTEMS
 3, 2/2
Prerequisite: FTT 206, FTT 300, or permission of instructor. Computerized knit fabrication using commercial software; includes review of basic knit construction; proceeds to the use of commercial computer technology related to knit design. Program allows knits to be designed and illustrated through multiple computer techniques. Students design original knit garments and produce computer printouts for portfolio inclusion.

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 411
CAM: APPAREL MANUFACTURING SOFTWARE SYSTEMS
 3, 2/2
Prerequisites: FTT 206, FTT 306 and FTT 310, or permission of instructor. Computer-aided apparel manufacturing simulates the production of industrial apparel patterns for the ready-to-wear market. Emphasis on computer-aided grading, development of garment specifications, preparations of markers, and plotting completed patterns.

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.

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, 1/2
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
Variable credit 36 credit hours
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

FTT 497
WORKSHOP

FTT 499
INDEPENDENT STUDY

GEG

GEOGRAPHY

Geography and Planning Department

GEG 101
WORLD NATURAL ENVIRONMENTS
 3, 3/0; K
 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; Y
 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.

**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 /GES241
METEOROLOGY**
3, 3/0; K

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.

**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.

**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.

**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

The nature of resources; concepts and philosophy of conservation; strategies for environmental management of the earth's land, water, air, and energy resources; local, regional, and global impacts of resource use.

**GEG 309
URBAN GEOGRAPHY**
3, 3/0; 8

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.

**GEG 310
GEOGRAPHY OF
TRANSPORTATION**
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.

**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, 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 systems (GPS) to identify, present, and study spatial phenomena.

**GEG/PLN 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.

**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.

**GEG 359
ARCTIC GEOGRAPHY FROM AN
INUIT PERSPECTIVE**
3, 3/0; 5

Prerequisite: Upper-division status. 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; 5

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.

**GEG 362
GEOGRAPHY OF THE UNITED
STATES AND CANADA**
3, 3/0

Basic geographic elements of North America including the natural environment, natural resources, economic activities, population, and urbanization.

**GEG 364
GEOGRAPHY OF EUROPE**
3, 3/0; 1

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.

**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 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.

**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.

**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 386
APPLIED CLIMATOLOGY**
3, 3/0

Prerequisites: Upper-division status; GEG 101 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.

**GEG 405
ADVANCED URBAN GEOGRAPHY**
3, 3/0

Prerequisite: 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 415
PROSEMINAR**
3, 3/0

Investigation, examination, and discussion of topics of current interest in geography. Techniques and analysis of geographic research.

**GEG 421
WATERSHED ANALYSIS**
3, 3/0

Prerequisites: Upper-division status; GEG 101 or GES 101, and at least 6 credit hours in geography, planning, or earth science.

Introduction to the systematic analysis of stream dynamics of watersheds and the impact 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 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
GEOGRAPHIC INFORMATION
SYSTEMS
3, 3/0**

Prerequisites: GEG 199 or SOC 199 and upper-division status. 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 430
SENIOR THESIS
3, 3/0**

Prerequisites: SOC 300 or PSC 300 and senior geography or planning major. Research in geography or planning and presentation of selected research-related topics by department faculty.

**GEG 480
AIR POLLUTION MODELING
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 488
INTERNSHIP
Variable credit**

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**

**GEG 499
INDEPENDENT STUDY**

GER

GERMAN

See Modern and Classical Languages

GES

GEOSCIENCES

Earth Sciences and Science Education Department

**ENS 100
URBAN ENVIRONMENTAL
SCIENCE
3, 3/0; K, L**
See page 112.

**ENS 300
ENVIRONMENTAL STUDIES**
See page 112.

**GES 101
INTRODUCTORY GEOLOGY
3, 3/0; K**

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, 4/0; K**

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; K, L**

Introduction to the science of the sea, including biological, physical, chemical, geological, and environmental aspects of oceanography.

**GES 131
INTRODUCTORY ASTRONOMY
3, 3/0; K**

Non-mathematical survey of the astronomical universe. Survey of the sun, planets, moons, comets, stars, and galaxies. Observation, planetarium, and laboratory sessions supplement lectures.

**GES 223
ENVIRONMENTAL EARTH
SCIENCE
3, 3/0; K, L**

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; K**

Catastrophic geologic events, with an emphasis on earthquakes, volcanism, and landslides. Includes causes, physical effects, prediction, and social implications.

**GES/GEG 241
METEOROLOGY
3, 3/0; K**

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.

**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, 3/2**

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
3, 4/0**

Prerequisite: GES 101 or GEG 101. The structural controls and processes that affect the development of the surface of the earth. Emphasis on selected geologic environments.

**GES 308
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.

**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. 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, 3/0**

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 moon 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.

**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.

**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.

**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.

**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.

**GES 404
FIELD GEOLOGY**

3, 1/4
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.

**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 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.

**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.

**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, 3/0; P
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**

1-15, 0/2-30
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**

Prerequisite: Approval of a faculty sponsor. Environment-, energy-, geology-, or astronomy-related areas.

**GES 498
HONORS RESEARCH**

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**

Prerequisite: Faculty sponsor permission. Environment-, energy-, geology-, or astronomy-related areas.

GRK

GREEK

See Modern and Classical Languages

HEW

HEALTH AND WELLNESS

**Health and Wellness
Department**

**HEW 203
INTRODUCTION TO SPORT
ADMINISTRATION**

3, 3/0
Overview of recent trends in sport marketing, facilities management, and tourism. Assessment strategies, staffing considerations, equipment procurement, and operational protocols related to construction; safety; maintenance; legal issues; and event organization, marketing, and management.

**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.

**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.

**HEW 302
EXERCISE PRINCIPLES**

3, 3/0
Prerequisite: BIO 308. 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.

**HEW 303
LEGAL FOUNDATIONS OF
SPORT ADMINISTRATION**

3, 3/0
Overview of the basic vocabulary, legal concepts, liability issues, and legal concerns relevant to sport facilities management, operations, and marketing. Fundamentals of sports law as it pertains to sport management, marketing, facilities, resort venues, and tourism.

**HEW 305
COMMUNITY HEALTH**

3, 3/0
Prerequisite: HEW 204. 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 204. Basic concepts of nutrition and exercise training to improving fitness and athletic performance. The relationship of exercise and nutrition to the etiology and treatment of eating disorders and obesity.

**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.

**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.

**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.

**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.

**HEW 327/ANT 327
INTRODUCTION TO MEDICAL
ANTHROPOLOGY**

3, 3/0; 5
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.

**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.

HEW 380
ETHICAL CONSIDERATIONS IN
SPORT ADMINISTRATION
3, 3/0

Prerequisite: PHI 102. Situations that require the sport facilities manager to examine how legal and ethical principles influence decisions. Selected ethical concepts and an examination of ethical diversity in management at resort and tourist locales. Specific legal topics, related ethical considerations, and critical analysis.

HEW 389
TOPICS COURSE
3, 3/0

HEW 401
ASSESSMENT AND EVALUATION
IN HEALTH WELLNESS
3, 3/0

Prerequisite: HEW 305. 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.

HEW 411
CRITICAL ISSUES IN HEALTH
AND WELLNESS
3, 3/0

Prerequisite: HEW 401 or senior 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.

HEW 412
HEALTH/WEELLNESS 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.

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.

HEW 488
INTERNSHIP
Variable credit

Prerequisites: Upper-division status and permission of instructor. 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.

HEW 495
SPECIAL PROJECT

HEW 497
WORKSHOP

HEW 499
INDEPENDENT STUDY

HIS

HISTORY

History and Social Studies Education Department

HIS 106
HISTORY OF AMERICAN LIFE I
3, 3/0; 1

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.

HIS 107
HISTORY OF AMERICAN LIFE II
3, 3/0; 1

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.

HIS 115
FOUNDATIONS OF WESTERN
CIVILIZATION
3, 3/0; 4

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.

HIS 116
EUROPE SINCE 1500
3, 3/0; 4

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.

HIS 117
TWENTIETH-CENTURY EUROPE
3, 3/0; 4

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.

HIS 189
TOPICS COURSE
1, 1/0

HIS 204
GLOBAL HISTORY OF THE
TWENTIETH CENTURY
3, 3/0; 5

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.

HIS 207
HISTORY OF SPAIN
3, 3/0

Ferdinand and Isabella unify Spain; rise of the Spanish empire; Columbus, Cortes, and the conquest of Spanish America; Charles V and Spain's domination of Europe; the Spanish colonial system in America; the problems of Phillip II; war with England; revolt in the Netherlands; decline of Spain under the later Hapsburgs; reform and revolution in the eighteenth century; Spanish America's wars for independence.

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.

HIS/AAS 211
HISTORY OF MODERN AFRICA
SINCE 1919
3, 3/0

Partition of Africa by European nations. Impact of colonial regimes. African resistance movements. Drive toward independence. Problems of economic and social change. Cultural and intellectual currents in modern Africa.

HIS 220
CLASSICAL GREECE AND ROME
3, 3/0

The development of Greece, the Western Hellenistic world, and the Roman Empire with emphasis on cities, economic development, technology, social change, and ideas.

HIS 230
WORLD CIVILIZATIONS TO 1600
3, 3/0; 5

Origins, cultural achievements, and interrelationships of various civilizations before 1600. The birth of human civilization, the emergence of major religious and philosophical traditions, state and society in the ancient world, the consolidation and interaction of world civilizations, the civilizations of Africa and the Americas, East Asian culture and civilization, the great Islamic civilizations, the origins and development of European civilization.

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.

HIS 302
HISTORY OF WOMEN IN
AMERICA
3, 3/0; 8

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.

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.

HIS 305
SEX AND GENDER IN HISTORY
3, 3/0

Prerequisite: Junior status or permission of instructor. An examination of the background and sources of some of the major sex and gender issues of our own day. Topics to be analyzed include the influence of historical and cultural factors on attitudes, changing understanding of the nature of sexuality in the Western world, influence of religion in moderating change, effect of disease in forming attitudes, and the development of the concepts of deviance, stigmatized behavior, and gender dysphoria.

HIS/AAS 306
HISTORY OF AFRICA TO 1919
3, 3/0

Indigenous developments 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.

HIS 307
HISTORY OF INDIA
3, 3/0; 5

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.

**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.

**HIS 310
HISTORY OF EAST ASIA: THE
TRADITIONAL ERA**
3, 3/0; 5

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.

**HIS 311
AMERICAN IMMIGRATION AND
EMIGRATION**
3, 3/0

American immigration policies from colonial times to the present. The people who came and left the United States. The process of assimilation. Problems of immigration and emigration.

**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/PSC 345
POLITICS AND HISTORY OF THE
MIDDLE EAST**
3, 3/0

Prerequisite: Upper-division status. 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.

**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.

**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.

**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.

**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.

**HIS 320
MODERN HISTORY OF JAPAN
AND KOREA**
3, 3/0; 5

Prerequisite: Upper-division status. 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.

**HIS 321
HISTORY OF MEDIEVAL EUROPE**
3, 3/0

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.

**HIS/AAS 322
AFRICAN AMERICAN HISTORY**
3, 3/0; 8

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.

**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.

**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 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.

**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.

**HIS 332
TECHNOLOGY AND U.S.
HISTORY**
3, 3/0; L

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.

**HIS 334
MODERN IRELAND SINCE 1800**
3, 3/0

Prerequisite: Upper-division status or permission of instructor. 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.

**HIS 335
HISTORY OF MEXICO**
3, 3/0

Prerequisite: Upper-division status. 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.

**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 is 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 338
MODERN HISTORY OF CHINA**
3, 3/0; 5

Prerequisite: Upper-division status. The history of China from the rise of the last imperial dynasty (Qing) in the mid-seventeenth century to the present. Topics include the fall of the Ming dynasty and the Manchu conquest of China, the Chinese state and society under the Qing dynasty, the development of relations between China and the West, the decline of the Qing imperial order, the emergence of modern nationalism and the rise of the Chinese Communist Party, Japanese imperialism and World War II, and the establishment of the People's Republic of China.

**HIS 340
HISTORY OF THE BUFFALO
NIAGARA REGION**
3, 3/0

Prerequisite: Upper-division status. The nature of the city, its growth, the dynamics of urban development, the enduring impact of its historical past in relation to its geographical presence. A case study of Buffalo.

**HIS/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. 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.

**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.

**HIS 344
EMERGENCE OF INDUSTRIAL
AMERICA: 1877–1919**
3, 3/0

Prerequisite: Upper-division status. 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.

**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.

**HIS 350
LEFT AND RIGHT IN EUROPEAN
HISTORY**
3, 3/0

Prerequisite: Upper-division status. The evolution of Marxist, anarchist, state socialist, and right radical ideologies in European thought and politics.

**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.

**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.

**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 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.

**HIS 363/SSE 363
AMERICAN IDENTITY IN
TRANSITION: DIVERSITY AND
PLURALISM IN THE UNITED
STATES**
3, 3/0; 8

Prerequisite: Upper-division status. The diverse, pluralistic makeup of American society. The roots of pluralism and what it means for the daily experience of living in America. Themes of diversity are explored through history and literature. Focuses on the activities of four major underrepresented groups in their struggle for liberation: African Americans, Native Americans, Latinos, and Asians. Encourages a multicultural view of America.

**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.

**HIS 366
MIEVEAL AND EARLY MODERN
BRITAIN**
3, 3/0

Prerequisite: Junior status. The development of English and Scottish political identities prior to their union, and the eventual formation of the British state in 1707. Also, considerations of the roles of the church, family life, social structure, culture, economics, immigration, and war as facets of these formative periods.

**HIS 367
MODERN BRITAIN**
3, 3/0

Prerequisite: Junior status. The modern history of the British Isles, from the Act of Union of 1707 to the end of the twentieth century. Considerations of the roles of the church, family life, social structure, culture, economics, immigration, industrialism, imperialism, and war as facets of these formative periods.

**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.

**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.

**HIS 372
AMERICAN FOREIGN POLICY IN
THE FAR EAST**
3, 3/0

Prerequisite: Sophomore, junior, or senior status. 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.

**HIS 373
VIETNAM AND THE VIETNAM
WAR**

3, 3/0; 5

Prerequisite: Upper-division status. 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.

**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.

**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.

**HIS 385
AZTEC AND MAYA HISTORY**
3, 3/0

Prerequisite: Upper-division status. The history of the Aztec and Maya empires in Mexico and Central America before and during the Spanish conquest. The political, economic, and religious motivations for empire building among indigenous cultures. Construction of rulership; Aztec and Maya historiography; systems of trade and tribute; imperial expansion; war and sacrifice; encounter with the Spanish.

**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.

**HIS 404
THE SOUTH SECTIONALISM,
AND THE CIVIL WAR**
3, 3/0

Prerequisite: Upper-division status. The structure of the American south; sectional development and states rights; slavery; the development of antislavery agitation and reform; the rise of Lincoln and the division of political parties; Civil War and the military; constitutional and diplomatic crises; economic and social impact of the war; reconstruction of the Union.

**HIS 405
THE RENAISSANCE AND
REFORMATION**
3, 3/0

Prerequisite: Upper-division status. 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.

**HIS 406
THE FRENCH REVOLUTION AND
NAPOLEON**
3, 3/0

Prerequisite: Upper-division status. Political, social, economic, and intellectual fabric of the Old Regime; the Revolution; dictatorship of Napoleon and spread of revolutionary ideas; rise of modern nationalism.

**HIS 407/SSE 407
THE TEACHING OF HISTORY**
3, 3/0

Prerequisite: Upper-division status. The curriculum and practice of teaching history, the historical perspective on the role of history in the social studies, and the political uses of the teaching discipline. Research foundation of historical meaning for instructional practice links material presented in various content and pedagogical courses in the program.

HIS 408
HISTORY OF AMERICAN
THOUGHT
3, 3/0

Prerequisite: Upper-division status. Sources of major bodies of thought and ideas in American history; their impact upon American culture; the role ideas have played in producing a distinctive culture.

HIS 412
HISTORY OF EAST CENTRAL
EUROPE
3, 3/0

Prerequisite: Upper-division status. Social, political, and economic history of the Baltic States, Western Slavic, and the Balkan peninsula; struggle of Eastern and Western civilizations; competition of the great powers for the domination of this area and the role of these peoples as Russian satellites.

HIS 415
HISTORY AND GOVERNMENT
OF NEW YORK STATE
3, 3/0

Prerequisite: Upper-division status. 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.

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.

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.

HIS 422
TUDOR AND STUART ENGLAND
3, 3/0

Prerequisite: Upper-division status. 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.

HIS 425
MUSEUM PRESERVATION
AND PRACTICE
3, 3/0

Prerequisite: Upper-division status. 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

Prerequisite: Upper-division status. The United States following the American Revolution through Andrew Jackson's administration; federal authority, political parties, industrial

and sectional economic development during a period of territorial, social, and diplomatic transformation; the formative and foundational structure of American society during the periods of Washington, Jefferson, and Jackson.

HIS 450
MUSEUM INTERNSHIP
6, 15/0

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.

HIS 460
PATTERNS OF HISTORY IN
SOUTHEAST ASIA
3, 3/0

Prerequisite: Upper division status. 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/AAS 468
READINGS IN AFRICAN
AMERICAN HISTORY
3, 3/0

Prerequisite: Upper-division status. The major historical writings on selected periods and topics in African American history. Readings, discussions, and writing book reviews and biographical essays.

HIS/AAS 469
BLACK PROTEST AND
LEADERSHIP IN THE UNITED
STATES IN THE TWENTIETH
CENTURY
3, 3/0; D

Prerequisite: Upper-division status. The black protest movements and leaders in twentieth-century America.

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
Variable credit

Prerequisites: Sophomore, junior, or senior status; 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.

HIS 490
SENIOR SEMINAR IN
HISTORIOGRAPHY
3, 3/0

Prerequisite: History and social studies education majors or permission of instructor. 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.

HIS 495
SPECIAL PROJECT

HIS 497
SPECIAL WORKSHOP
1, 0/0

HIS 498
HONORS RESEARCH

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

HON

HONORS

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.

HON 101
HUMANITIES SEMINAR
3, 3/0; H

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; M

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.

HON 103
ARTS SEMINAR
3, 3/0; A

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 301
VALUES AND ETHICS IN THE
PROFESSIONS
3, 3/0; T

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 healthcare professions from a personal and professional viewpoint.

HON 302
SOCIAL SCIENCE SEMINAR
3, 3/0; S

Prerequisite: Acceptance into All College Honors Program. Social science core. Part of an integrated sequence of core courses. Focuses on central ideas, epistemology, and issues and significant works in and among the social sciences.

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.

HPR

HEALTH AND PHYSICAL

EDUCATION

Coaching and Physical

Education Office

HPR 100
SPECIAL PROJECT

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

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.

HPR 180
PHYSICAL FITNESS FOR WOMEN

HPR 198
STRENGTH FITNESS

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.

**HPR 202
TECHNIQUES AND THEORIES
OF SOCCER**

3, 3/0

Analysis of soccer with emphasis on history, present status, rules, techniques, and theories.

**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.

**HPR 208
TECHNIQUES AND THEORIES
OF SWIMMING**

3, 3/0

Analysis of swimming with emphasis on history, present status, rules, techniques, and theories.

**HPR 209
TECHNIQUES AND THEORIES
OF BASKETBALL**

3, 3/0

Analysis of basketball with emphasis on history, present status, rules, techniques, and theories.

**HPR 300
ATHLETICS IN EDUCATION**

3, 3/0; 5

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.

**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.

**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 319
SOCIOLOGY OF SPORT**

3, 3/0; D

Sport and related social phenomena of social status, norms, goals, values, and organizational network.

**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.

**HPR 488
INTERNSHIP**

Variable credit

Prerequisites: Upper-division status and instructor permission. The integration of theoretical knowledge with practical field experience in coaching interscholastic sports.

**HPR 495
SPECIAL PROJECT**

**HPR 499
INDEPENDENT STUDY**

HTR

HOSPITALITY AND TOURISM

Hospitality and Tourism Department

**HTR 100
MULTICULTURAL FOODS**

3, 2/2

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.

**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.

**HTR 320
ALCOHOL MANAGEMENT
ISSUES**

2, 2/0

The legal responsibilities of alcoholic beverage service to the general public. Operational techniques for hiring and training. Necessary skills for the conscientious service of alcohol through formal organizational policies.

**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**

3, 0/9

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.

**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.

**HTR 361
PRINCIPLES OF MANAGEMENT
IN FOOD SERVICE**

3, 3/0

Application of management principles in food service systems.

**HTR 363
QUANTITY FOOD PRODUCTION**

3, 1/4

Prerequisite: HTR 100. Application of food-preparation principles to quantity production, menu planning, use and care of institutional equipment, standardized recipes, costs, and service to the public at Campus House.

**HTR 364
DINING ROOM SERVICE**

3, 2/2

Prerequisites: HTR 100 and HTR 300. Techniques used in dining room activities; planning, preparation, coordination, and evaluation of selected dining functions.

**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.

**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.

**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.

**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.

**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.

**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.

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.

HTR 420 FRANCHISING AND ENTREPRENEURSHIP IN THE HOSPITALITY INDUSTRY 3, 3/0

Prerequisite: HTR 110. Understanding franchising and its role in the hospitality industry; differences between entrepreneurship and franchising; selecting a franchise; franchise analysis for marketing effectiveness and financial performance.

HTR 430 MANAGEMENT AND MARKETING OF SERVICES 3, 3/0

Prerequisite: HTR 110. Understanding the service process and its role in the hospitality industry; service systems analysis for marketing effectiveness and financial performance; understanding service gaps and developing strategies for long-term survival.

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.

HTR 460 CONCEPTS IN STRATEGIC MANAGEMENT 3, 3/0

Prerequisites: HTR 370 and HTR 390. Concepts of strategic planning process, strategy implementation, and strategic control in the hospitality industry; the importance of environment scanning in strategic management; case studies.

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 problems 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.

HTR 475 RESEARCH METHODS IN HOSPITALITY 3, 3/0

Prerequisites: Upper-division status, successful completion of English composition/basic communication competency requirement, knowledge of word processing and statistics recommended. Introduction to the research process, including the opportunity to develop a research question including testable hypotheses; students may choose own topics.

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.

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.

HTR 495 SPECIAL PROJECT 3, 0/0

Prerequisite: Instructor and department chair permission, using department forms available in Caudell Hall 207.

HTR 499 INDEPENDENT STUDY 3, 0/0

Prerequisite: Instructor and department chair permission, using department forms available in Caudell Hall 207.

HUM

HUMANITIES Philosophy and Humanities Department

HUM 100 INTRODUCTION TO HUMANITIES 3, 3/0; Q

Introduction to some central topics in the humanities. Humans' attempts to give meaning to their lives through literary, philosophical, and creative expression.

HUM 300 HUMANISTIC PERSPECTIVES 3, 3/0

Prerequisites: HUM 100 and upper-division status. Chronology of major art, literature, philosophy, music, and religious movements of the world. The interaction of these disciplines during various eras. Junior-level course; required for humanities majors.

HUM 320 THE TRADITION OF ROMANTIC LOVE IN WESTERN LITERATURE: 1000–PRESENT 3, 3/0

The depiction of romantic love in Western European and American literature from the Middle Ages to the present. The social realities that, over the centuries, have caused romantic love to remain central to occidental literature.

HUM 321/COM 321 RHETORICAL CRITICISM 3, 3/0

Prerequisite: Upper-division status or permission of instructor. Analysis of persuasive messages, designed to teach students to recognize and respond analytically to influential strategies used by public persuaders. Focus on political speeches, commercial advertising, protest music, and other forms of purposeful communication.

HUM 327/COM 327 GREAT WRITING AND REPORTING OF AMERICAN JOURNALISM 3, 3/0

Prerequisite: Upper-division status or permission of instructor. Excellence in reporting and writing. Great journalistic writings and why they enjoy enduring fame.

HUM 328 FANTASY AND MAGIC REALISM IN LITERATURE 3, 3/0

Prerequisite: One course in the humanities or upper-division status. Fantastic and magically realistic literature through the ages. The ways in which such works mirror and/or symbolically transform historical reality.

HUM 337/GER 337 MODERN GERMAN LITERATURE IN TRANSLATION 3, 3/0

Literary trends, ideas, and techniques of modern German literature as manifested in selected works of major German literary figures.

HUM 339 FRIENDSHIP 3, 3/0

Prerequisites: Fulfillment of freshman writing requirement and 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 some friends to others.

HUM 488 INTERNSHIP Variable credit

Prerequisites: Upper-division status; instructor and program coordinator permission. Guided and supervised field experiences (experiential learning). Supervised on-site activities for qualified students with training sessions, seminars, and reports.

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.

HUM 495 SPECIAL PROJECT

HUM 499 INDEPENDENT STUDY

IDE

INTERIOR DESIGN Design Department

IDE 100 INTERIOR DESIGN: AN OVERVIEW 3, 3/0

Introduces students to the ideas, principles, and methods of solving interior design problems in both a lecture and studio setting, and the differentiation between "interior decoration" and "interior design." Through a series of small experimental projects culminating in a major term project, students explore two-dimensional and three-dimensional design elements and principles as they are applied specifically to interior design. Conceptual design is emphasized and represented through sketches, basic mechanical drawings, perspectives, and models. Studio instruction is through both lecture and intensive and personalized critiques of student work by faculty members and peers, as well as invited faculty and guest critics.

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.

IDE 102 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.

IDE 151 MECHANICAL AND PERSPECTIVE DRAWING 3, 0/6

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.

IDE 152 INTRODUCTION TO COLOR RENDERING 3, 0/6

Prerequisites: IDE 101, IDE 102, DES 101. *Corequisites:* IDE 151, DES 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, 0/6

Prerequisites: IDE 101, IDE 102, DES 101.
Corequisites: IDE 151, IDE 152. 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.

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.

IDE 251 INTERIOR DESIGN II

3, 0/6

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.

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 253 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.

IDE 301 INTERIOR DESIGN III

3, 0/6

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.

IDE 302 COMPUTER APPLICATION FOR INTERIOR DESIGN

3, 0/6

Prerequisite: IDE 251. *Corequisites:* IDE 301, IDE 303. Intermediate-level course teaching the leading graphic design programs used in conjunction with computer aided design (CAD) software. Creating an understanding of digital drawing, modeling and graphic layout using professional photo-manipulating, Web site design, desktop-publishing software, and three-dimensional modeling tools, such as Photoshop, Illustrator, InDesign, Quark Express, GoLive, FormZ, and RhinoCAD. Creative problem solving, including photomontage, poster, portfolio, and catalog design assignments, as well as three-dimensional design projects.

IDE 303 INTERIOR DETAILING

3, 0/6

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.

IDE 351 INTERIOR DESIGN IV

3, 0/6

Prerequisite: IDE 301. *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.

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.

IDE 353 INTERIOR DESIGN PROFESSIONAL PRACTICE AND SPECIFICATIONS

3, 3/15

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.

IDE 401 INTERIOR DESIGN V

3, 0/6

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.

IDE 402 LIGHTING DESIGN

3, 0/6

Prerequisite: IDE 351. *Corequisite:* IDE 401. 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.

IDE 451 INTERIOR DESIGN VI

3, 0/6

Prerequisite: IDE 401. Constitutes the final studio experience prior to graduation and features one capstone 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 INTERNSHIP Variable credit

Prerequisite: IDE 351. 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 120 contract hours with the firm, provide a written report of their work experience, and receive a written evaluation from their employer.

INS

INDIVIDUALIZED STUDIES

Continuing Professional Studies,
University College

Dean's Office, School of Arts and
Humanities

Dean's Office, School of
Education

Dean's Office, School of Natural
and Social Sciences

Dean's Office, School of the
Professions

Dean's Office, University College

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.

INS 495 PROJECT

3, 3/0

INS 497 WORKSHOP

1, 0/0

INS 499 INDEPENDENT STUDY

3,0/0

ITA

ITALIAN

See Modern and Classical
Languages

LAT

LATIN

See Modern and Classical
Languages

LIB

E. H. BUTLER 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 499
INDEPENDENT STUDY**
3, 0/0

MAT

MATHEMATICS

Mathematics Department

**MAT 103
INTRODUCTION TO
CONTEMPORARY MATHEMATICS**
3, 3/0; X

Prerequisite: Three years of Regents high school mathematics or equivalent. Contemporary mathematics, the methods used, applications, and the wide variety of problems that arise in a rapidly changing society that can be solved using contemporary mathematical techniques.

**MAT 110
INTERMEDIATE COLLEGE
ALGEBRA AND TRIGONOMETRY**
3, 3/0

Prerequisite: Three years of Regents high school mathematics or equivalent. Concepts and skills in intermediate algebra and right-triangle trigonometry. Includes equations; inequalities; polynomials; exponents; radicals; logarithms; systems of equations; functions; and trigonometry of the right triangle.

**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; X

Prerequisite: MAT 121. Real numbers; logic, relations, and functions; probability and statistics; geometry; Logo.

**MAT 124
PRE-CALCULUS MATHEMATICS**
3, 3/0

Prerequisite: Three years of Regents high school mathematics. Pre-calculus course in algebra and trigonometry designed primarily for those who have had eleventh-year high school mathematics. Includes numbers; inequalities; functions graphing; polynomials; rational functions; circular functions; trigonometric identities; induction; sequences. No credit issued to students who have completed a college-level calculus course.

**MAT 126
CALCULUS**
3, 3/0; X

Prerequisite: MAT 110 or four years of Regents high school mathematics. Functions; limits; continuity; techniques for differentiations; applications; summations; antiderivatives; definite integrals; fundamental theorem of calculus; techniques of integration; applications. Credit issued for either MAT 126 or MAT 161 (or equivalents), but not both.

**MAT 127
CALCULUS OF SEVERAL
VARIABLES**
3, 3/0

Prerequisite: MAT 126. The calculus of several variables with emphasis on applications to the physical and social sciences. Vectors; conic sections, surface in three space, functions of several variables and their graphs; partial derivatives; lines and planes in three-space; tangent planes and normal lines and their applications; the differential and its applications; the directional derivative and its applications; introduction to differential equations and application. Credit issued for either MAT 127 or MAT 162 (or equivalents), but not both.

**MAT 161
CALCULUS I**
3, 3/0; X

Prerequisite: MAT 124 or four years of Regents high school mathematics. *Corequisite:* MAT 163. Functions; limits; continuity; differentiation of algebraic functions; applications of the derivative; differentiation. Credit issued for either MAT 126 or MAT 161 (or equivalents), but not both.

**MAT 162
CALCULUS II**
3, 3/0

Prerequisite: MAT 161. *Corequisite:* MAT 164. The definite integral; techniques of integration; logarithmic and exponential functions; applications studied through algorithmic techniques and/or computer usage. Credit issued for either MAT 127 or MAT 162 (or equivalents), but not both.

**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
COMPUTER MATHEMATICS 1**
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.

**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 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.

**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.

**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 306
PROBLEM SOLVING IN BASIC**
3, 3/0

Prerequisite: Three years of Regents high school mathematics. Introduction to the mathematical uses of computers in today's society. Background; typical uses; writing programs to solve problems in number theory, geometry, finance, and algebra; mathematical games; sorting. Not applicable toward mathematics major requirements.

**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; X

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.

**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 322
MODERN GEOMETRY**
3, 3/0

Prerequisite: MAT 270. Euclidean constructions; theorems of Menelaus and Ceva; cross-ratio; harmonic points; orthogonal circles; isometries and similarities in the plane; introduction of projective geometry.

**MAT 325
PROBABILITY AND STATISTICS**
3, 3/0

Prerequisites: MAT 162, MAT 163, MAT 164, MAT 270, and 0721 major; 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
COMPUTER MATHEMATICS 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
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.

MAT 382
TOPICS IN MATHEMATICAL STATISTICS
3, 3/0

Prerequisites: MAT 263 and MAT 381. Sampling distributions; central-limit theorem; point and interval estimation; tests of hypotheses.

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, 3/3

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 490
SEMINAR
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

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

MAT 499
INDEPENDENT STUDY

MED

MATHEMATICS EDUCATION

Mathematics Department

MED 200
FIELD EXPERIENCE IN SECONDARY EDUCATION MATHEMATICS
3, 1/4

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.

MED 300
FIELD EXPERIENCE: METHODS IN THE TEACHING OF SECONDARY SCHOOL MATHEMATICS
1, 0/2

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

Prerequisite: Upper-division status or permission of instructor. Introduction to equipment and software available for use in the mathematics classroom through problem solving and exploration. Effective use of software and equipment, developing classroom lessons, and preparation for adoption of future developments. Students produce and evaluate projects for use in the mathematics classroom.

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.

MED 309
FIELD EXPERIENCE: METHODS IN TEACHING OF SECONDARY SCHOOL MATHEMATICS
1, 0/2

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.

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, 0/6

Prerequisites: For 0721 and 0524, completion of MED 308 with a minimum grade of C, completion of MED 300 with a minimum grade of C, minimum GPA of 2.5 in all mathematics major coursework, completion of all professional coursework with a minimum GPA of 2.5, and permission of instructor. Early secondary school classroom laboratory experiences; goals of early secondary mathematics education; psychological influences; teaching models; testing and evaluation techniques; total involvement in early secondary school activities; practicum.

MED 408
STUDENT TEACHING OF MATHEMATICS IN SENIOR HIGH SCHOOL
6, 0/6

Prerequisites: For 0721, completion of MED 308 with a minimum grade of C, completion of MED 300 with a minimum grade of C, minimum GPA of 2.5 in mathematics major coursework, completion of all professional coursework with a minimum GPA of 2.5, and permission of instructor. Secondary school classroom laboratory experiences; goals of secondary mathematics education; psychological influences; teaching models; testing and evaluation techniques of instruction; total involvement in secondary school activities; practicum.

MED 499
INDEPENDENT STUDY

MODERN AND CLASSICAL LANGUAGES

CHI

Chinese

CHI 101 BEGINNING CHINESE I 3, 3/0; F

Fundamentals of Mandarin Chinese with an emphasis on the spoken and written language.

CHI 102 BEGINNING CHINESE II 3, 3/0; F

Prerequisite: CHI 101 or equivalent.
Continuation of CHI 101.

CHI 201 INTERMEDIATE CHINESE I 3, 3/0; F

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; F

Prerequisite: CHI 201 or equivalent.
Continuation of CHI 201.

CHI 389 TOPICS COURSE 3, 0/0

FLE

Foreign Language Education

FLE 200 FIELD EXPERIENCE IN FOREIGN LANGUAGE EDUCATION 3, 0/0

Prerequisites: Sophomore status; completion of 302 in language of specialization; minimum GPA of 2.5 in language of specialization or GOOD on MLA scale; proficiency in English (FS1-3); consent of modern and classical languages education coordinator. Ninety hours in a middle, junior high, or senior high school in observation and participation of various types. Conducted by school and college staff.

FLE 316 TEACHING READING IN THE SECOND LANGUAGE IN MIDDLE SCHOOLS 3, 3/0

Prerequisites: FRE 301 or SPA 301 or equivalent, and one course in French or Spanish literature. Strategies and techniques for teaching reading in the second-language classroom. Students read in the language they are going to teach. Required for all students entering foreign language education programs.

FLE 405 METHODS AND MATERIALS FOR TEACHING FOREIGN LANGUAGES IN HIGH SCHOOLS 3, 3/0

Prerequisites: EDF 303, EDF 403, and consent of modern and classical languages education coordinator. *Prerequisite or*

corequisite: FLE 200. Introduction to the elements of a foreign language curriculum: selecting, organizing, and presenting material; designing classroom activities; evaluating student progress; teacher-pupil relationships. Students in modern and classical languages teacher certification programs should take this course immediately before FLE 407 and FLE 408.

FLE 406 TECHNIQUES FOR TEACHING AND EVALUATING FOREIGN LANGUAGES IN MIDDLE SCHOOLS 3, 3/0

Prerequisites: EDF 303, EDF 403, and consent of modern and classical languages education coordinator. *Prerequisite or corequisite:* FLE 200. Development of skills in teaching and testing foreign languages, with special emphasis on applying a communicative syllabus to middle and secondary school language programs.

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.

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.

FLE 497 WORKSHOP

FRE

French

FRE 101 BEGINNING FRENCH I 3, 3/0; F

Fundamentals of French with an emphasis on the spoken and written language.

FRE 102 BEGINNING FRENCH II 3, 3/0; F

Prerequisite: FRE 101. Continuation of FRE 101. Fundamentals of French with an emphasis on the spoken and written language.

FRE 110 ACCELERATED BEGINNING FRENCH 6, 6/0; F

Prerequisite: Two or three years of high school French. Covers material normally studied in FRE 101 and FRE 102. Designed for those who have had two or three years of high school French and feel the need for practice in the basic patterns and structures of French.

FRE 201 INTERMEDIATE FRENCH I 3, 3/0; F

Prerequisite: FRE 102. Further development of basic skills with emphasis on reading and writing.

FRE 202 INTERMEDIATE FRENCH II 3, 3/0; F

Prerequisite: FRE 201. Continuation of FRE 201. Further development of basic skills with emphasis on reading and writing.

FRE 210 ACCELERATED INTERMEDIATE FRENCH 6, 6/0

Prerequisite: FRE 102 or FRE 110. Covers material normally studied in FRE 201 and FRE 202. Designed for those who have more than three years of high school French and who feel the need for intensive practice in speaking and writing in the language.

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 303 TRANSLATION 3, 3/0

Prerequisites: FRE 301 and FRE 302. Problem words, idiomatic expressions, and contrastive English-French, French-English structures. Intensive work in translation of authentic texts from English to French and French to English.

FRE 304 INTRODUCTION TO READING LITERATURE 3, 3/0

Prerequisite: FRE 301 or 302. Introduction to the reading of French literature. Systematic reading and analysis of various genres. Selections from prose, poetry, and drama of various authors from the Middle Ages to the present.

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 SURVEY OF NINETEENTH- AND TWENTIETH-CENTURY FRENCH LITERATURE 3, 3/0

Prerequisite: FRE 301 or FRE 302. Introduction to representative works from a variety of genres from romanticism to contemporary writing.

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.

FRE 341 FRANCOPHONE LITERATURE IN TRANSLATION 3, 3/0

Aspects of the Francophone world (French-speaking Europe, North America, Africa, and the Caribbean). Emphasis on historical, political, economic, and social changes resulting from colonial, neocolonial, and anticolonial periods. French majors and minors must obtain department chair and permission of course instructor.

FRE 411 STUDIES IN FRENCH POETRY 3, 3/0

Prerequisite: FRE 307, FRE 308, or FRE 309. French and Francophone poetry selected from major literary periods. May be limited to one historical period. May be repeated once where content varies.

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 413
STUDIES IN FRENCH THEATER
3, 3/0**

Prerequisite: FRE 307, FRE 308, or FRE 309.
One or several of the major periods of French and Francophone theater. Includes historical introduction, discussion of French-language theater as a literary form, and detailed analyses of representative authors and works. 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 417
BUSINESS FRENCH
3, 3/0**

Prerequisites: FRE 301 and FRE 302. Study of the French business world to develop competence in French commercial language. Practice in translating and writing business communiqués.

**FRE 496
SEMINAR I
3, 3/0**

Prerequisite: Permission of instructor. Topic chosen by instructor.

**FRE 497
SEMINAR II
3, 3/0**

Prerequisite: Permission of instructor. Topic chosen by instructor.

**GER
German**

**GER 101
BEGINNING GERMAN I
3, 3/0; F**

Fundamentals of German with emphasis on the spoken and written language.

**GER 102
BEGINNING GERMAN II
3, 3/0; F**

Prerequisite: GER 101. Continuation of GER 101.

**GER 201
INTERMEDIATE GERMAN I
3, 3/0; F**

Prerequisite: GER 102. Further development of basic skills with emphasis on reading and writing.

**GER 202
INTERMEDIATE GERMAN II
3, 3/0; F**

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 303
THE GERMAN NOVELLE
3, 3/0**

Prerequisite: GER 202. The romantic, realistic, and contemporary developments of the short prose form, the novella.

**GER 304
THE GERMAN DRAMA
3, 3/0**

Prerequisite: GER 202. Chief literary trends and major authors of German drama from 1750 to 1870.

**GER 306
GERMAN CIVILIZATION
3, 3/0**

Prerequisite: GER 202. The growth of German civilization. Emphasis on artistic and intellectual contributions to the Western world.

**GER 307
HISTORY OF GERMAN
LITERATURE I
3, 3/0**

Prerequisite: GER 202. Major authors from the Middle Ages to the eighteenth century.

**GER 308
HISTORY OF GERMAN
LITERATURE II
3, 3/0**

Prerequisite: GER 202. Major authors of the classical period and the nineteenth and twentieth centuries.

**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.

**GER 338
GERMAN FILM AND RELATED
LITERATURE IN TRANSLATION
3, 3/0**

The main artistic phases of the German cinema and their relationship with literature (primarily drama and narrative) from the Weimar period to contemporary times. Films are subtitled; instruction is in English. German minors must obtain department chair and permission of course instructor.

**GER 339
MODERN GERMAN CULTURE
3, 3/0**

Modern German-speaking cultures from 1871 to the present. Emphasis on the Weimar period, the Third Reich, the postwar era, and recent developments. Readings and instruction are in English. German minors must obtain department chair and permission of course instructor.

**GER 389
TOPICS COURSE
3, 0/0**

**GER 401
TWENTIETH-CENTURY GERMAN
LITERATURE
3, 3/0**

Prerequisite: GER 202. Chief literary trends and major authors of German literature in the twentieth century.

**GER 450
DIRECTED READINGS I
3, 3/0**

Prerequisite: Permission of instructor. Variable.

**GER 451
DIRECTED READINGS II
3, 3/0**

Prerequisite: Permission of instructor. Variable.

**GER 495
SPECIAL PROJECT**

**GER 497
WORKSHOP**

**GRK
Greek**

**GRK 101
BEGINNING NEW TESTAMENT
GREEK I
3, 3/0; F**

Fundamentals of Koine Greek with emphasis on reading.

**GRK 102
BEGINNING NEW TESTAMENT
GREEK II
3, 3/0; F**

Prerequisite: GRK 101. Continuation of GRK 101.

**ITA
Italian**

**ITA 101
BEGINNING ITALIAN I
3, 3/0; F**

Fundamentals of Italian with emphasis on listening and speaking.

**ITA 102
BEGINNING ITALIAN II
3, 3/0; F**

Prerequisite: ITA 101. Continuation of ITA 101.

**ITA 201
INTERMEDIATE ITALIAN I
3, 3/0; F**

Prerequisite: ITA 102. Further development of basic skills with emphasis on reading and writing.

**ITA 202
INTERMEDIATE ITALIAN II
3, 3/0; F**

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 306
CONTEMPORARY ITALIAN
CIVILIZATION
3, 3/0**

Prerequisite: If offered in English, none; if offered in Italian, ITA 202 or equivalent. Cultural, intellectual, and social developments in Italy, past and present. Offered in English or Italian, as noted in the master schedule. When in English, this course may not be applied to the Italian minor.

**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 336
CONTEMPORARY ITALIAN
LITERATURE IN TRANSLATION
3, 3/0**

Major writers and cultural movements since Italian unification. Italian minors must obtain department chair and permission of course instructor.

**ITA 401
DANTE'S DIVINA COMMEDIA
3, 3/0**

Prerequisite: One upper-division Italian course. Selected cantos as an introduction to Dante's work and times.

**ITA 406
NINETEENTH-CENTURY ITALIAN
LITERATURE
3, 3/0**

Prerequisite: One upper-division Italian course. Readings and discussions of representative works of poetry and novels.

**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; F

Fundamentals of Latin with emphasis on reading.

LAT 102 BEGINNING LATIN II 3, 3/0; F

Prerequisite: LAT 101. Continuation of LAT 101.

MCL

Modern and Classical Languages

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.

MCL 338 INTRODUCTION TO CLASSICAL GREEK DRAMA 3, 3/0

Prerequisite: One literature course. Origin of European drama as a distinct literary form. Characteristics of Greek tragedy and theatrical conventions. Study of works by major playwrights, with emphasis on cultural patterns of the time.

MCL 488 INTERNSHIP Variable credit

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

Prerequisite: Permission of instructor.

MCL 499 INDEPENDENT STUDY

Prerequisite: Permission of instructor.

SPA

Spanish

SPA 101 BEGINNING SPANISH I 3, 3/0; F

Fundamentals of Spanish with emphasis on the spoken and written language.

SPA 102 BEGINNING SPANISH II 3, 3/0; F

Prerequisite: SPA 101. Continuation of SPA 101.

SPA 201 INTERMEDIATE SPANISH I 3, 3/0; F

Prerequisite: SPA 102. Further development of basic skills with emphasis on reading and writing.

SPA 202 INTERMEDIATE SPANISH II 3, 3/0; F

Prerequisite: SPA 201. Continuation of SPA 201.

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 303 INTRODUCTION TO SPANISH LITERATURE 3, 3/0

Prerequisite: SPA 202. Basic concepts of literary theory and their application to masterpieces of prose and poetry.

SPA 305 SPANISH PHONETICS 3, 3/0

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 402 SPANISH DRAMA OF THE GOLDEN AGE 3, 3/0

Prerequisite: SPA 307. Prelopistas and the works of Lope de Vega, Tirso de Molina, Juan Ruiz, de Alarcón, and others.

SPA 404 CERVANTES 3, 3/0

Prerequisite: SPA 307. Reading and analysis of Don Quixote or the Novelas Exemplares.

SPA 405 OLD SPANISH 3, 3/0

Prerequisite: SPA 305. Development of Spanish from the Middle Ages to the fifteenth century, including the earliest documents in Spanish. Lectures, readings, and reports.

SPA 406 NINETEENTH-CENTURY SPANISH LITERATURE 3, 3/0

Prerequisite: SPA 308. Representative works of the period.

SPA 408 TWENTIETH-CENTURY SPANISH LITERATURE 3, 3/0

Prerequisite: SPA 308. Appreciation, analysis, and criticism of major trends in the development of Spanish poetry and theater of the twentieth century.

SPA 409 TWENTIETH-CENTURY SPANISH LITERATURE 3, 3/0

Prerequisite: SPA 308. The novel, short story, and essay.

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 412 SPANISH AMERICAN LITERATURE: THE TWENTIETH CENTURY 3, 3/0

Prerequisite: SPA 310 or SPA 311. Theater and poetry.

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 421 STRUCTURE OF MODERN SPANISH 3, 3/0

Prerequisite: SPA 305. An analysis of the principles of modern Spanish from a linguistic perspective. A study of Spanish phonology, morphology, and syntax.

SPA 495 SPECIAL PROJECT

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

SWA

Swahili

SWA/AAS 101 BEGINNING SWAHILI I 3, 3/0; F

Fundamentals of Swahili with emphasis on the spoken and written language.

SWA/AAS 102 BEGINNING SWAHILI II 3, 3/0; F

Prerequisite: SWA/AAS 101. Continuation of SWA/AAS 101.

SWA/AAS 201 INTERMEDIATE SWAHILI I 3, 3/0

Prerequisite: SWA/AAS 102. Further development of basic skills, with emphasis on reading and writing.

SWA/AAS 202 INTERMEDIATE SWAHILI II 3, 3/0

Prerequisite: SWA/AAS 201. Continuation of SWA/AAS 201.

MUS

MUSIC

Music Department

MUS 112 APPLIED MUSIC 1, 0/5

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, 1/1

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, 1/1

Prerequisite: Music education majors. Pre-professional training in performing and teaching methodologies for percussion instruments. Laboratory teaching exposure to Buffalo Public School music students.

MUS 115 STRING TECHNIQUES 1, 1/1

Prerequisite: Music education majors. Pre-professional training in performing and teaching methodologies for violin, viola, violoncello, and contrabass.

MUS 116 WOODWIND TECHNIQUES 1, 1/1

Prerequisite: Music education majors. Pre-professional 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 3, 3/0

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, 3/5

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 150 DIRECTED STUDY SEMINAR: COMPOSITION 3, 3/0

Prerequisite: Permission of instructor and department chair. Supervised projects in areas of music study not addressed by current offerings, such as composition and theory, sound recording, computer music, or computer music editing; common seminar.

MUS 161 CLASS PIANO I 1, 0/1

Prerequisite: Audition. 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, 0/1

Prerequisite: C or better in MUS 161 or audition. Continuation of the skills acquired in MUS 161.

MUS 171

MUS 173

MUS 271

MUS 273

MUS 371

MUS 373

MUS 471

MUS 473

APPLIED MUSIC

1, 0/1

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; J

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.

MUS 206 JAZZ AND ROCK FOUNDATIONS 3, 3/0

An exploration of the roots of blues, jazz, and rock music in America. Musicological and socio-historical developments that helped formulate today's jazz and rock movements from the 1920s to the 1990s.

MUS 208 SURVEY OF WORLD MUSIC CULTURES 3, 3/0; J

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 210 MUSIC THEORY FOR NON- MAJORS 3, 3/0

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, 3/0

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 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 250 DIRECTED STUDY SEMINAR 3, 3/0

Prerequisite: Permission of instructor and department chair. Supervised projects in an area of music study not addressed by current offerings, such as, but not restricted to, composition and theory, sound recording, computer music and computer music editing; common seminar. MUS 450 is an all-college elective.

MUS 261 CLASS PIANO III 1, 0/1

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, 0/1

Prerequisite: C or better in MUS 261 or audition. Continuation of the skills acquired in MUS 261.

MUS 301 SURVEY OF MUSIC HISTORY 3, 3/0

Prerequisite: Upper-division status. Listening, basic analysis, and study of music from the Middle Ages through the present; music forms, styles, and composers; historical, cultural, and social backgrounds; parallel developments in other arts.

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 socio-historical trends in the medieval, Renaissance, and Baroque style periods.

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.

MUS 305 MODERN JAZZ 3, 3/0

Prerequisite: MUS 206. History and development of modern jazz from 1941 to the present.

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.

MUS 313 CHAMBER CHOIR 1, 0/2

Prerequisite: Audition. A select vocal ensemble of mixed voices that studies and performs art music from the medieval through modern genres.

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.

**MUS 321
COMPOSITION, IMPROVISATION
AND ARRANGING**

2, 2/0

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, 0/2

Prerequisite: Audition. Training and supervised performance in jazz and dance band combination. May be repeated.

**MUS 330
MUSIC THEORY III**

3, 3/0

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, 3/0

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, 0/3

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, 0/2

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, 0/2

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, 0/2

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, 0/2

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 340
ETHNOMUSICOLOGY**

3, 3/0

Prerequisite: MUS 303. Lectures, readings, and recordings introducing principal musical traditions of selected non-Western cultures, such as African, Indic, and Sinitic. Consideration of the African American tradition, including jazz and rock. Includes individual projects of music or cultural analysis. Required for music majors.

**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 350
DIRECTED STUDY SEMINAR**

3, 3/0

Prerequisite: Permission of instructor and department chair. Supervised projects in an area of music study not addressed by current offerings, such as composition and theory; sound recording; computer music and computer music editing; common seminar. MUS 350 is an all-college elective.

**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.

**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 450
DIRECTED STUDY SEMINAR,
COMPOSITION**

3, 3/0

Prerequisite: Permission of instructor and department chair. Supervised projects in an area of music study not addressed by current offerings, such as composition and theory; sound recording; computer music and computer music editing. Common seminar. MUS 450 is an all-college elective.

**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 495
SPECIAL PROJECT**

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**

NFS

NUTRITION AND FOOD SCIENCE

Dietetics and Nutrition Department

**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, 3/3

A basic human nutrition course with emphasis on requirements, functions, dietary sources, digestion, absorption, transportation, utilization, and excretion of essential nutrients and other substances in foods. Key contemporary nutritional issues include dietary standards for diet adequacy and healthy eating for prevention of chronic diseases.

**NFS 105
FOOD AND PEOPLE:
INTERACTIONS AND ISSUES**

3, 3/0

The relationship of people and food, including the basis for eating behavior and patterns, eating disorders and faddism, potential hazards associated with foods, dietary goals

and guidelines for countries of the world, and issues relating to world nutrition problems, especially hunger.

**NFS 108
FOOD CULTURE AND
CIVILIZATION IN THE FAR EAST
3, 3/0**

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.

**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.

**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; T**

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, 3/0**

**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.

**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, 1/2**

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.

**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. 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.

Prerequisite: Permission of instructor.

**NFS 499
INDEPENDENT STUDY**

PHI

PHILOSOPHY

Philosophy and Humanities Department

**PHI 101
INTRODUCTION TO
PHILOSOPHY
3, 3/0; Q**

Introduction to the literature and problems of philosophy.

**PHI 102
INTRODUCTION TO MORAL
AND SOCIAL PHILOSOPHY
3, 3/0; Q**

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.

**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 106
CRITICAL THINKING
3, 3/0**

Informal types of reasoning, including fallacies, reasoning by analogy, causal reasoning, statistical reasoning, and deductive reasoning; analysis and evaluation of everyday reading, such as newspaper articles and letters to the editor.

**PHI 110
THE MEANING OF LIFE
3, 3/0; Q**

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 202
THE PHILOSOPHY OF HUMAN
NATURE
3, 3/0**

Exploration of several competing conceptions of human nature; development of analytical skills for examining various views; examination of the implications for human existence.

**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.

**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.

**PHI 212
HISTORY OF AMERICAN
PHILOSOPHY
3, 3/0**

An introduction to the major figures and salient ideas of American philosophers from the time of the Puritans to the early twentieth century.

**PHI 300
PROBLEMS OF PHILOSOPHY
3, 3/0**

Selected problems in epistemology, metaphysics, ethics, and certain movements in contemporary philosophy.

**PHI 301
HISTORY OF POLITICAL
PHILOSOPHY
3, 3/0; 4**

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.

**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.

**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.

**PHI 305
ANALYTIC PHILOSOPHY I:
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
BEGINNING 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 "supervision," "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.

**PHI 309
KNOWLEDGE AND TRUTH
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.

**PHI 310
HISTORY OF ETHICS
3, 3/0; 4**

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.

**PHI 312
ANALYTIC PHILOSOPHY II:
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 ETHICAL
THEORY
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.

**PHI 316
FREEDOM AND THE SELF
3, 3/0**

Prerequisite: Upper-division status or one course in philosophy. Examination of two general metaphysical problems: the nature of people and of personal identity over time, and the nature and possibility of free will.

**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.

**PHI 323
MORAL ISSUES
3, 3/0**

Prerequisite: Upper-division status or one course in philosophy. Contemporary moral issues and theories provide a foundation for examining specific moral problems. Includes moral issues related to genetic engineering, war and peace, discrimination, and censorship.

**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.

**PHI 328
BUSINESS AND ETHICS
3, 3/0**

Prerequisite: Upper-division status or one course in philosophy. Moral problems of business professionals, including advertising, ecology, pollution, pricing of goods and services, and bribery; moral theories provide a theoretical foundation for examining specific moral problems.

**PHI 339/HUM 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.

**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.

**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.

PHI 495
SPECIAL PROJECT

PHI 498
HONORS RESEARCH

PHI 499
INDEPENDENT STUDY

PHY

PHYSICS

Physics Department

PHY 100
PHYSICS FOR NON-SCIENCE
MAJORS
3, 3/0; K

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, 3/0

A conceptual consideration of all aspects of sound and noise. Discussion of the generation and propagation of sound, the ear and voice, musical sounds and instruments, and the recording and reproduction of sound. May not be substituted for PHY 107, PHY 108, PHY 111, or PHY 112. Not open to physics majors.

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
3, 2/2; K

Algebra-based study of mechanics, measurement, kinematics, Newton's laws, gravity, conservation of energy and momentum, and rotation; laboratory. Not open to physics majors.

PHY 108
GENERAL PHYSICS II
3, 2/2

Prerequisite: PHY 107. Algebra-based study of light, electricity, and magnetism; circuits and optics; laboratory. Not open to majors.

PHY 111
UNIVERSITY PHYSICS I
4, 3/2; K

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
4, 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
3, 3/0

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 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, 3/0

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.

PHY 410
ADVANCED PHYSICS
LABORATORY
3, 0/6

Prerequisite: PHY 305 or equivalent. Selected advanced experiments chosen from the areas of mechanics, thermal physics, sound, optics, electricity and magnetism, and modern physics.

PHY 412
PHYSICS SEMINAR
1, 1/0

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 Schroedinger 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
Variable credit

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

Prerequisite: Faculty sponsor approval. Physics and physics-related areas.

PHY 499
INDEPENDENT STUDY

Prerequisite: Faculty sponsor approval. Physics and physics-related areas.

PLN

PLANNING

Geography and Planning Department

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/GEG 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.

PLN 330/GEG 330
LAND RESOURCE ANALYSIS AND
PLANNING
3, 3/0

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.

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 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**

Prerequisite: SOC 300 OR PSC 300, senior geography and planning major. Research in geography or planning and presentation of selected research-related topics by department faculty.

**PLN 488
INTERNSHIP
Variable credit**

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**

**PLN 499
INDEPENDENT STUDY**

PSC

POLITICAL SCIENCE

**Political Science
Department**

**PSC 101
INTRODUCTION TO
GOVERNMENT AND POLITICS
3, 3/0**

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
3, 3/0**

The Constitution and its principles; functions and roles of the federal executive, legislative, and judicial branches; citizen participation; problems of individual liberty and governmental authority; problems of national security, economic regulation, and social welfare.

**PSC 103
GREAT POLITICAL ISSUES
3, 3/0**

Great political issues such as ideology, freedom, equality, political obligation, civil disobedience, law, and morality.

**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.

**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.

**PSC/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.

**PSC 220
THE DEVELOPMENT OF
AMERICAN CONSTITUTIONAL
LAW
3, 3/0**

Foundations of American constitutionalism; judicial review and its use throughout history; the Supreme Court's interaction with Congress, the president, and states; evolving concepts of federalism; development of civil rights and liberties policies.

**PSC 225
WOMEN IN AMERICAN POLITICS
3, 3/0**

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**

Elements of national power, religion, and 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 300
POLITICAL ANALYSIS
3, 3/0**

The design, execution, and interpretation of research in the field of political science; emergence and development of the discipline; common assumptions and controversies. Required of all political science majors.

**PSC 301
POLITICAL STATISTICS
3, 3/0**

Advanced investigation of quantitative political science research methods; application of statistics to test empirical hypotheses about the political world; accepted quantitative techniques and statistical inference; sampling, testing hypotheses about one-sample and two-sample cases, measures of association, and tests of statistical significance. Required of all political science majors.

**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 309
INTERNATIONAL POLITICAL
ECONOMY
3, 3/0**

Political and economic dynamics of the global economy; theoretical traditions of international political economy; analysis of international trade, foreign direct investment, monetary policy, debt, technology, and energy; role of international organizations; interdependence and globalization.

**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.

**PSC 315
STATE AND LOCAL
GOVERNMENT 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 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.

**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

Basic ideas that shape American foreign policy; isolationism, domestic and international pressures, cold war, peaceful coexistence and détente, major problems.

**PSC/AAS 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.

**PSC 340
POLITICS OF DEVELOPING
COUNTRIES**
3, 3/0

Major 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; globalization.

**PSC 345/HIS 313
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.

**PSC 350
INTRODUCTION TO LEGAL
THOUGHT**
3, 3/0

Prerequisites: PSC 102 and upper-division status. Main concepts, theories, and issues of legal thought from the perspective of political science; includes political theories on the nature of law, concepts and independent variables in political legal theory, boundaries to political choice, and issues of social and political justice.

**PSC 351
HISTORY OF POLITICAL THEORY I**
3, 3/0

Main problems of political theory examined through the writings of major political thinkers from Plato to Aquinas.

**PSC 352
HISTORY OF POLITICAL THEORY II**
3, 3/0

Main problems of political theory examined through the writings of major political thinkers from Machiavelli to Marx.

**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 different 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, 3/0; D

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.

**PSC 389
TOPICS IN POLITICAL SCIENCE**
3, 3/0

In-depth study of current issues of substantial political significance, such as: public personnel administration, defense policy, computers and political science, and environmental policy, political communication, health policy, and human rights.

**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.

**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.

**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.

**PSC 470
SENIOR SEMINAR**
3, 3/0

Prerequisite: Senior status. Selected topics in political science examined and analyzed in depth.

**PSC 488
INTERNSHIP**
Variable credit

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.

**PSC 495
SPECIAL PROJECT**

**PSC 497
WASHINGTON SEMESTER**
16, 0/0

State University of New York's Washington semester program. Classwork, seminars, and internship work; selection based on college-wide competition; contact Political Science Department chair for information and application forms.

**PSC 499
INDEPENDENT STUDY**

PSY

PSYCHOLOGY

Psychology Department

**PSY 101
INTRODUCTION TO
PSYCHOLOGY**
3, 3/0; Y

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, 2/2

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, 2/2

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 310
BEHAVIOR MODIFICATION**
3, 3/0

Prerequisite: PSY 101. Major learning principles as applied in behavior-modification techniques; premises, ethics, and assessment of behavioral methods; reinforcement, extinction, punishment, modeling, and cognitive change as methods of changing human behavior.

**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.

**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 385
PSYCHOLOGY OF PERSONAL
ADJUSTMENT**
3, 3/0

Prerequisite: PSY 101. Theory, research, and practical application of personal growth and adjustment throughout the lifespan; theories of adjustment; characteristics of the healthy personality; sex roles and gender differences; interpersonal relationships; adjustments to school, work, and retirement; understanding and managing stress; human sexuality; strategies for coping and adjustment.

**PSY 387
PSYCHOLOGY OF GENDER
DIFFERENCES**
3, 3/0; 8

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 404
THEORIES OF LEARNING**
3, 3/0

Prerequisites: PSY 101 and PSY 304. Major theoretical interpretations of learning; the history and development of learning theories; cognitive versus stimulus-response explanations; recent mathematical, neurophysiological, and information-processing models.

**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. 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; 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, 3/0

Prerequisites: PSY 101 and PSY 355. 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:
LANGUAGE STRUCTURES
AND PROCESSES
3, 3/0**

Prerequisites: PSY 101 and 3 credit hours of psychology; PSY 340 recommended. Theoretical and empirical literature regarding human language processes. Animal vs. human communication, speech production, speech perception, language acquisition, grammar, sentence production and comprehension, and the relationship between language and cognition. Integrates language processes into the general framework of cognitive psychology.

**PSY 432
HUMAN MOTIVATION AND
EMOTION
3, 3/0**

Prerequisites: PSY 101 and PSY 304. 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, 3/0**

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.

**PSY 453
EXPERIMENTAL PSYCHOLOGY II:
METHODS IN SOCIAL
PSYCHOLOGY
3, 2/2**

Prerequisite: PSY 450; PSY 325 recommended. Continuation of PSY 450. Focus on research methods used in social psychology. Includes artifacts in social psychological research, the rights of subjects, the responsibilities of experimenters, and the problem of generalizing results to the "real" world. Requires minimum of four research exercises and reports, including the formulation of at least one original experimental design.

**PSY 454
EXPERIMENTAL PSYCHOLOGY II:
METHODS IN PHYSIOLOGICAL
AND COMPARATIVE
PSYCHOLOGY
3, 2/2**

Prerequisite: PSY 450; PSY 321 or PSY 421 recommended. Continuation of PSY 450. Focus on research methods used in comparative and physiological psychology; principles of behavioral observation, quantification of behavior, methods employed in the investigation of the nervous system, surgical and histological techniques, and the application of physiological methods to the understanding of behavior. Requires minimum of four research exercises and reports, including the formulation of at least one original experimental design.

**PSY 455
EXPERIMENTAL PSYCHOLOGY II:
METHODS IN COGNITION
3, 2/2**

Prerequisite: PSY 450; PSY 340 recommended. Continuation of PSY 450. Research methods used in studying cognitive processes. Short- and long-term memory, language, concept formation, and attention and thinking. Requires minimum of four research exercises and reports, including the formulation of at least one original experimental design.

**PSY 456
EXPERIMENTAL PSYCHOLOGY II:
METHODS IN SENSATION AND
PERCEPTION
3, 2/2**

Prerequisite: PSY 450; PSY 308 recommended. Continuation of PSY 450. Focus on research methods used in sensation and perception. Includes classical psychophysical methods and recent advances in methodology. Emphasis on visual modality. Requires minimum of four research exercises and reports, including the formulation of at least one original experimental design.

**PSY 457
EXPERIMENTAL PSYCHOLOGY II:
METHODS IN CLINICAL
PSYCHOLOGY
3, 2/2**

Prerequisite: PSY 450; PSY 411 recommended. Continuation of PSY 450. Methods and analysis of data used in clinical research. History of clinical psychology, ethical issues, special problems in clinical measurement and research, statistical procedures, the use of tests, case study and group designs, analogues, social interaction measures, and genetics. Requires minimum of four research exercises and reports, including the formulation of at least one original experimental design.

**PSY 458
EXPERIMENTAL PSYCHOLOGY II:
METHODS IN DEVELOPMENTAL
PSYCHOLOGY
3, 2/2**

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.

**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 470
ENVIRONMENTAL PSYCHOLOGY II
3, 3/0**

Prerequisites: PSY 101 and PSY 370. Advanced-level continuation of PSY 370. Theory building in physical-environmental behavior relations, innovative and unobtrusive measures, individual human needs in the physical environment, and basic processes and their relationship to the physical environment.

**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.

**PSY 472
SEMINAR ON PSYCHOLOGY
3, 3/0**

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.

**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, 2/2**

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
Variable credit**

Prerequisite: Approval of the faculty supervisor. Supervised field experience in a variety of settings to supplement classroom instruction.

**PSY 495
SPECIAL PROJECT
Variable credit**

Prerequisite: Faculty supervisor permission. Research conducted under the supervision of a faculty member.

**PSY 496
HONORS THESIS I
3, 0/3**

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, 0/3**

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
Variable credit**

Prerequisite: Faculty adviser permission.

REL

RELIGIOUS STUDIES

Philosophy and Humanities Department

REL 104 INTRODUCTION TO RELIGIOUS STUDIES 3, 0/0; Q

Introduction to the rational study of religion, including religious practices and philosophies and concepts basic to religious experience.

REL 105 INTRODUCTION TO CHRISTIAN THOUGHT 3, 3/0; 4

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.

REL 121 INTRODUCTION TO JEWISH THOUGHT 3, 3/0

Basic Judaism, the major divisions in Jewish thought and practice, the Torah and the problem of practice, the epistemological basis of Jewish sectarianism, God and the problem of knowledge, the "good" life, Israel and the Nations, and Jewish practices.

REL 205 INTRODUCTION TO THE OLD TESTAMENT 3, 3/0; Q

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; Q

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.

REL 303 WOMEN IN GLOBAL RELIGIONS 3, 3/0; 5

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.

REL 321 WORLD RELIGIONS 3, 3/0; 5

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.

REL 326 NEW TESTAMENT 3, 3/0

Introduction to the New Testament, with emphasis on literary content, the societies from which it emerged, the structures and varieties of its literary contemporaries, and the tools necessary for understanding it.

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 350 HOLOCAUST 3, 3/0

Prerequisite: Upper-division status or one course in religion. Examination of the Holocaust (Europe 1933–1945) against the background of Jewish and other religious thought, with special attention to how the Holocaust has affected present religious and philosophical thinking.

REL 488 INTERNSHIP Variable credit

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.

SAF

SAFETY STUDIES

Technology Department

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.

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

SCI

GENERAL SCIENCE

Earth Sciences and Science Education Department

SCI 100 CONTEMPORARY SCIENCE 3, 3/0; K

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.

SCI 105 PHYSICAL SCIENCE FOR NONSCIENCE STUDENTS 3, 3/0

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, 3/0

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; K

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

SCI 232 ENERGY, ENVIRONMENT, AND SOCIETY 3, 3/0; K

Regional and global energy use and issues; environmental, economic, individual, and societal perspectives; major energy alternatives.

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.

SCI 335
OUTDOOR SCIENCE EDUCATION
3, 2/2

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.

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

Prerequisite: Faculty sponsor permission. Environment, energy, science, society, and science education-related areas.

SCI 499
INDEPENDENT STUDY

Prerequisite: Faculty sponsor permission. Environment, energy, science, society, and science education-related areas.

SED

SCIENCE EDUCATION

Earth Sciences and Science Education Department

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.

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.

SED 407
PRACTICE TEACHING SCIENCE IN THE MIDDLE SCHOOL
6, 1/30; P

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 NYSCE 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 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.

SED 408
PRACTICE TEACHING SCIENCE IN THE HIGH SCHOOL
6, 1/30; P

Prerequisites: SED 405 (minimum grade of B), minimum cumulative 2.75 grade point average in coursework (3.0 in earth science), completion of the NYSCE 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.

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
1-3, 0/15-45

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

Speech-Language Pathology Department

SLP 100
STUDENT SPEECH CLINIC
Variable credit

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.

SLP 206
LANGUAGE DEVELOPMENT
3, 3/0

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.

SLP 210
INTRODUCTION TO SIGN LANGUAGE
3, 3/0

Introduction to basic sign language skills suitable for use in elementary classes for students with hearing disabilities. Focus on the development of basic expressive and receptive skills in signed English, including finger spelling (dactylology); basic information about the sign language continuum, deafness, and deaf culture. Active participation in daily signing in front of large and small groups or providing appropriate constructive feedback. Practice of receptive and expressive signing skills outside of class encouraged.

SLP 220
INTRODUCTION TO COMMUNICATION DISORDERS
3, 3/0

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.

SLP 300
INTRODUCTION TO SPEECH PATHOLOGY
3, 3/0

Prerequisite: Speech-language pathology major. Etiology, characteristics, diagnoses, and intervention implications of disorders of motor speech, adult language, craniofacial anomalies, fluency, phonology, voice, and cognitive-communicative.

SLP 302
CLINICAL PHONETICS
3, 3/0

Production, acoustic analysis, and representation of English (American) speech sounds; application of phonetics to deviations in speech.

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.

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.

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.

SLP 314
AUDIOLOGY
3, 3/0

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
3, 3/0

SLP 405
COMMUNICATION DISORDERS II
3, 3/0

Prerequisites: SLP 302, SLP 303, SLP 304, SLP 305. 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.

SLP 412
SPEECH ACOUSTICS AND PERCEPTION
3, 3/0

Prerequisites: SLP 302, SLP 304. *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.

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.

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, 0/1

Observation, evaluation, and treatment sessions in speech-language pathology.

SLP 495
SPECIAL PROJECT

SLP 497
WORKSHOP

SLP 499
INDEPENDENT STUDY

SOC

SOCIOLOGY

Sociology Department

SOC 100
INTRODUCTION TO SOCIOLOGY
3, 3/0; Y

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/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, 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.

SOC 240
ANALYZING SOCIAL PROBLEMS
3, 3/0; Y, 8

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 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.

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.

SOC 310
SOCIOLOGY OF GENDER AND SEX ROLES
3, 3/0; 8

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; 8

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.

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.

SOC/AAS 321
THE AFRICAN AMERICAN FAMILY
3, 3/0; 8

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.

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/SSE 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.

SOC 324/HRP 319
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.

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.

SOC 333
SOCIAL MOVEMENTS
3, 3/0

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 341
SOCIOLOGY OF HUMAN ECOLOGY
3, 3/0

The interaction of people and the environment and its effect on the quality of living, especially upon social problems such as poverty, crime, physical and mental illness, and various types of pollution.

SOC 350
POWER, CLASS, AND INEQUALITY
3, 3/0; 8

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/AAS 351
SOCIOLOGY OF RACE AND
ETHNICITY
3, 3/0; 8

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.

SOC 352
SOCIOLOGY OF AGING
3, 3/0

Prerequisite: SOC 100. How society structures the experience of aging; major transitions and role changes experienced by the elderly within social institutions such as family, the economy, and religion; understanding the way these same institutions adapt to an aging population. Includes investigation of programs and policies aimed at assisting individuals at varying levels of independence throughout the aging process.

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 361
INDUSTRIAL SOCIOLOGY
3, 3/0

Prerequisite: SOC 100. Presents major theories on group process within the workplace; issues that affect workers' attitudes, behavior, and productivity; the social organization of the workplace; the impact of technology; the meaningfulness of work; reactions to change; the balance of internal and external factors. The internal dynamics of the workplace within the context of larger issues, such as the capitalist organization of production and the tendency toward globalization.

SOC 362
SOCIOLOGY OF
ORGANIZATIONS
3, 3/0

Prerequisite: SOC 100. Characteristics of, and relations among, multilevel organizational structures (formal and informal), behavior within organizations, and the behavior of organizations; the effects of organizational environments and networks within organizations.

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 381
SOCIOLOGY OF VIOLENCE
3, 3/0

Prerequisite: SOC 100. An analysis of various manifestations of violence. Theories of violence will be presented, as well as investigation into such specific topics as child abuse, battered spouses, rape, violence in schools, and collective violence; programs which deal with violence.

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 384
SOCIOLOGY OF MURDER
3, 3/0

Prerequisite: SOC 100. Sociological findings and theory concerning various manifestations of murder; homicide, genocide, serial killing, and simultaneous killing; social profiles of murderers and discussion and analysis of social factors conducive to murder.

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 sado-masochism 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.

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.

SOC 415
POPULATION ANALYSIS
3, 3/0

Prerequisite: SOC 100. Applied formal, social, and economic demography. Includes the study of treatment of birth, death, and migration. Methods of population measurement and projection, and sources of demographic data; hands-on experience in computer analysis of population data using general statistical packages and/or programs customized for use in population analysis.

SOC 420
SOCIOLOGY OF RELIGION
3, 3/0

Prerequisite: SOC 100. Theories in the sociology of religion; Religion and social change; religion in society; church and sect; social class and religion; the role of minister, priest and rabbi.

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 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
3, 3/0

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.

SOC 491
TOPICAL SEMINAR IN
SOCIOLOGY
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

SOC 499
INDEPENDENT STUDY

SPA

SPANISH

See Modern and
Classical Languages

SPC

SPEECH AND CRITICISM

Communication Department

SPC 103 INTRODUCTION TO HUMAN COMMUNICATION 3, 3/0; Q

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.

SPC 205 INTRODUCTION TO ORAL COMMUNICATION 3, 3/0; P

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.

SPC 306 PUBLIC SPEAKING 3, 3/0

Prerequisite: SPC 205. Organization, delivery, and evaluation of public speech from a performance and analytical framework for professional, social, public, and small group situations.

SPC 307 GROUP COMMUNICATION 3, 3/0

Prerequisite: SPC 205. Interdisciplinary approach to examination of the theoretical and practical dimensions of communication in small-group decision-making and problem-solving situations.

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; 8

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 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.

SPC 333 MINORITIES AND THE MEDIA 3, 3/0; 8

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).

SPE 422 MEDIA CRITICISM 3, 3/0

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.

SPE 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/SST

History and Social Studies Education Department

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.

SSE 199/GEG 199/SOC 199/ ANT 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.

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

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.

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.

SSE 355 SOCIAL STUDIES SEMINAR IN CONFLICT RESOLUTION 3, 3/0

Review of strategies for resolving conflicts. Emphasis on international and interpersonal problems. Coursework is drawn from political science, law, sociology, and social psychology.

SSE 363/HIS 363 AMERICAN IDENTITY IN TRANSITION: DIVERSITY AND PLURALISM IN THE UNITED STATES 3, 3/0; 8

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.

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.

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/HIS 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.

SSE 409 STUDENT TEACHING OF SOCIAL STUDIES IN THE MIDDLE SCHOOL 6, 0/0

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. If referred, satisfactory completion of or exemption from SLP 100. All other coursework must be completed prior to student teaching. Corequisite: SSE 410. Teaching under supervision five days a week; individual and group instruction; daily and long-view planning; unit teaching; classroom management and routine procedures; audiovisual aids; community resources recordkeeping; evaluation procedures; participation in total school program.

SSE 410 STUDENT TEACHING OF SOCIAL STUDIES IN SENIOR HIGH SCHOOL 6, 0/0

Prerequisites: Minimum cumulative GPA of 2.75 (overall and in major coursework), minimum grade of C in SSE 303 and SSE 309, successful completion of English composition/basic communication and mathematics competency requirements. If referred, satisfactory completion of or exemption from SLP 100. All other coursework must be completed prior to student teaching. Corequisite: SSE 409. Teaching under supervision five days a week; individual and group instruction; daily and long-view planning; unit teaching; classroom management and routine procedures; audiovisual aids; community resources; recordkeeping; evaluation procedures; participation in total school program.

SSE 450 INTERDISCIPLINARY FIELD RESEARCH SEMINAR IN SOCIAL STUDIES METHODS 3, 3/0

Prerequisite: 6 credit hours in upper-division social science courses. The nature of interdisciplinary research; the design, fielding, and

analysis of social surveys. Particular attention is paid to school settings and attitudes and relationships of the community to policy decisions regarding the format of secondary school social studies curriculum.

SSE 488
INTERNSHIP
Variable credit

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.

SSE 495
SPECIAL PROJECT

SSE 497
WORKSHOP
2, 0/0

SSE 499
INDEPENDENT STUDY

SWA

Swahili

See Modern and Classical Languages

SWK

SOCIAL WORK

Social Work Department

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.

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.

SWK 310
SEXUALITY IN HUMAN DEVELOPMENT
3, 3/0

Examination and analysis of human sexuality as part of human development; designed for future human services professionals.

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.

SWK 319
DYNAMICS OF POVERTY
3, 3/0; 8

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.

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.

SWK 321
THE ELDERLY AND SOCIAL SERVICES
3, 3/0

Prerequisite: Upper-division status. Needs of and services for the elderly; services and programs; policy issues regarding the aging, such as health, housing, and finances; intervention strategies for working with the elderly.

SWK 335
MENTAL HEALTH AND SOCIAL WORK
0, 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 345
CHILD WELFARE SERVICES
3, 3/0

Prerequisite: Upper-division status. Child welfare as a field of practice in social work; historical and philosophical bases; the impact of culture, ethnicity, and race on practice; current delivery of services; skills needed to practice in the field.

SWK 346
CHILD ABUSE AND NEGLECT
3, 3/0

Prerequisite: Upper-division status. Major issues in child abuse and neglect from a social work viewpoint; the nature of abuse and neglect, the actual incidence, workings of the current child-protection system; intervention

and treatment issues; the role of other disciplines and the larger society.

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.

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.

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.

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.

SWK 425
SOCIAL WORK WITH FAMILIES
3, 3/0

Prerequisites: SWK 308 and SWK 422. Focus on family and family intervention; family theory and practice principles studied through examination of families in specialized problem contexts.

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

SWK 499
INDEPENDENT STUDY

TEC

INDUSTRIAL TECHNOLOGY

Technology Department

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
THE SHAPE OF THINGS
3, 3/0

Mechanics and design; concepts of strength of materials; the influence of shape, size, and material on the strength and rigidity of structures; presentation of the elements of mechanism.

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.

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

The development of technology; prevailing ideas, known physical materials and processes, and pressures of the natural and social surroundings; consideration of the technological future based on historical development.

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

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.

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 324 QUALITY IN THE SERVICE SECTOR

3, 3/0

Prerequisite: TEC 313. Fundamental concepts of service quality; problem definition, analysis, correction, and follow-up; case studies of quality methods in the fields of education, health care, government, food service, finance, and utilities.

TEC 325 DEVELOPMENT OF AMERICAN INDUSTRIES

3, 3/0

America's technological society; the relationship of people and machines in the increasingly complex world of work; industry as a basis of culture.

TEC 326 OCCUPATIONS IN AMERICAN INDUSTRY

3, 3/0

Overview and analysis of occupations in the major industries with emphasis on the role of federal, state, and local agencies and their services.

TEC 327 SURVEY OF INDUSTRIAL POLLUTION CONTROL PROBLEMS

3, 3/0

Overview and analysis of problems pertaining to pollution generation and abatement by industry during procurement, product development, production, distribution, and use.

TEC 351 ENERGY SYSTEMS

3, 2/3

Prerequisites: MAT 124 and PHY 107. Energy and power from sources through conversion systems and mechanisms to the application of power for manufacturing.

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.

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.

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.

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.

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.

TEC 488 QUALITY INTERNSHIP

3, 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.

TEC 495 SPECIAL PROJECT

TEC 497 WORKSHOP

TEC 499 INDEPENDENT STUDY

Technology

Also see:

ENT Engineering Technology
FTT Fashion and Textile Technology
SAF Safety Studies
TED Technology Education

TED

TECHNOLOGY EDUCATION

Technology Department

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

TED 497
WORKSHOP

THA

THEATER ARTS

Theater Department

THA 106
INTRODUCTION TO THEATER ARTS
3, 3/0; J

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 189
TOPICS COURSE
1, 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 207
PLAY PRODUCTION
3, 2/2

Hands-on introduction to all aspects of play production, including theater management, publicity, theatrical design, stage properties, and makeup; participation in at least one preparation or run-crew for performing arts productions.

THA 210
PERFORMANCE LABORATORY
1, 0/3

Prerequisite: Permission of instructor. Laboratory experience in the theater arts chosen through faculty consultation, dependent upon student interests and experiences. May be repeated up to three times for credit.

THA 216
THEATER FUNDAMENTALS
3, 3/0

Prerequisite: Theater major or permission of instructor. Intensive introduction to the theater and Buffalo State's theater program.

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.

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; improvisation, 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.

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
TECHNICAL THEATER
3, 1/4

Technical elements of costume, scenery, and lighting design; participation in at least one preparation or run-crew for performing arts 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.

THA 316
SCRIPT ANALYSIS
3, 3/0

Scripts as unique forms of writing for public communication and theatrical production.

THA 317
HISTORY OF THE THEATER:
ANCIENT TO RENAISSANCE
3, 3/0

The origins and development of the physical theater; dramatic literature in its theatrical context.

THA 318
HISTORY OF THE THEATER:
RENAISSANCE TO MODERN
3, 3/0

The emergence of the modern theater; dramatic literature in its theatrical context.

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.

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

Past period styles of Western culture in architecture, furniture, fashion, and the decorative arts; how they are used for theatrical presentation for stage, film, and other forms of visual communication in the entertainment industry.

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 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.

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.

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.

THA 340
PLAYWRITING
3, 3/0

Prerequisite: THA 106, THA 216, or permission of instructor. Development of critical capacities; productive work in playwriting.

THA 350
DIRECTING
3, 3/0

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, 2/2**

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. Deepen movement and vocal practice, and integrate previously learned voice, movement, and acting vocabularies. Strengthen skills and knowledge associated with articulate, precise, and expansive vocal and physical presence. Deepen 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.

**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 418
CREATIVE DRAMATICS
3, 3/0**

History, philosophy, methods, and materials of informal playmaking with children; observation and participation.

**THA/AAS 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.

**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.

TVA

TELEVISION ARTS

**TVA 201 INTRODUCTION TO
TELEVISION 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.

**TVA 301 STORYTELLING
PROCESS I
3, 3/0**

Prerequisite: Permission of instructor. 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.

**TVA 304 WRITING FOR
TELEVISION ARTS
3, 3/0**

Prerequisite: Permission of instructor. Students practice writing techniques for television, film, and other visual media by crafting a series of commercials, documentaries, scenes and narrative scripts.

**TVA 401 STORYTELLING
PROCESS II
3, 3/0**

Prerequisites: TVA 301, TVA 304, COM 329, and permission of instructor. 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.

**TVA 420 SENIOR PROJECT I
3, 3/0**

Prerequisites: TVA 401 and permission of instructor. 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.

**TVA 450 SENIOR PROJECT II
3, 3/0**

Prerequisites: TVA 420 and permission of instructor. 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.

**TVA 460 ADAPTION
3, 3/0**

Prerequisite: Permission of instructor. 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.

**TVA 480 ADVANCED
DIRECTING/PRODUCING I
3, 3/0**

Prerequisite: Permission of instructor. 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."

**TVA 481 ADVANCED
DIRECTING/PRODUCING II
3, 3/0**

Prerequisites: TVA 480 and permission of instructor. 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 acts as the "Acting Company" and "Production Company."

**THA 470
ENSEMBLE THEATER
3-9, 0/6-18**

Prerequisite: Audition. Examination of ensemble theatrical production through preparation and performance of plays.

**THA 488
INTERNSHIP
Variable credit**

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**

**THA 499
INDEPENDENT STUDY**

UNC

UNIVERSITY COLLEGE

**BSC 101
FOUNDATIONS OF INQUIRY
3, 3/0**

Introduction to the Intellectual Foundations program. Focus 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.

CWP 099

**CWP 101
COLLEGE WRITING I
3, 3/0**

Initiation into all phases of the writing process and the features of good writing. 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.

**CWP 102
COLLEGE WRITING II
3, 3/0**

Prerequisite: CWP 101 or equivalent. (See College Writing Program Office, South Wing 130 for placement procedures.) Further development of students' writing (beyond CWP 101). Writing assignments emphasize argument and persuasion, advanced rhetorical strategies, analysis/synthesis, and research methods.

**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, 0/1**

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.

**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.

**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.

**UNC 120
READING AND STUDY
STRATEGIES
13, 0/0**

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.

ADMINISTRATION

BUFFALO STATE COLLEGE

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James Brandys, '71, '73
Anne Laura Koessler Brosnahan
Robert D. Bulman, '84
Arlene F. Kaukus, '75
Alphonso O'Neil-White
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Howard A. Zemsky
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Interim Vice President for Institutional Advancement
and Development and Executive Director of the Buffalo
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Vice President for Student Affairs

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SUNY Distinguished Teaching Professors

George T. Hole, Ph.D., *University of Rochester*, Chair, Philosophy and Religious Studies Department; Humanities Program Coordinator (1965)
Dan A. Kushel, M.A., *Columbia University*, Art Conservation Department (1983)

SUNY Distinguished Service Professors

Betty J. Cappella, Ph.D., *University at Buffalo*, Chair, Educational Foundations Department (1985)
Sharon F. Cramer, Ph.D., *New York University*, Exceptional Education Department (1985)
Janet E. Ramsey, Ph.D., *University at Buffalo*, Dean, University College (1985)
Edward O. Smith Jr., Ph.D., *Lehigh University*, History and Social Studies Education Department (1963)

Anthropology Department

Deborah E. Reed-Danahay, Ph.D., *Brandeis University*, Chair and Professor (2006)
Lisa Anselmi, Ph.D., *University of Toronto*, Assistant Professor (2004)
Simeon W. Chilungu, Ph.D., *University at Buffalo*, Associate Professor (1970)
Lydia M. Fish, Ph.D., *Indiana University*, Professor (1967)
Dennis L. Gaffin, Ph.D., *University at Buffalo*, Associate Professor (1989)
Glenice J. Guthrie, Ph.D., *University at Buffalo*, Lecturer (1998)

Art Conservation Department

Elizabeth S. Peña, Ph.D., *Boston University*, Director and Professor (2003)
James F. Hamm, M.A., *SUNY College at Oneonta*, Professor (1986)
Dale P. Kornkright, B.A., *University of California, Davis*, Lecturer (2006)
Dan A. Kushel, M.A., *Columbia University*, SUNY Distinguished Teaching Professor (1983)
Aaron N. Shugar, Ph.D., *University College London*, Assistant Professor (2006)
Gregory Dale Smith, Ph.D., *Duke University*, Andrew W. Mellon Assistant Professor in Conservation Science (2005)
Jonathan L. Thornton, M.A., *SUNY Oneonta*, Professor (1983)
Judith C. Walsh, M.A., *SUNY Oneonta*, Associate Professor (2005)

Art Education Department

Michael E. Parks, Ed.D., *Ball State University*, Acting Chair and Professor (1981)
Lucy Andrus, M.S.Ed., *Buffalo State College*, Professor (1982)
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)
Shirley Hayes, Ph.D., *Pennsylvania State University*, Associate Professor (2005)
Diane M. Koepfel, M.S.Ed., *Bank Street College of Education*, Assistant Professor (2001)
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 (1992)
Phyllis I. Thompson, Ph.D., *University of Wisconsin-Milwaukee*, Assistant Professor (2003)
Mary L. Wyrick, Ph.D., *Pennsylvania State University*, Professor (1992)

Biology Department

Randal J. Snyder, Ph.D., *University of California, Davis*, Chair and Associate Professor (1990)
Douglas P. Easton, Ph.D., *University of Iowa*, Professor (1977)
Amy M. McMillan, Ph.D., *University of Kansas*, Assistant Professor (2003)
Christopher M. Pennuto, Ph.D., *University of Kansas*, Associate 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)
Howard P. Riessen, Ph.D., *Yale University*, Associate Professor (1988)
Martha I. Skerrett, Ph.D., *Flinders University*, Assistant Professor (2005)
Edward A. Standora, Ph.D., *University of Georgia*, Associate Professor (1985)
Gregory J. Wadsworth, Ph.D., *North Carolina State University*, Associate Professor (1992)
Thomas D. White, Ph.D., *University of California*, Los Angeles, Associate Professor (1991)

Business Department

Kevin F. Mulcahy, Ed.D., *University of California*, Los Angeles, Interim Chair and Associate Professor (1992)
Solochidi O. Ahirah, Ph.D., *University of Pittsburgh*, Associate Professor (1990)
John L. DeNisco, M.B.A., *Canisius College*, Associate Professor (1982)
Leonard R. Graziplene, Ph.D., *University at Buffalo*, Professor (1968)
Andrew J. Joniak, Ph.D., *University of New Mexico*, Associate Professor (1974)
Joseph M. Kelly, J.D., *Northwestern Illinois University*, Professor (1990)
Michael J. Littman, Ph.D., *Ohio State University*, Associate Professor (1986)
Edward J. Marecki, M.S., *Canisius College*, Lecturer (2005)
Diane S. McFarland, Ph.D., *University at Buffalo*, Assistant Professor (2002)
James B. Okun, M.B.A., *Medaille College*, Lecturer (2005)
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

Warren L. Gleckel, Ph.D., *Syracuse University*, Interim Director and Associate Professor (1975)
Paul G. Theobald, Ph.D., *University of Illinois at Chicago*, Woods-Beals Endowed Chair and Professor (2004)
Kathy Lynn Wood, Ph.D., *University at Buffalo*, Assistant Professor (2004)

Center for Health and Social Research

William F. Wiczorek, Ph.D., *University at Buffalo*, Director and Professor (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)
Kenneth F. Jonmaire, M.S., *Canisius College*, Lecturer (1996)
Joonyeong Kim, Ph.D., *Texas A & M University*, Assistant Professor (2005)
Stanley Kardonsky, Ph.D., *City University of New York*, Professor and Vice President for Finance and Management (1993)
Alexander Y. Nazarenko, Ph.D., *Kiev State University*, Associate Professor (2000)
Maria D. Pacheco, Ph.D., *University of Puerto Rico*, Associate Professor (1985)
Surjit Singh, Ph.D., *Saint Louis University*, Professor (1967)

Coaching and Physical Education

Stephen E. Schwartz, Ph.D., *Ohio State University*, Professor (1974)

Communication Department

Ronald D. Smith, M.S., *Syracuse University*, Chair and Professor (1990)
Bruce G. Bryski, Ph.D., *Pennsylvania State University*, Associate Professor (1983)
Marian T. Deutschman, Ph.D., *University at Buffalo*, Professor and Interim Director, College and Community Partnerships Office (1978)
Paul J. DeWald, M.A., *University at Buffalo*, Associate Professor (1967)
Jeffrey N. Hirschberg, M.A., *Syracuse University*, Assistant Professor (2006)
Janet A. Kaye, J.D., *American University*, Assistant Professor (1996)
Marguerite Emerson Knowles, M.A., *St. Bonaventure University*, Assistant Professor (1997)
Joseph J. Marren Jr., M.A., *St. Bonaventure University*, Assistant Professor (1997)
Thomas R. McCray, M.A., *University at Buffalo*, Associate Professor (1980)
Michael I. Niman, Ph.D., *University at Buffalo*, Assistant Professor (2002)
Ronald L. Rabin, Ph.D., *Northwestern University*, Associate Professor (1976)
William E. Raffel, J.D., Ph.D., *University at Buffalo*, Assistant Professor (1997)
Janet E. Ramsey, Ph.D., *University at Buffalo*, SUNY Distinguished Service Professor and Dean, University College (1985)
Louis V. Rera, M.A., *University at Buffalo*, Assistant Professor (1999)
Deborah A. Silverman, Ph.D., *University at Buffalo*, Assistant Professor (2005)
Kerran L. Sanger, Ph.D., *Pennsylvania State University*, Associate Professor and Interim Associate Dean, School of Arts and Humanities, SUNY Chancellor's Award for Excellence in Teaching (1988)

Computer Information Systems Department

Lawrence W. Scott, Ph.D., *University at Buffalo*, Chair and Associate Professor (1977)
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*, Assistant Professor (2005)
William Lin, Ph.D., *University at Buffalo*, Associate Professor (1984)
Neal M. Mazur, Ph.D., *Arizona State University*, Assistant Professor (2002)
Carl H. Naeher, M.S., *University at Buffalo*, Associate Professor (1979)
Ramona R. Santa Maria, M.S.Ed., *Buffalo State College*, Lecturer (1999)
John T. Thompson, Ph.D., *University at Buffalo*, Assistant Professor (2001)

Criminal Justice Department

Elizabeth Szockyj, Ph.D., *University of California, Irvine*, Chair and Associate Professor (2004)
Michael A. Cretacci, Ph.D., *University at Albany*, Assistant Professor (2006)
Shashi M. Gayadeen, M.A., *CUNY-Bronx Community 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 Assistant Dean, First Year and Academic Support Programs, University College (1994)
Glenda Kelmes, Ph.D., *University of California, Irvine*, Lecturer (2006)
Scott W. Phillips, Ph.D., *University at Albany*, Assistant Professor (2001)
Geoffrey R. Skoll, Ph.D., *University of Wisconsin-Milwaukee*, Assistant Professor (2005)
John H. L. Song, Ph.D., *University of California, Irvine*, Professor (1988)

Design Department

James P. Astrella, M.F.A., *Syracuse University*, Interim Chair and Associate Professor (1983)
Jozef Bajus, M.F.A., *Academy of Fine Arts and Design, Bratislava (Slovakia)*, Associate Professor (2002)
Marianne E. Egler-Gerozissis, Ph.D., *The City University of New York*, Lecturer (2007)
Stanley Kent Friesen, M.F.A., *Fort Hays State University*, Associate Professor (2000)
Richard J. Ross, M.F.A., *University of Connecticut*, Associate Professor (1995)
Stephen F. Saracino, M.F.A., *Kent State University*, Professor (1981)
Tara J. Stephenson, M.F.A., *Kent State University*, Assistant Professor (2002)
Carol A. Townsend, M.F.A., *Ohio University*, Associate Professor (2000)
Robert L. Wood, M.F.A., *Indiana State University*, Professor (1987)

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)
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 (2000)
Richard J. Batt, Ph.D., *University of Colorado*, Associate Professor (1989)
Elisa T. Bergslien, Ph.D., *University at Buffalo*, Assistant Professor (2002)
Donald L. Birdd, Ed.D., *University of Northern Colorado*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1983)
Dara J. Dorsey, M.Ed., *University at Buffalo*, Lecturer (2000)
Robin Lee Harris, Ph.D., *University of Iowa*, Associate Professor (1997)
John E. Mack Jr., Ph.D., *The Catholic University of America*, Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (1973)
Jill K. Singer, Ph.D., *Rice University*, Professor and Director of Undergraduate Research (1986)
Kevin K. Williams, Ph.D., *Arizona State University*, Assistant Professor (2006)
Joseph L. Zawicki, Ph.D., *University at Buffalo*, Assistant Professor (2002)

Economics and Finance Department

Ted P. Schmidt, Ph.D., *University of California, Riverside*, Chair and Associate Professor (1990)
Theodore F. Byrle, Ph.D., *University of Cincinnati*, Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (1984)
Susan M. Davis, Ph.D., *New School for Social Research*, Associate Professor (1985)
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 Amherst*, Associate Professor (1993)
Victor Kasper Jr., Ph.D., *Rutgers University*, Assistant Professor (2001)
Yung-Mo Kim, J.D./Ph.D., *University at Buffalo*, Professor (1968)
Douglas G. Kortiz, Ph.D., *University of Pittsburgh*, Associate Professor and Assistant Dean, Intellectual Foundations (1986)
Joelle J. Leclaire, M.A., *University of Ottawa*, Assistant Professor (2004)
M. Stephen Pendleton, D.A., *Idaho State University*, Associate Professor (1979)
John L. Wilcox, M.B.A., *University at Buffalo*, Lecturer (2005)

Educational Foundations Department

Frederick C. Howe, Ph.D., *Michigan State University*, Chair and Professor, SUNY Chancellor's Award for Excellence in Teaching (1973)
Susan K. Birden, Ph.D., *University of Oklahoma*, Associate Professor (2001)
Betty J. Cappella, Ph.D., *University at Buffalo*, SUNY Distinguished Service Professor (1985)
David T. Converse, Ph.D., *University of Nebraska-Lincoln*, Associate Professor (1964)
James A. Gold, Ed.D., *Pennsylvania State University*, Lecturer (1977)
Albert Grande, Ph.D., *University of Pittsburgh*, J.D., *University at Buffalo*, Professor (1970)
Susan E. Hall, M.A., *Buffalo State College*, Lecturer (2000)
Geraldine M. Hura, Ph.D., *University of Akron*, Assistant Professor (2005)
P. Rudolph Mattai, Ph.D., *University of Pittsburgh*, Professor (1990)
Patricia Medina, Ed.D., *Rutgers State University*, Assistant Professor (2005)
Nanci M. Monaco, Ph.D., *University at Buffalo*, Associate Professor (2000)
James L. Palermo, Ph.D., *University at Buffalo*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1968)
N. John Popovich, Ed.D., *Wayne State University*, Associate Professor (1974)
Ronald S. Rochon, Ph.D., *University of Illinois at Urbana-Champaign*, Professor and Dean, School of Education; Associate Vice President for Teacher Education (2005)
Keith Schmidli, Ph.D., *University at Buffalo*, Assistant Professor (2000)

E. H. Butler Library

Maryruth E. Glogowski, M.L.S., *University at Buffalo*, Librarian and Assistant Vice President for Library and Instructional Technology (1975)

Donna J. Davidoff, M.L.S., *University at Buffalo*, Associate Librarian (1987)

Daniel M. Dilandro, M.L.S., *Buffalo State College*, Senior Assistant Librarian (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 Fujuchi, M.L.S., *Emporia State University*, Associate Librarian (2005)

Constance C. Hsu, M.S., *Kansas State Teachers College*, Associate Librarian (1966)

Maureen A. Lindstrom, M.L.S., *University at Buffalo*, Associate Librarian and Associate Director, Information Commons (1997)

Gail M. Marinaccio, M.L.S., *University at Buffalo*, Librarian and Associate Director Technical Services (1972)

Marianne D. Muha, M.L.S., *University at Buffalo*, Senior Assistant 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 DiBartolo Rockwell, M.L.S., *University at Buffalo*, Associate Librarian (1987)

Wanda M. Slawinska, M.L.S., *Syracuse University*, Associate Librarian (1973)

Hilary I. Sternberg, M.L.S., *University at Buffalo*, Associate Librarian and Head of Reference (1990)

Barbara J. Vaughan, M.L.S., *University at Buffalo*, Associate Librarian (1982)

Elementary Education and Reading Department

Wendy A. Paterson, Ph.D., *University at Buffalo*, Chair and Associate Professor, SUNY Chancellor's Award for Excellence in Professional Service (1988)

Mary C. Bailey, M.A., *University of Redlands*, Lecturer (2006)

Marion F. Barnett, Ed.D., *University at Buffalo*, Associate Professor (2000)

Maria A. Ceprano, Ph.D., *University at Buffalo*, Professor (1997)

Nancy A. Chicola, Ph.D., *University of Colorado*, Associate Professor (2000)

Leslie K. Day, M.S., *Buffalo State College*, Lecturer (1990)

Carla M. DiChristina, M.S., *Buffalo State College*, Lecturer (1999)

Karen M. Drew, M.Ed., *Buffalo State College*, Lecturer (2003)

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*, Assistant Professor (2001)

Keli Garas-York, Ph.D., *University at Buffalo*, Assistant Professor (2006)

Mary T. Graff, Ph.D., *University at Buffalo*, Assistant Professor (2002)

David R. Henry, Ph.D., *University at Buffalo*, Associate Professor (1999)

Muriel A. Howard, Ph.D., *University at Buffalo*, Professor and President of Buffalo State College (1996)

Rosemary Leibowitz, M.S., *SUNY Brockport*, Lecturer (1999)

Peter W. Loehr, Ph.D., *Kent State University*, Associate Professor (1996)

Rosemary P. Lonberger, Ph.D., *University at Buffalo*, Associate Professor (1991)

Dianne S. McCarthy, Ed.D., *University at Buffalo*, Assistant Professor (2005)

Wendy McLeish, M.S.Ed., *Wheelock College*, Lecturer (2002)

Dennis G. Mike, Ph.D., *University at Albany*, Associate Professor (1999)

Stephen F. Phelps, Ph.D., *Syracuse University*, Professor (1978)

Lori V. Quigley, Ph.D., *Foridham University*, Associate Professor and Associate Dean, School of Education (2000)

Thomas J. Sadowski, M.S.Ed., *Buffalo State College*, Lecturer (1998)

Suzanne M. Salzler, Ph.D., *Andrews University*, Lecturer (2000)

Hebajene Shandomo, Ph.D., *Andrews University*, Assistant Professor (2000)

Barbara J. Smith, C.A.S., *University at Albany*, Lecturer (2001)

Coralee S. Smith, Ph.D., *University of Missouri*, Associate Professor (1999)

Carol A. Stevens, Ph.D., *Cleveland State University*, Associate Professor (1992)

Linda B. Tolbert, Ph.D., *Louisiana State University*, Assistant Professor (2004)

Christine L. Tredo, M.S., *Buffalo State College*, Lecturer (2002)

Kim S. Truesdell, Ed.D., *University at Buffalo*, Assistant Professor (2002)

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)

Geraldine E. Bard, Ph.D., *University at Buffalo*, Professor (1973)

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)

Ann C. Colley, Ph.D., *University of Chicago*, 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)

Melvin J. Hoffman, Ph.D., *University at Buffalo*, Professor (1968)

E. Carole Knuth, Ph.D., *University at Buffalo*, Professor (1973)

Susan Leist, Ed.D., *University of Virginia*, Professor and Director, College Writing Program (1991)

Terrence R. McDonald, M.F.A., *Southern Methodist University*, Co-Director, CADET, and Associate Professor (1972)

Karen Sands O'Connor, Ph.D., *University of Wales-Cardiff*, Associate Professor (1997)

Kevin Railey, Ph.D., *Stony Brook University*, Professor and Dean, Graduate School; Associate Provost; SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities (1991)

Peter J. Ramos, Ph.D., *University at Buffalo*, Assistant Professor (2005)

Thomas J. Reigstad, Ph.D., *University at Buffalo*, Professor (1981)

Jennifer D. Ryan, Ph.D., *University of Iowa*, Assistant Professor (2005)

Susan G. Schroeder, Ph.D., *University at Buffalo*, Assistant Professor (2006)

Aimable Twagilimana, Ph.D., *University at Buffalo*, Professor (1995)

Craig G. Werner, Ph.D., *Harvard University*, Associate Professor (1984)

Exceptional Education Department

Sarita C. Samora, Ph.D., *University at Buffalo*, Chair and Professor (1981)

R. Bruce Baum, Ed.D., *Indiana University*, Professor (1972)

Judith A. Bondurant-Utz, Ed.D., *University of Cincinnati*, Professor (1977)

Sharon F. Cramer, Ph.D., *New York University*, SUNY Distinguished Service Professor (1985)

Barbara J. Dray, Ph.D., *University of Texas at Austin*, Assistant Professor (2005)

Shannon E. Gormley, Ph.D., *Pennsylvania State University*, Assistant Professor (2005)

Linda K. Gleckel, M.S.Ed., *Buffalo State College*, Assistant Professor and Interim Associate Dean, School of Education (1971)

Warren L. Gleckel, Ph.D., *Syracuse University*, Associate Professor and Interim Director, Center for Excellence in Urban and Rural Education (1975)

Satasha L. Green, Ph.D., *University of Texas at Austin*, Assistant Professor (2006)

Theresa M. Janczak, M.S., *Buffalo State College*, Assistant Professor (2005)

Harold D. Mattie, Ph.D., *University of Nevada*, Assistant Professor (2001)

Michaelene M. Meger, Ph.D., *University at Buffalo*, Associate Professor (1993)

Kevin J. Miller, Ed.D., *West Virginia University*, Assistant Professor (2006)

Susan M. Paige, Ph.D., *University at Buffalo*, Lecturer (1999)

Kathleen K. Palumbo, M.S.Ed., *Buffalo State College*, Lecturer (1994)

David J. Pomerantz, Ph.D., *University of Illinois at Urbana-Champaign*, Associate Professor (1977)

Mark P. Poslusny, Ed.D., *University of Kentucky*, Associate Professor (1985)

Sharon L. Raimondi, Ph.D., *American University*, Associate Professor (1990)

Katherine C. Sacca, Ed.D., *University at Buffalo*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1992)

Raqel J. Schmidt, Ph.D., *University at Buffalo*, Assistant Professor (1999)

Charmayne C. Zieziula, M.S.Ed., *Buffalo State College*, Lecturer (1998)

Fine Arts Department

Lin Xia Jiang, M.F.A., *University of Utah*, Chair and Professor (1995)

Sylvia D. Bakos, Ph.D., *Rutgers University*, Associate Professor (1990)

Harriet Blitzer, Ph.D., *Indiana University*, Associate Professor (1997)

Dennis L. Dehart, M.F.A., *University of New Mexico*, Assistant Professor (2005)

Anthony P. Gorny, M.F.A., *Yale University*, Assistant Professor (2001)

Leslie R. Krims, M.F.A., *Pratt Institute*, Professor (1969)

Rekha T. Menon, Ph.D., *Binghamton University*, Associate Professor (2001)

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

Kimberley N. Irvine, Ph.D., *McMaster University*, Chair and Professor (1988)
Kelly M. Frothingham, Ph.D., *University of Illinois at Urbana-Champaign*, Associate Professor (2000)
Wende A. Mix, Ph.D., *University at Buffalo*, Associate Professor (2004)
Tao Tang, Ph.D., *University of Wisconsin-Milwaukee*, Associate Professor (1998)
Vida Vanchan, Ph.D., *University at Buffalo*, Lecturer (2006)
Stephen J. Vermette, Ph.D., *McMaster University*, Associate Professor (1993)
Veryan G. Vermette, M.S., *McMaster University*, Lecturer (1993)
William F. Wiczorek, 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

Richard A. Stempniak, Ph.D., *University at Buffalo*, Interim Chair and Associate Professor (1974)
Catherine G. Ansuini, Ed.D., *University at Buffalo*, Professor (1988)
Susan M. Baldwin, Ph.D., *Kent State University*, Assistant Professor (2002)
Scott W. Roberts, Ed.D., *Brigham Young University*, Professor (1986)

History and Social Studies Education Department

David A. Carson, Ph.D., *Texas Christian University*, Chair and Professor, SUNY Chancellor's Award of Excellence in Teaching (1983)
Felix L. Armfield, Ph.D., *Michigan State University*, Associate Professor (2000)
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*, Assistant Professor (2004)
Donald R. Hetzner, Ed.D., *University at Buffalo*, Professor (1970)
Michael C. Lazich, Ph.D., *University at Buffalo*, Associate Professor (1997)
Kathryn H. Leacock, M.L.S., *University at Buffalo*, Lecturer (2006)
Gary Marotta, Ph.D., *New York University*, Professor (2000)
Kenneth S. Mernitz, Ph.D., *University of Missouri*, Associate Professor (1985)
William I. Mitchell, Ph.D., *University of Missouri*, Associate Professor (1991)
Andrew D. Nicholls, Ph.D., *University of Guelph*, Associate Professor (1996)
Gerald A. Oczek, M.A.T., *Niagara University*, Lecturer (2002)
Jean E. Richardson, Ph.D., *University at Buffalo*, Associate Professor (1995)
Edward O. Smith Jr., Ph.D., *Lehigh University*, SUNY Distinguished Service Professor and Director, Monroe Fordham Regional History Center (1963)

Hospitality and Tourism Department

Kevin F. Mulcahy, Ed.D., *University of California*, Los Angeles, Chair and Associate Professor (1992)
Stephen C. Burgeson, Ed.M., *University at Buffalo*, Lecturer (1996)
Rebecca Dowsey, M.S.Ed., *Niagara University*, Lecturer (2002)
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.E.A., *University of Georgia*, Chair and Associate Professor (1993)
Rebecca Geraghty, M.B.A., *Medaille College*, Assistant Professor (2000)
Jorg Schnier, B.A. Dipl.-Ing. (Architecture), *Technology University of Dresden*, Assistant Professor (2002)
Barry Yavener, M.E.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, M.S., *Buffalo State College*, Lecturer (2000)
John F. Cabra, Ph.D., *University of Manchester*, Lecturer (2005)
Jon Michael Fox, M.S., *Buffalo State College*, Lecturer (1997)
Susan M. Keller-Mathers, M.S., *Buffalo State College*, Assistant Professor (1997)
Mary C. Murdock, Ed.D., *University of Georgia*, Associate Professor (1987)

Mathematics Department

Robin Sue Sanders, Ph.D., *University of Illinois at Urbana-Champaign*, Chair and Associate Professor (1997)
Saziye Bayram, Ph.D., *University at Buffalo*, Assistant Professor (2006)
Valentin E. Brimkov, Ph.D., *University of Sofia, Bulgaria*, Associate Professor (2005)
Joaquin O. Carbonara, Ph.D., *University of California, San Diego*, Associate Professor (1992)
Christina L. Carter, M.S., *California State University*, Lecturer (2004)
Daniel W. Cunningham, Ph.D., *University of California, Los Angeles*, Associate Professor (1991)
Jane R. Cushman, Ph.D., *University of Texas at Austin*, Assistant Professor (2006)
Chairali Ghosh, Ph.D., *University at Buffalo*, Assistant Professor (2000)
Tom M. Giambone, Ed.D., *University at Buffalo*, Professor (1990)
James Guyker, Ph.D., *Lehigh University*, Professor (1970)
Jodelle S. W. Magner, Ph.D., *University of Maryland*, Assistant Professor (2000)
Susan E. McMillen, Ph.D., *University at Buffalo*, Associate Professor (2000)
Peter R. Mercer, Ph.D., *University of Toronto*, Associate Professor (1997)
Margaret Sherman, Ph.D., *North Dakota State University*, Assistant Professor (2002)
John J. Slivka, Ph.D., *University at Buffalo*, Professor (1969)
David C. Wilson, Ph.D., *University at Buffalo*, Assistant Professor (2002)
Tingyao Zheng, Ph.D., *University of Georgia*, Associate Professor (2000)

Modern and Classical Languages Department

Michael Johnson, Ph.D., *University at Buffalo*, Chair and Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (1976)
Lee Ann Grace, Ph.D., *University at Buffalo*, Associate Professor and Assistant Dean, International and Exchange Programs (1973)
Andrea Guiati, Ph.D., *Rutgers University*, Professor and Honors Program Director, SUNY Chancellor's Award for Excellence in Teaching (1985)
Deborah L. Hovland, Ph.D., *University of Minnesota*, Associate Professor (1992)
Carol B. Kirby, Ph.D., *University of Kentucky*, Professor (1985)
Mark G. Littlefield, Ph.D., *University of California, Berkeley*, Professor (1981)
Rafika Merini, Ph.D., *Binghamton University*, 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)
Lucy M. Schwartz, Ph.D., *Harvard University*, Professor (1995)
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*, Lecturer (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)
Dean W. Ekberg, M.M., *University of Rochester*, Lecturer (2006)
Ricky L. Fleming, Ph.D., *Florida State University*, Assistant Professor (2001)
Lisa R. Hunter, Ph.D., *University of Arizona*, Assistant Professor (2006)
Charles Mancuso, M.A., *University at Buffalo*, Professor (1976)
Sarah E. Meredith, Ph.D., *Florida State University*, Assistant Professor (2003)
Crystal Hearne 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

George T. Hole, Ph.D., *University of Rochester*, Chair and SUNY Distinguished Teaching Professor (1965)
Kimberly A. Blessing, Ph.D., *University at Buffalo*, Assistant Professor (2004)
John D. Draeger, Ph.D., *Syracuse University*, Assistant Professor (2005)
Jeffrey F. Dueck, Ph.D., *University at Buffalo*, Lecturer (2003)
Marianne C. Ferguson, Ph.D., *McMaster University*, Professor (1971)
Gerald M. Nosich, Ph.D., *University of Illinois*, Visiting 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)
Stephen R. Highland, M.S., *University of Arkansas*, Lecturer (2006)
Daniel L. Maclsaac, Ph.D., *Purdue University*, Associate Professor (2002)

Political Science Department

Laurie A. Buonanno, Ph.D., *Johns Hopkins University*, Chair and Professor (2006)
Ram Desai, Ph.D., *Michigan State University*, Professor (1963)
Lawrence G. Flood, Ph.D., *University of North Carolina at Chapel Hill*, Professor and Dean, School of Natural and Social Sciences (1977)
Simon Peter Gomez, Ph.D., *Binghamton University*, Lecturer (1999)
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)

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*, Assistant Professor (1999)
Gary W. Heiman, Ph.D., *Bowling Green State University*, Professor (1976)
Dwight A. Hennessy, Ph.D., *York University*, Associate Professor (2000)
Michael G. MacLean, Ph.D., *Arizona State University*, Associate Professor (1997)
Jill M. Norvilitis, Ph.D., *Wayne State University*, Associate Professor (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 and SUNY Chancellor's Award for Excellence in Faculty Service (1977)
Pamela Schuetze-Pizarro, Ph.D., *Virginia Polytechnic Institute and State University*, Associate Professor (1996)
Tamara L. Towles-Schwen, Ph.D., *Indiana University*, Assistant Professor (2002)
Carol A. Wannemacher, Ph.D., *University at Buffalo*, Lecturer (1996)
Michael J. Zborowski, Ph.D., *Ohio University*, Associate Professor (1991)

Social Work Department

J. Patrick Dexter, M.S.W., *University at Buffalo*, Chair and Associate Professor (1977)
Christopher B. Aviles, Ph.D., *University at Albany*, Associate Professor (1985)
Louis A. Colca, M.S.W., *University at Buffalo*, Associate Professor (1977)
Eddie Davis, D.S.W., *University of Utah*, Associate Professor (1994)
Carolyn M. Hilariski, Ph.D., *University at Buffalo*, Associate Professor (2006)
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)
David P. Wegenast, D.S.W., *City University of New York*, Professor (1973)
Kimberly M. Zittel-Palamara, Ph.D., *Buffalo State College*, Assistant Professor (2005)

Sociology Department

Virginia E. Grabiner, Ph.D., *University of California, Berkeley*, Chair and Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (1975)
Cheryl M. Albers, Ph.D., *University at Buffalo*, Associate Professor and Coordinator, CASTL (1997)
Kevin W. Clarke, M.A., *University at Buffalo*, Lecturer (2000)
Gerhard J. Falk, Ed.D., *University at Buffalo*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1957)
Amitra A. Hodge, Ph.D., *Texas Women's University*, Associate Professor (2000)
Rosalyn A. Lindner, Ph.D., *University of Minnesota*, Professor and Associate Vice President, Curriculum and Assessment (1974)
Timothy A. McCorry, M.A., *St. John's University*, Assistant Professor (1998)
Allen C. Shelton, Ph.D., *University of Georgia*, Associate Professor (1998)
Ron Stewart, Ph.D., *Howard University*, Professor (1990)
Thomas S. Weinberg, Ph.D., *University of Connecticut*, Professor, SUNY Chancellor's Award for Excellence in Teaching (1969)

Gary S. Welborn, Ph.D., *University at Buffalo*, Associate Professor (1993)
Zhang Jie, 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., *The University of Memphis*, Chair and Professor (2005)
Sally A. Arnold, Ph.D., *Northwestern University*, Associate Professor (1995)
Dolores E. Battle, Ph.D., *University at Buffalo*, Professor and Senior Adviser to the President for Equity and Campus Diversity (1970)
Deborah G. Fletcher, Ph.D., *University of Memphis*, Assistant Professor (2006)
Deborah M. Insalaco, Ph.D., *University of Arizona*, Assistant Professor (2000)
Gary W. Jones, Ph.D., *University at Buffalo*, Associate Professor and Dean, School of the Professions (1992)
Christine M. Scott, Ph.D., *Wichita State University*, Lecturer (2006)
Barbara Weitzner-Lin, Ph.D., *University at Buffalo*, Associate Professor (1985)

Student Personnel Administration

Richard J. Herdlein, Ph.D., *University of Pittsburgh*, Chair and Associate Professor (2001)
Wanda M. Davis, D.Ed., *Pennsylvania State University*, Associate Professor (1995)
Timothy L. Gallineau, D.Ed., *University of Akron*, Associate Professor and Coordinator, Student Personnel Administration Program (1992)

Technology Department

Peter S. Pawlik, Ph.D., *University at Buffalo*, Chair and Professor (1972)
Liza K. Abraham, Ph.D., *Iowa State University*, Assistant Professor (1997)
Stephen N. Andre, Ph.D., *Syracuse University*, Associate Professor (1979)
Proves R. Banks Jr., B.S., *Wayne State University*, Lecturer (1988)
D. Steven Barker, Ph.D., *University of Wyoming*, Associate Professor (1995)
David A. Brinson, M.S., *Cornell University*, Lecturer (1995)
Richard A. Butz, M.F.A., *Alfred State College*, Associate Professor (1985)
Mohan S. Devgun, Ph.D., *Birmingham University*, Professor (1990)
John J. Earshen, Ph.D., *University at Buffalo*, Associate Professor (1980)
Emine Ercan, Ph.D., *Epe University*, Assistant Professor (2006)
Slade Gellin, Ph.D., *Harvard University*, Associate 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*, Assistant Professor (1999)
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)
James N. Siewert, B.F.A., *Daemen College*, Lecturer (2005)
Richard A. Stempniak, Ph.D., *University at Buffalo*, Associate Professor (1974)

Theater Department

Donna E. McCarthy, M.A., *University of Washington*, Chair and Professor (1976)
Carol Y. Beckley, M.F.A., *Southern Methodist University*, Associate Professor (1994)
Joy A. Guarino, M.F.A., *Temple University*, Lecturer (2004)
Andrew J. Kahn, M.F.A., *Southern Methodist University*, Associate Professor (2002)
Dennis M. McCarthy, M.F.A., *Carnegie Mellon University*, Associate Professor and Interim Dean, School of Arts and Humanities, SUNY Chancellor's Award for Excellence in Professional Service (1977)
Janet Reed, M.A., *University at Buffalo*, Associate Professor (1993)
Gerald A. Trentham, M.F.A., *York University*, Assistant Professor (1998)
Donn M. Youngstrom, M.F.A., *Brooklyn College*, Associate Professor (1994)

Writing Program (University College)

Susan Leist, Ed.D., *University of Virginia*, Professor and Director (1991)
John M. McKinnis, M.A., *University at Buffalo*, Lecturer (1987)
Michele Ninacs, M.A., *Buffalo State College*, Lecturer (2001)
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, Buffalo State College Foundation, and Research Foundation and was current as of April 2007. Date indicates year hired at Buffalo State.

SUNY Chancellor's Awards for Excellence in Professional Service Recipients

- Scot R. Eckert, A.A.S., *Niagara County Community College*, Associate Director, Campus Services and Facilities Office (1997)
- Linda K. Gleckel, M.S.Ed., *Buffalo State College*, Assistant Professor and Interim Associate Dean, School of Education (2004)
- Karen L. Johnson, M.L.S., *University at Buffalo*, Program Director, Success Track for Academic Readiness (2001)
- Gail F. Maloney, Ph.D., *University at Buffalo*, Senior Associate Director, Intercollegiate Athletics (1978)
- Roswell Park IV, Ph.D., *University at Buffalo*, Director, Academic Support Programs (1981)
- Rebecca J. Schenk, M.B.A., *University at Buffalo*, Director, Budget Office (2003)
- Steven E. Shaffer, M.A., *University at Buffalo*, Manager, Design and Construction, Facilities Planning (1996)
- Mary E. Suffoletta, B.S., *D'Youville College*, Associate Vice President, Institutional Advancement and Development Office (2004)
- Stephanie B. Zuckerman-Aviles, M.Ed., *University at Buffalo*, Director, Career Development Center (2002)

(Indicates year award received)

-
- 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 Seminars, Academic Advisement Center (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*, Senior Psychologist, Counseling Center (1997)
- David P. Alessi, Payroll Manager, Payroll Office (1998)
- Michael J. Anderson, B.S., *Buffalo State College*, Director, Technology and Processing, Institutional Advancement and Development Office (1988)
- Nicholas J. Anderson, B.S., *Buffalo State College*, Web Developer, Computing and Technology Services (1997)
- Cara L. Angie, B.F.A., *Buffalo State College*, Staff Assistant, Strategic Planning Office (2005)
- Fajri Ansari, M.S., *SUNY Brockport*, Head Varsity Basketball Coach, Intercollegiate Athletics (1981)
- Lisa A. August, M.S., *Canisius College*, Associate Director, Career Development Center (2001)
- Phillip Auman, B.A., *St. Bonaventure University*, Senior Career Counselor, Career Development Center (1999)
- Karen E. Bailey-Jones, M.A., *University at Buffalo*, Director, Speech-Language-Hearing Clinic, Speech-Language Pathology Department (1992)
- Maurine E. Baker-Stein, A.A.S., *Alfred State College*, Audio-Visual Supervisor, Instructional Resources Center (1977)
- Joseph W. Ball, B.A., *Buffalo State College*, Associate Director, Campus Services and Facilities Office (1976)
- Salvatore S. Ballachino, M.Ed., *University at Buffalo*, Assistant 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)
- Caleb P. Basiliko, B.S., *Buffalo State College*, Instructional Support Assistant, Great Lakes Center (2005)
- 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 Center (2001)
- Robert L. Baumet, M.S.Ed., *Buffalo State College*, Foundation Accountant, Accounting Office (1991)
- Mark T. Bausili, M.S., *Buffalo State College*, Registrar, Registrar's Office (1985)
- Gina L. Beam, B.A., *Southeastern Illinois College*, Development Assoc./Grant Writer, Burchfield-Penney Art Center (2006)
- Clifford Bell, Senior Staff Assistant, Small Business Development Center (1996)
- Suzanne N. Benay, Development Assistant, Institutional Advancement and Development (2005)
- Paul J. Bentkowski, M.S.Ed., *Buffalo State College*, Senior Systems Programmer, Computing and Technology Services (1982)
- Jessica M. Berg, B.S., *SUNY Fredonia*, Grant Development Specialist, Pre-Award and Contract Services, Research Foundation (1999)
- Sherrie H. Bernat, D.N.S., *University at Buffalo*, Nurse Practitioner, Weigel Health Center (1989)
- Karl J. Bernhardt, M.A., *University at Buffalo*, Instructional Support Assistant, Earth Sciences and Science Education Department (1999)
- Angela P. Berti, B.A., *Buffalo State College*, Director of Special Events and Protocol, Institutional Advancement and Development (2005)
- Richard J. Bihl, M.B.A., *Canisius College*, Assistant to the Dean, School of Professions (1979)
- Lily M. Bink, M.S.Ed., *Buffalo State College*, Interim Associate Director, Educational Opportunity Program (1973)
- Paul T. Bink, M.S., *Buffalo State College*, Assistant Director, Admissions Office (1978)
- Terence D. Bitka, M.S., *Buffalo State College*, Assistant Football Coach, Intercollegiate Athletics (1992)
- Daniel S. Blachanec, B.S., *Buffalo State College*, Senior Systems Programmer, Computing and Technology Services (1994)
- Patricia E. Black, Senior Staff Assistant, Student Accounts Office (1990)
- Josh S. Blumberg, B.S., *Buffalo State College*, General Manager, Campus House, Hospitality and Tourism Department (2002)
- Marie E. Bonebrake, M.L.S., *University at Buffalo*, Visual Resources Curator, Fine Arts (2004)
- 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, Dean's Office, Faculty of Natural and Social Sciences (1990)
- Barbara A. Boquard, B.S., *Buffalo State College*, Senior Staff Assistant, Information Technology Exchange Center (1988)
- Christopher Lee Bordeleau, Programmer/Analyst, Information Technology Exchange Center (2000)
- Jerry S. Boyes, M.S., *Ithaca College*, Director, Intercollegiate Athletics (1986)
- Kelly S. Brace, B.S., *Rochester Institute of Technology*, Production Control Manager, Information Technology Exchange Center (2003)
- 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 (2002)
- Daniel W. Brint, B.A., *Brock University*, Senior Programmer/Analyst, Information Technology Exchange Center (2001)
- Michael R. Broderick, B.S., *University at Buffalo*, Assistant for University Financial Analysis, Student Accounts Office (1981)

- Addae Brown, M.S.W., *Stony Brook University*, Residence Hall Director, Residence Life Office (2003)
- Ann R. Brown, M.F.A., *Syracuse University*, Publications Director, College Relations Office (1998)
- Jerome Brown, M.S., *Buffalo State College*, Financial Analyst, Budget Office (1998)
- Ronald N. Brown Jr., B.A., *Buffalo State College*, CIO/Director SUNY ITEC, Information Technology Exchange Center (1969)
- Sandra Brown, M.S., *University at Buffalo*, Associate Director, Clinical Operations, Weigel Health Center (1994)
- Carolyn E. Brunner, M.S., *Union College*, Director, International Graduate Programs for Educators (1997)
- Robert W. Burke, B.A., *SUNY Fredonia*, Women's Ice Hockey Coach, Intercollegiate Athletics (2006)
- Sandra L. Burnham, B.A., *University at Buffalo*, Admissions Adviser, Admissions Office (2000)
- Cheryl L. Byer, B.S., *Buffalo State College*, Coordinator, Business Systems, Campus Services and Facilities Office (1989)
- Phyllis A. Camesano, B.A. *New York University*, Public Relations Director, College Relations Office (2007)
- Nicholas R. Carriere, B.S., *Niagara University*, Men's Ice Hockey Coach, Intercollegiate Athletics (2005)
- Shannon Mary Casterline, B.A., *SUNY Cobleskill*, Instructional Support Associate, Biology Department (2000)
- Jeffrey D. Caughel, B.S., *SUNY Brockport*, Programmer Analyst, Information Technology Exchange Center (2006)
- Anthony J. W. Chase, M.A., *University at Buffalo*, Assistant to the Dean, School of Arts and Humanities (1988)
- Linda A. Chilson, M.A., *Buffalo State College*, Senior Financial Aid Adviser, Financial Aid Office (1981)
- Stephen A. Chris, Ph.D., *University of Toronto*, Senior Counselor, Counseling Center (1998)
- Luke L. Clutter, B.S., *Lock Haven University of Pennsylvania*, Programmer/Analyst, Information Technology Exchange Office (2003)
- Thomas E. Coates, B.A., *Buffalo State College*, Director, Events Management Office (1996)
- Claire Collier, M.A., *University of Wisconsin-Madison*, Director of Special Projects, Institutional Advancement and Development Office (1995)
- Leon Collins, B.A., *Buffalo State College*, Programmer/Analyst, Information Technology Exchange Center (1999)
- Dorcas L. Colvin, Ed.D., *University of Pennsylvania*, Associate Vice President for Policy and Planning, Strategic Planning Office (1989)
- William J. Cran, B.S., *Buffalo State College*, Audio-Visual Loan Manager, Instructional Resources Center (1995)
- Jennifer D. Dachauer, Manager, Computing Help Desk, Computing and Technology Services (1976)
- Nicholas A. DeMarsh, B.F.A., *Buffalo State College*, Women's Soccer Coach, Intercollegiate Athletics (2003)
- Jedidah D. Dennis, M.S., *University at Buffalo*, Nurse Practitioner, Weigel Health Center (2005)
- Paula J. Devereaux, M.A., *Buffalo State College*, Director, Capital Campaigns/Donor Relations, Institutional Advancement and Development (2000)
- 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*, Staff Associate, Students Accounts Office (1990)
- Ivan Docenko Jr., Accompanist, Music Department (1992)
- Lynda H. Donati, B.F.A., *University at Buffalo*, Graphic Designer, 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)
- Bonita R. Durand, Ph.D., *University at Buffalo*, Executive Assistant to the President, President's Office (1996)
- Mary A. Durlak, M.A., *University at Buffalo*, Promotional Writer, College Relations Office (2001)
- Melissa L. Dybbro, M.Ed., *University at Buffalo*, Assistant Director, Student Life Office (2005)
- Susan J. Earshen, M.B.A., *University at Buffalo*, Director, Human Resource Management Office (1973)
- Scot R. Eckert, A.A.S., *Niagara County Community College*, Associate Director, Campus Services and Facilities Office (1981)
- Timothy R. Ecklund, M.S., *Buffalo State College*, Associate Vice President for Campus Life, Residence Life Office (1997)
- Cynthia D. Eggleston, M.S.Ed., *Buffalo State College*, Senior Staff Associate, Elementary Education and Reading (1979)
- Ann R. Emo, M.F.A., *New York University*, Costume Director/Shop Manager Theater Department (2006)
- Richard B. Engelhardt, B.S., *Buffalo State College*, Manager, Academic/Technical Services, Computing and Technology Services (1996)
- Don F. Erwin, B.S., *Southeastern Louisiana University*, Director, Divisional Technology, Information Services and Systems (2004)
- Timothy J. Fann, Ed.M., *University at Buffalo*, Complex Director, Residence Life Office (2006)
- Cynthia M. Fasla, M.S.W., *University at Buffalo*, Associate Registrar, Registrar's Office (2005)
- Gregory E. Faust, B.F.A., *SUNY Fredonia*, Staff Assistant, Theater Department (1996)
- Cheryl M. Fellows, B.A., *SUNY Geneseo*, Instructional Support Technician, Biology Department (1996)
- Jiu Feng, M.S., *Rochester Institute of Technology*, Programmer/Analyst, Information Technology Exchange Center (2004)
- Nicholi R. Fernandez, B.S., *Buffalo State College*, Client Services Technician, Computing and Technology Services (2004)
- Marie M. Ferraro, M.S., *Buffalo State College*, Coordinator, Academic Advisement Center (2000)
- Robert M. Filighera, B.S., *Buffalo State College*, Women's Ice Hockey Coach, Intercollegiate Athletics (1998)
- Mary Catherine Finger, M.S., *Buffalo State College*, Admissions Assistant, Admissions Office (2004)
- Wynnie L. Fisher, M.S.Ed., *Buffalo State College*, Senior Staff Assistant, English and History and Social Studies Education Departments (2000)
- Ellie E. Fleetwood, B.S., *Buffalo State College*, Research Administrator, Center for Health and Social Research (1997)
- Charlene M. Fontana, S.S.J., 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 and Men's Hockey Coach, Intercollegiate Athletics (1996)
- Bruce A. Fox, B.F.A., *SUNY Fredonia*, Photography and Graphics Coordinator, Instructional Resources (2004)
- John J. Freidhoff, B.S., *Gannon University*, Boat Captain/Field Station Manager, Great Lakes Center (1994)
- Keith Andrew Fulcher, M.S., *Buffalo State College*, Instructor, Academic Skills Center (2002)
- Carolyn S. Fusco, B.A., *University at Buffalo*, Staff Associate, Dean's Office, 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)
- Ricardo Ganaishlal, M.S.Ed., *SUNY Oswego*, Residence Hall Director, Residence Life Office (2004)
- Janet H. Ganley, M.S., *Buffalo State College*, Assistant Director, Financial Aid Office (1970)
- Maria I. Garrett, B.A., *University of Puerto Rico*, Senior Staff Assistant, Modern and Classical Languages (1991)
- Andrew T. Garrity, B.A., *Buffalo State College*, Programmer/Analyst, Computing and Technology Services (2001)
- Latoria D. Gaston-Marsh, J.D., *Queens College*, Director, Judicial Affairs, Dean of Students Office (2005)
- Khaleel M. Gathers, B.S., *Buffalo State College*, Manager, Web Development, Computing and Technology Services (1994)
- Ronald A. George, M.S., *Niagara University*, Senior Counselor, Counseling Center (1986)
- Patricia D. Ghee, M.S., *University at Buffalo*, Coordinator, Scholarship Office (1993)
- Kenneth C. Giangreco, B.A., *Buffalo State College*, Multimedia Specialist, Instructional Resources Center (2000)
- Arthur W. Gielow Jr., M.S.Ed., *Buffalo State College*, Director, Ferguson Planetarium, Earth Sciences and Science Education (1970)
- Linda K. Gleckel, M.S., *Buffalo State College*, Assistant Professor, Exceptional Education, and Assistant to the Dean, School of Education (1971)
- Maryruth F. Glogowski, M.L.S., *University at Buffalo*, Associate Vice President for Library and Instructional Resources (1975)
- Robert M. Gordon, M.Ed., *Troy State University*, Coordinator, EOP Admissions, Admissions Office (2006)
- Jean F. Gounard, Ph.D., *University of Bordeaux*, Director, International Student Affairs Office (1978)
- Lee Ann Grace, Ph.D., *University at Buffalo*, Associate Professor, Modern and Classical Languages, and Assistant Dean, International and Exchange Programs (1973)

- Mary Jo Graham, Manager, User Account Maintenance and Support, Computing and Technology Services (2001)
- Gary V. Grecco, B.S., *Buffalo State College*, Programmer Analyst, Computing and Technology Services (2006)
- William E. Grieshober, M.Ed., *Pennsylvania State University*, Adviser, 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)
- Theresa R. Stephan Hains, M.D., *University at Buffalo*, Director, Weigel Health Center (1992)
- 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 and Facilities Office (1977)
- Paul J. Hebert, B.B.A., *Medaille College*, Programmer Analyst (DBA), Information Technology Exchange Center (2003)
- Maria C. Hejna, M.S.Ed., *Buffalo State College*, Systems Programmer Computing and Technology Services (2000)
- Mark F. Henning, Client Services Technician, Computing and Technology Services (1981)
- Daniel R. Herr, B.S., *Bradley University*, Facilities Engineer, Facilities Planning (1998)
- Christopher M. Heximer, M.A., *University at Buffalo*, Clinical 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)
- Warren J. Hoffman, Ed.M., *University at Buffalo*, Assistant Director, Financial Aid Office (1977)
- Sandra L. Hollander, M.S., *Canisius College*, Athletic Trainer, Intercollegiate Athletics (1985)
- Joseph R. Hoot, B.S., *Buffalo State College*, Programmer/Analyst (UNIX), Information Technology Exchange Center (2004)
- 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)
- Debra A. Hurley, M.Arch., *Arizona State University*, Asst. Design and Construction Coordinator, Facilities Planning (2006)
- Kim M. Jablonski, B.S., *Hilbert College*, Medical Programs Coordinator, Weigel Health Center (2004)
- Kimberly J. Jackson, M.S., *University at Buffalo*, Director, Enrollment Services, Graduate School (2005)
- Jude A. Jayatilleke, B.A., *Buffalo State College*, Academic Adviser, Educational Opportunity Program (2004)
- Yanick H. Jenkins, M.S., *SUNY Brockport*, Director, Educational Opportunity Program (2001)
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- Florence D. Johnson, M.S.Ed., *Buffalo State College*, Director, Student Support Services Program (1968)
- Karen L. Johnson, M.L.S., *University at Buffalo*, Director, Success Track for Academic Readiness (1985)
- Scott L. Johnson, Ph.D., *Pennsylvania State University*, Associate Professor, Criminal Justice, and Assistant Dean, First-Year Programs, University College (1994)
- Suzanne K. Johnson, M.S.W., *University at Buffalo*, Senior Counselor, Counseling Center (2006)
- Tracey P. Johnson, M.A., *Northeastern State University*, EOP Counselor, Educational Opportunity Program (2006)
- Claire S. Jones, M.B.A., *University at Buffalo*, Associate Vice President, College Relations Office (2000)
- Deborah Jones, B.S., *Buffalo State College*, Admissions Adviser, Admissions Office (1990)
- Juanita Jones, A.A.S., *Erie Community College*, Associate Counselor, Weigel Health Center (1997)
- Karen L. Jurewicz, A.A.S., *Erie Community College*, Associate Events Manager, Events Management Office (1977)
- Michael J. Jurewicz, A.A.S., *Erie Community College*, Classroom Technology Specialist, Instructional Resources (1990)
- Kris A. Kaufman, M.S., *Buffalo State College*, Director, Residence Life Office (1992)
- Lydia Kawaler, B.S., *Buffalo State College*, HRM Technical Support Coordinator, Human Resource Management Office (1985)
- Maria L. Kendzierski, M.S., *St. Bonaventure University*, Admissions Counselor, Admissions Office (2005)
- Mark J. Kent, B.A., *Buffalo State College*, Manager, Client Services, Computing and Technology Services (2000)
- Charles B. Kenyon, Ed.D., *Harvard University*, Associate Vice President/Dean of Students, Dean of Students Office (1992)
- Melaine C. Kenyon, M.L.S., *University at Buffalo*, Associate Director, Instructional Technology, Instructional Resources (2000)
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- Thomas D. Killian, B.A., *SUNY Geneseo*, Manager, Networking and Communications, Computing and Technology Services (1998)
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- Douglas G. Koritz, Ph.D., *University of Pittsburgh*, Associate Professor, Economics and Finance, and Assistant Dean, Intellectual Foundations, University College (1986)
- Thomas J. Kostusiak, B.A., *University at Buffalo*, Production Technical Manager, Performing Arts Center (1996)
- Tammy L. Kresge, M.S., *Canisius College*, Coordinator of Health Promotions, Weigel Health Center (2002)
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- Valerie A. Lehman, B.S., *Buffalo State College*, Senior Programmer/Analyst, Information Technology Exchange Center (1990)
- Micheline P. Lepine, B.S., *Buffalo State College*, Head of Administration, Burchfield-Penney Art Center (1978)
- Eugene R. Lewis, B.A., *Youngstown State*, Head Cross-Country/Track and Field Coach, Intercollegiate Athletics (2001)
- Rosalyn A. Lindner, Ph.D., *University of Minnesota*, Professor, Sociology, and Associate Vice President, Curriculum and Assessment, Academic Affairs Office (1974)
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- Therese M. Locher, Director, Purchasing Office (1986)
- Joseph M. Lofft, B.S., *University at Buffalo*, Senior Programmer/Analyst, Information Technology Exchange Center (1996)
- Sam LoGiudice, M.A., *University at Buffalo*, Instructional Support Specialist, Psychology Department (1985)
- Jessie J. Lombardo, B.A., *University at Buffalo*, Senior Career Counselor, Career Development Center (2002)
- John A. Lombardo, B.A., *University at Buffalo*, Interim Deputy Chief, University Police (1987)

- Raymond K. Lonsdale, B.S., *Buffalo State College*, Computer Lab Support Coordinator, Computing and Technology Services (1997)
- Margaret Loops, A.A.S., *Trocaire College*, Financial Aid Adviser, Financial Aid Office (1999)
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- Lori L. Mabry, B.S., *Buffalo State College*, Assistant Director, Budget Office (1994)
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- Gail F. Maloney, Ph.D., *University at Buffalo*, Senior Associate Director, Intercollegiate Athletics (1978)
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- Kimmarie Markel, M.S.Ed., *Buffalo State College*, Staff Assistant, Assessment, Academic and Student Affairs Office (1990)
- Jeffrey L. Marsha, B.A., *SUNY Fredonia*, Director of Operations, Performing Arts Center (2001)
- Bettina Martinez-Hackert, Instructional Support Specialist, Earth Sciences and Science Education (2004)
- Carolyn Martino, B.S., *Buffalo State College*, Staff Assistant to the Provost, Academic and Student Affairs Office (2001)
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- Ronald C. Matusiak, B.S., *University at Buffalo*, Instructional Support Technician, Technology Department (1994)
- Bradley K. Mazon, M.A., *Georgetown University*, Grant Proposal Writer, Institutional Advancement and Development Office (2003)
- Dennis M. McCarthy, M.F.A., *Carnegie Mellon University*, Associate Professor, Theater, and Interim Dean, School of Arts and Humanities (1977)
- Susan A. McCartney, M.B.A., *University at Buffalo*, Director, Small Business Development Center (1987)
- Joan L. McCool, Ph.D., *University at Buffalo*, Director, Counseling Center (1981)
- Emma J. McFayden, M.S., *SUNY Fredonia*, Assistant Director, Counseling Services, Educational Opportunity Program (1981)
- Kent M. McGowan, Ed.M., *University at Buffalo*, Director, Financial Aid Office (1999)
- Jeannita F. McKnight, B.S., *University at Buffalo*, Employee Benefits Assistant, Human Resource Management Office (1988)
- Slawko F. Medinac, M.B.A., *University at Buffalo*, Associate Vice President, Facilities Planning and Institutional Studies (1973)
- Melissa Meehan, M.A., *University at Buffalo*, Web Administration Director, College Relations Office (1999)
- William J. Menshon, B.S., *Buffalo State College*, Facilities Manager, Burchfield-Penney Art Center (2006)
- Diane E. Mercuri, Instructional Support Assistant, Center for Excellence in Urban and Rural Education (1997)
- Donald J. Metz, B.A., *University at Buffalo*, Associate Director, Burchfield-Penney Art Center (1998)
- Barbara A. Meyer, B.A., *Buffalo State College*, Assistant Vice President, Finance and Management Office (1980)
- Ronald N. Meyer, Client Services Coordinator, Computing and Technology Services (1968)
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- Judith A. Miller, M.S., *Buffalo State College*, Associate Registrar, Registrar's Office (1969)
- Christopher G. Milton, B.S., *Buffalo State College*, New York City Regional Representative, Admissions Office (1998)
- Melissa J., Miskiewicz, M.S., *University at Albany*, Director, Academic Computing, Computing and Technology Services (2005)
- Carolyn Ann Morris-Hunt, Director, External Development, Institutional Advancement and Development Office (1997)
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- Marsha L. Moses, B.A., *Buffalo State College*, Assistant to the Dean, Graduate School (1991)
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- Robert M. Murphy, Client Services Technician, Computing and Technology Services (1985)
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- Shetice L. Newell, B.S., *Buffalo State College*, Kitchen Manager, Campus House, Hospitality and Tourism (2005)
- John C. Newman Jr., B.A., *University at Buffalo*, Computer Lab Support Coordinator, Computing and Technology Services (1999)
- Tim G. Ngo, B.S., *Buffalo State College*, Manager Operations and Maintenance, Copy Center (1994)
- Mark A. Norris, B.A., *University at Buffalo*, Web Publications Editor, College Relations Office (2006)
- Michael B. Notarius, B.S., *Buffalo State College*, Chief Technology Officer, Information Technology Exchange Center (1994)
- R. Karen O'Quin, Ph.D., *Michigan State University*, Professor, Psychology, and Associate Dean, School of Natural and Social Sciences (1982)
- William Ortega, M.S., *Buffalo State College*, Academic Adviser, Educational Opportunity Program (1997)
- Christian P. Ozolins, M.S., *Alfred University*, Rec/Intramural Mgr./Asst. Coach, Intercollegiate Athletics (2003)
- Neilhall J. Palmer, B.S., *Buffalo State College*, Network Support Programmer, Computing and Technology Services (1998)
- Roswell Park IV, Ph.D., *University at Buffalo*, Director, Academic Support Programs (1981)
- Nancy B. Paschke, M.A., *Buffalo State College*, Associate Director of Publications, College Relations Office (1996)
- Megan M. Passanese, B.S., *Buffalo State College*, Staff Assistant, School of the Professions (2004)
- Carrie M. Pavis, Facilities Assistant, Facilities Planning (2004)
- Meghan E. B. Pereira, M.Ed., *North Carolina Central University*, Instructional Tech. Specialist, Instructional Resources (2006)
- Mark J. Petrie, M.B.A., *University at Buffalo*, Associate Vice President, Enrollment Management Office (2006)
- Gary J. Phillips, Ed.M., *Providence College*, Associate Vice President and Comptroller, Comptroller's Office (1974)
- Ted S. Pietrzak, B.A., *University of Guelph*, Director, Burchfield-Penney Art Center (1998)
- Keon A. Pitter, B.A., *Buffalo State College*, Classroom Support Assistant, Instructional Resources (2005)
- Marybeth Polakiewicz, Community Relations Assistant, Events Management Office (2005)
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- Jill A. Powell, M.S., *Buffalo State College*, Senior Assistant to the Vice President, Institutional Advancement and Development Office (2000)
- Molly J. Prell, M.S., *Nova Southeastern University*, Programmer/Analyst, Computing and Technology Services (2001)
- Angeline M. Price, M.S., *Buffalo State College*, Associate Director, Weigel Health Center (1984)
- Jeffrey R. Proctor, B.A., *Buffalo State College*, Instructional Support Assistant, Communication (2002)
- Ruby A. Pulliam, M.A., *Ohio State University*, Assistant Director, Equity and Campus Diversity Office (2005)
- Dawn A. Pustelnik, B.A., *McGill University*, Audience Services Manager, Performing Arts Center (2001)
- Holly V. Quicksey, B.S., *Buffalo State College*, Assistant to the Dean, School of Education (2001)
- Kevin P. Rabener, B.A., *SUNY Geneseo*, Technical Assistant, Computing and Technology Services (2004)
- Roland S. Rachinger, B.A., *Buffalo State College*, Computer Lab Support Coordinator, Computing and Technology Services (1999)
- Michael J. Radomski, Supervising Analyst Systems/Telecom Services, Information Technology Exchange Center (2000)
- Michael P. Ramos, M.Ed., *Pennsylvania State University*, Student Employment Coordinator, Career Development Center (2006)
- Todd W. Randall, B.S., *Buffalo State College*, Sr. Programmer/Analyst, Information Technology Exchange Center (2000)
- Laura H. Rao, M.S., *Lesley College*, Coordinator, VSLC, Career Development Center (2003)
- Dennis J. Reed Jr., B.A., *Buffalo State College*, StudyQuad Support Associate, E. H. Butler Library (2004)
- Dean J. Reinhart, Ph.D., *University at Buffalo*, Associate Director, Admissions Office (2005)
- Wayne L. Reling, B.A., *University at Buffalo*, Senior Programmer/Analyst, Information Technology Exchange Center (1998)
- John J. Rellinger, B.S., *University at Buffalo*, Senior Prospect Research Analyst, Institutional Advancement and Development (2005)
- Thomas C. Renzi, Ph.D., *University at Buffalo*, Coordinator, Tutorial Services, Academic Skills Center (1989)

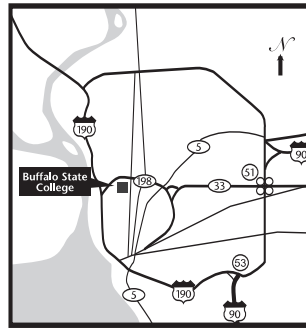
- A. Paul Reynolds, M.S.Ed., *Buffalo State College*, Manager, Training and Consulting, Computing and Technology Services (1984)
- Jayne S. Riter, M.S., *Buffalo State College*, Director, Parking Services Office (1989)
- Wendell P. Rivera, M.S.W., *University at Buffalo*, Senior Counselor, Counseling Center (2006)
- Susan M. Roarke, M.S., *Miami University*, Head Women's Basketball Coach, Intercollegiate Athletics (2006)
- Sean M. Roberts, Staff Assistant, Intercollegiate Athletics (1998)
- Shirley J. Roberts, B.A., *Buffalo State College*, Senior Staff Assistant, Student Accounts Office (1986)
- Leasa N. Rochester, Ed.M., *University at Buffalo*, Senior Staff Assistant, University College (2006)
- Brendan F. Rooney, B.S., *Buffalo State College*, Director, Administrative Computing, Computing and Technology Services (1996)
- Luann M. Root, B.S., *University at Buffalo*, Telecommunications Specialist, Computing and Technology Services (1998)
- Evelyn Rosario, M.A., *University at Buffalo*, Counselor, Educational Opportunity Program (1980)
- Amy Rosen-Brand, J.D., *University at Buffalo*, Accommodations Specialist, Disability Services Office (2004)
- Pamela J. Rosnak, A.O.S., *Bryant and Stratton College*, Programmer Analyst, Computing and Technology Services (2006)
- David J. Ross, T.V. Engineer, Instructional Resources Center (1977)
- Richard L. Saddleson, Director, Business Services and Property Control, Campus Services and Facilities Office (1981)
- Marianne R. Savino, M.A., *University at Buffalo*, Director, Disability Services Office (1990)
- Rebecca J. Schenk, M.B.A., *University at Buffalo*, Director, Budget Office (1977)
- Stephen E. Schwartz, Ph.D., *Ohio State University*, Professor and Assistant to the Dean, School of Natural and Social Sciences (1974)
- Joann H. Seelig, M.S., *Buffalo State College*, Degree Coordinator, Registrar's Office (1998)
- Steven E. Shaffer, M.A., *University at Buffalo*, Manager, Design and Construction, Facilities Planning (1984)
- Paul R. Shaffner, M.S., *Ithaca College*, Football Coach, Intercollegiate Athletics (2004)
- Margaret A. Shaw-Burnett, Ed.D., *Northern Illinois University*, Assistant Vice President, Continuing Professional Studies Office (1997)
- Jeffrey J. Sick, Systems Programmer, Computing and Technology Services (1998)
- Harish C. Sikka, Ph.D., *Auburn University*, Senior Staff Associate, School of Natural and Social Sciences (1982)
- Melissa Ann Slisz, B.S., *Buffalo State College*, Staff Assistant, President's Office (1999)
- Paul J. Smith, A.A.S., *Erie Community College*, Instructional Support Technician, Instructional Resources Center (1988)
- Erik W. Snyder, B.S., *SUNY Fredonia*, Programmer/Analyst, Information Technology Exchange Center (2002)
- Anne Marie Sokol, M.S., *Buffalo State College*, Instructional Support Technician, Chemistry Department (1978)
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- Camille A. Spyra, B.S., *Buffalo State College*, Senior Staff Assistant, E. H. Butler Library (1967)
- J. Robert Stalder, M.A., *University at Buffalo*, Academic Tutor, Mathematics Department (1986)
- Pamela S. Steffan, M.A., *Buffalo State College*, Financial Aid Adviser, Financial Aid Office (1993)
- Theresa R. Stephan Haines, M.D., *University at Buffalo*, Director, Weigel Health Center (1992)
- Hilary I. Sternberg, M.L.S., *University at Buffalo*, Head of Reference, E. H. Butler Library (1990)
- Elizabeth A. Stevens, M.S.Ed., *St. Bonaventure University*, Counselor, Educational Opportunity Program (1999)
- Meg A. Stevens, B.S., *SUNY Cortland*, Lacrosse Coach, Champs Coordinator, Intercollegiate Athletics (2002)
- Mary E. Suffoletta, B.S., *D'Youville College*, Associate Vice President, Institutional Advancement and Development Office (1991)
- Mark P. Suida, M.S., *Buffalo State College*, Assistant Director, Student Life Office (2006)
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- Joel P. Swisher, B.S., *Buffalo State College*, Director, Systems Administration, Computing and Technology Services (1973)
- Michael F. Switalski, B.A., *University of Wisconsin-Whitewater*, Swimming and Diving Coach, Intercollegiate Athletics (2001)
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- Michael J. Tracz, B.S., *Buffalo State College*, Lead Programmer Analyst, Computing and Technology Services (1998)
- Nanette Tramont, R.N., *Erie Community College*, Coordinator, Community Relations, Communication Department (1996)
- Patrick A. Trinkley, Instructional Support Specialist, Instructional Resources Center (1988)
- Grant L. Umberger, M.S., *Buffalo State College*, Coordinator, Continuing Professional Studies (2006)
- Marie E. Unson, B.A., *University at Buffalo*, Senior Programmer Analyst, Computing and Technology Services (1990)
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- Daniel C. Velez, M.A., *Buffalo State College*, Assistant to the Vice President, Academic and Student Affairs Office (1999)
- Sarah M. Velez, M.S., *Buffalo State College*, Assistant Director, Campbell Student Union (1998)
- Jeffrey M. Ventura, B.A., *Buffalo State College*, Sports Information Director/Compliance Officer, Intercollegiate Athletics (1998)
- Pamela M. Voyer, B.A., *Buffalo State College*, Fundraising Events Coordinator, Institutional Advancement and Development Office (2000)
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Buffalo State

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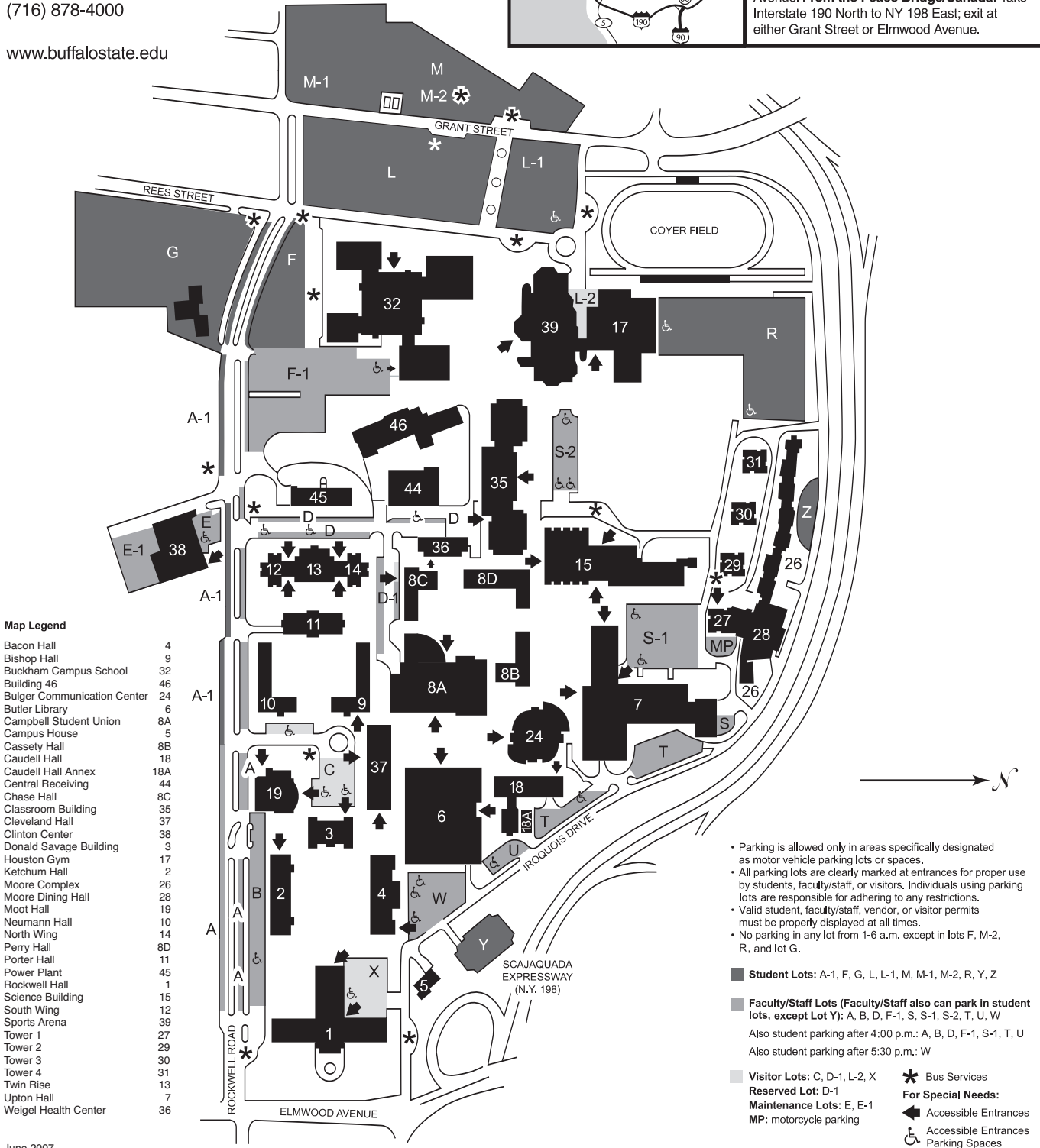
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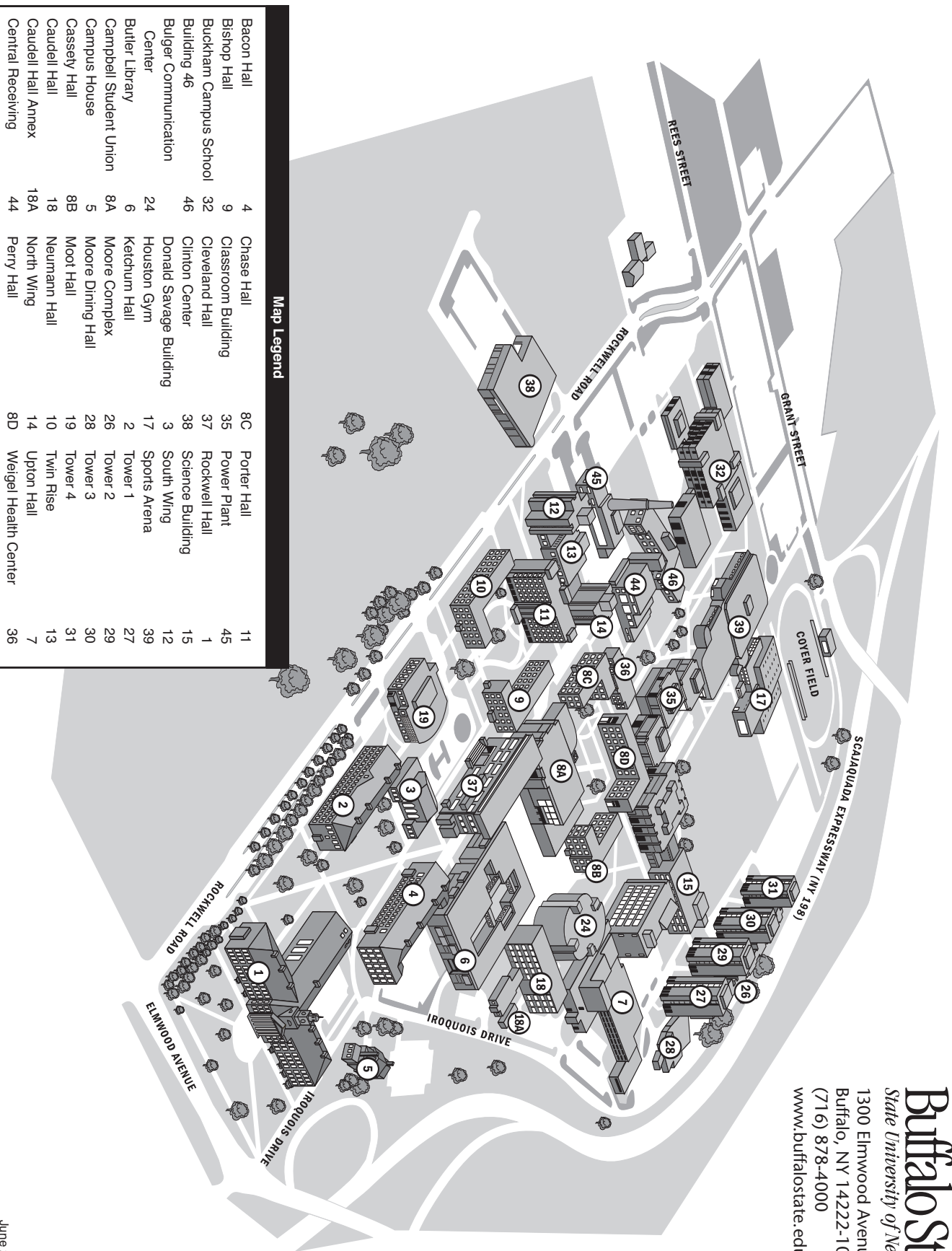
How to get to Buffalo State by car:

From the east (via the NYS Thruway/Interstate 90): Take Exit 51 (NY 33 West) to NY 198 West. Exit NY 198 at Elmwood Avenue South. The college is immediately on the right. **From the west or south (via the NYS Thruway/Interstate 90):** Take Exit 53 (Interstate 190) to NY 198 East; exit at either Grant Street or Elmwood Avenue. **From the north/Niagara Falls:** Take Interstate 190 South (over the Grand Island Bridge) to NY 198 East; exit at either Grant Street or Elmwood Avenue. **From the Peace Bridge/Canada:** Take Interstate 190 North to NY 198 East; exit at either Grant Street or Elmwood Avenue.



June 2007

Buffalo State
State University of New York
 1300 Elmwood Avenue
 Buffalo, NY 14222-1095
 (716) 878-4000
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Map Legend

Bacon Hall	4	Chase Hall	8C	Porter Hall	11
Bishop Hall	9	Classroom Building	35	Power Plant	45
Buckham Campus School	32	Cleveland Hall	37	Rockwell Hall	1
Building 46	46	Clinton Center	38	Science Building	15
Bulger Communication Center	24	Donald Savage Building	3	South Wing	12
Butler Library	6	Houston Gym	17	Sports Arena	39
Campbell Student Union	8A	Ketchum Hall	2	Tower 1	27
Campus House	5	Moore Complex	26	Tower 2	29
Cassidy Hall	8B	Moore Dining Hall	28	Tower 3	30
Caudell Hall	18	Moot Hall	19	Tower 4	31
Caudell Hall Annex	18A	Neumann Hall	10	Twin Rise	13
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