Nondiscrimination Notice

Pursuant to College policy, the College is committed to fostering a diverse community of outstanding faculty, staff, and students, as well as ensuring equal educational opportunity, employment, and access to services, programs and activities, without regard to an individual's race, color, national origin, religion, creed, age, disability, sex, gender identity, sexual orientation, familial status, pregnancy, predisposing genetic characteristics, military status, domestic violence victim status, or criminal conviction. Employees, students, applicants or other members of the College community (including but not limited to vendors, visitors, and guests) may not be subjected to harassment that is prohibited by law, or treated adversely or retaliated against based upon a protected characteristic.

The College's policy is in accordance with federal and state laws and regulations prohibiting discrimination and harassment. These laws include the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964 as Amended by the Equal Employment Opportunity Act of 1972, and the New York State Human Rights Law. These laws prohibit discrimination and harassment, including sexual harassment and sexual violence.

Inquiries regarding the application of Title IX and other laws, regulations and policies prohibiting discrimination may be directed to Dr. Karen A. Clinton Jones, Chief Diversity Officer and Title IX Coordinator, Buffalo State College, 1300 Elmwood Avenue, 415 Cleveland Hall, Buffalo, New York 14222; or by phone (716) 878-6210 or fax (716) 878-6234. Inquiries may also be directed to the United States Department of Education's Office for Civil Rights, 32 Old Slip 26th Floor, New York, N.Y., 10005-2500; Tel. (646) 428-3800; Email; OCR.NewYork@ed.gov.

This catalog is current as of June 2014. 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.

The offices of the vice presidents supplied copy for their respective areas of responsibility. The Academic Affairs Office coordinated the collection of data for this catalog.

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

Buffalo State Undergraduate Programs ................................................................. 3
Accreditations ........................................................................................................ 4
SUNY Buffalo State .................................................................................................. 6
Facilities, Services, and Special Programs .............................................................. 8
Admissions ............................................................................................................. 18
Finances ................................................................................................................ 22
Financial Aid ......................................................................................................... 26
Academic Policies ................................................................................................ 34
Academic Organization .......................................................................................... 51
Collegewide Degree Requirements for Baccalaureate Degrees ............................ 52
Undergraduate Major and Minor Programs ........................................................... 57
Course Listings ...................................................................................................... 151
Administration ..................................................................................................... 265
Faculty .................................................................................................................. 267
Staff ....................................................................................................................... 274
## Buffalo State Undergraduate Programs

<table>
<thead>
<tr>
<th>Field</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>62</td>
</tr>
<tr>
<td>Applied Mathematics</td>
<td>103</td>
</tr>
<tr>
<td>Art</td>
<td>62</td>
</tr>
<tr>
<td>Art Education (K–12)</td>
<td>63</td>
</tr>
<tr>
<td>Art History</td>
<td>64</td>
</tr>
<tr>
<td>Arts and Letters</td>
<td>64</td>
</tr>
<tr>
<td>Biology</td>
<td>64</td>
</tr>
<tr>
<td>Biology Education (7–12)</td>
<td>65</td>
</tr>
<tr>
<td>Biology Education (7–12; 5–6 Extension)</td>
<td>66</td>
</tr>
<tr>
<td>Business Administration</td>
<td>66</td>
</tr>
<tr>
<td>Business and Marketing Education</td>
<td>67</td>
</tr>
<tr>
<td>Career and Technical Education</td>
<td>68</td>
</tr>
<tr>
<td>Ceramics</td>
<td>69</td>
</tr>
<tr>
<td>Chemistry</td>
<td>70</td>
</tr>
<tr>
<td>Chemistry Education (7–12)</td>
<td>71</td>
</tr>
<tr>
<td>Chemistry Education (7–12; 5–6 Extension)</td>
<td>72</td>
</tr>
<tr>
<td>Childhood Education (Grades 1–6)</td>
<td>73</td>
</tr>
<tr>
<td>Communication Design</td>
<td>79</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>80</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>81</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>81</td>
</tr>
<tr>
<td>Dietetics: Coordinated Program</td>
<td>82</td>
</tr>
<tr>
<td>Dietetics: Didactic Program</td>
<td>83</td>
</tr>
<tr>
<td>Earth Science Education (7–12)</td>
<td>85</td>
</tr>
<tr>
<td>Earth Science Education (7–12; 5–6 Extension)</td>
<td>85</td>
</tr>
<tr>
<td>Earth Sciences</td>
<td>86</td>
</tr>
<tr>
<td>Economics</td>
<td>87</td>
</tr>
<tr>
<td>Electrical Engineering Technology (Electronics)</td>
<td>88</td>
</tr>
<tr>
<td>Electrical Engineering Technology (Smart Grid)</td>
<td>88</td>
</tr>
<tr>
<td>English</td>
<td>89</td>
</tr>
<tr>
<td>English Education (7–12)</td>
<td>90</td>
</tr>
<tr>
<td>Exceptional Education</td>
<td>91</td>
</tr>
<tr>
<td>Family and Consumer Sciences Education</td>
<td>91</td>
</tr>
<tr>
<td>Fashion and Textile Technology</td>
<td>92</td>
</tr>
<tr>
<td>Fibers</td>
<td>94</td>
</tr>
<tr>
<td>Forensic Chemistry</td>
<td>95</td>
</tr>
<tr>
<td>French Education (7–12)</td>
<td>95</td>
</tr>
<tr>
<td>French Language and Literature</td>
<td>97</td>
</tr>
<tr>
<td>Geography</td>
<td>98</td>
</tr>
<tr>
<td>Geology</td>
<td>98</td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>99</td>
</tr>
<tr>
<td>History</td>
<td>99</td>
</tr>
<tr>
<td>Hospitality Administration</td>
<td>99</td>
</tr>
<tr>
<td>Individualized Studies</td>
<td>100</td>
</tr>
<tr>
<td>Industrial Technology</td>
<td>100</td>
</tr>
<tr>
<td>Interior Design</td>
<td>101</td>
</tr>
<tr>
<td>Journalism</td>
<td>102</td>
</tr>
<tr>
<td>Mathematics</td>
<td>102</td>
</tr>
<tr>
<td>Mathematics Education (7–12)</td>
<td>103</td>
</tr>
<tr>
<td>Mathematics Education (7–12; 5–6 Extension)</td>
<td>104</td>
</tr>
<tr>
<td>Mechanical Engineering Technology</td>
<td>105</td>
</tr>
<tr>
<td>Media Production</td>
<td>106</td>
</tr>
<tr>
<td>Metals/Jewelry</td>
<td>106</td>
</tr>
<tr>
<td>Music</td>
<td>107</td>
</tr>
<tr>
<td>Music Education (Pre-K–12)</td>
<td>108</td>
</tr>
<tr>
<td>Painting</td>
<td>108</td>
</tr>
<tr>
<td>Philosophy</td>
<td>109</td>
</tr>
<tr>
<td>Photography</td>
<td>109</td>
</tr>
<tr>
<td>Physics</td>
<td>110</td>
</tr>
<tr>
<td>Physics Education (7–12)</td>
<td>111</td>
</tr>
<tr>
<td>Physics Education (7–12; 5–6 Extension)</td>
<td>111</td>
</tr>
<tr>
<td>Political Science</td>
<td>102</td>
</tr>
<tr>
<td>Printmaking</td>
<td>113</td>
</tr>
<tr>
<td>Psychology</td>
<td>114</td>
</tr>
<tr>
<td>Public Communication</td>
<td>116</td>
</tr>
<tr>
<td>Sculpture</td>
<td>116</td>
</tr>
<tr>
<td>Social Studies Education (7–12)</td>
<td>117</td>
</tr>
<tr>
<td>Social Studies Education (7–12; 5–6 Extension)</td>
<td>118</td>
</tr>
<tr>
<td>Social Work</td>
<td>120</td>
</tr>
<tr>
<td>Sociology</td>
<td>121</td>
</tr>
<tr>
<td>Spanish</td>
<td>122</td>
</tr>
<tr>
<td>Spanish Education (7–12)</td>
<td>122</td>
</tr>
<tr>
<td>Speech-Language Pathology</td>
<td>123</td>
</tr>
<tr>
<td>Technology Education</td>
<td>124</td>
</tr>
<tr>
<td>Television and Film Arts</td>
<td>124</td>
</tr>
<tr>
<td>Theater</td>
<td>125</td>
</tr>
<tr>
<td>Urban and Regional Analysis and Planning</td>
<td>125</td>
</tr>
<tr>
<td>Wood/Furniture</td>
<td>126</td>
</tr>
<tr>
<td>Writing</td>
<td>127</td>
</tr>
</tbody>
</table>
**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:

Academy of Nutrition and Dietetics, Accreditation Council for Education in Nutrition and Dietetics (ACEND)*

Accreditation Association for Ambulatory Health Care (Weigel Health Center)

Accreditation Commission for Programs in Hospitality Administration (ACPHA)

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

American Association of Museums (Burchfield Penney Art Center)

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

Council for Interior Design Accreditation (CIDA)

Council on Social Work Education (CSWE)

Engineering Technology Accreditation Commission (ETAC)**

International Association of Counseling Services (Counseling Center)

National Association of Industrial Technology (NAIT)

National Association of Schools of Art and Design (NASAD)

National Association of Schools of Music (NASM)

National Association of Schools of Theatre (NAST)

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

*SUNY-Buffalo State's Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312)899-0040 ext 5400. Http://www.eatright.org/ACEND

http://www.eatright.org/ACEND

**The Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org**

**The Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org**

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.

*SUNY-Buffalo State’s Coordinated Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312)899-0040 ext 5400. Http://www.eatright.org/ACEND
http://www.eatright.org/ACEND.
Honor Societies

Alpha Kappa Delta
Sociology

Alpha Sigma Lambda
Adult Students

Epsilon Pi Tau
Career and Technical Education

Kappa Delta Pi
Education

Omicron Delta Epsilon
Economics

Phi Alpha Theta
History

Phi Delta Kappa
Education

Phi Upsilon Omicron
Nutrition and Food Science

Pi Delta Phi
French

Pi Sigma Alpha
Political Science

Psi Chi
Psychology

Sigma Delta Pi
Spanish

Sigma Pi Sigma
Physics
A Place to Learn, Grow, and Prepare for Your Future

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

Excellent, Comprehensive Academic Offerings

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

Quality Learning Environment

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

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

Diverse Student Body

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

Hands-on Career Preparation

Buffalo State and the Western New York community offer plenty of convenient opportunities for students to “learn by doing” through internships with local organizations. Students gain valuable skills through involvement with applied research and community service programs sponsored by campus centers.

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

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

Convenient, Attractive Campus

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

Vibrant, Metropolitan Neighborhood

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

Buffalo and Beyond

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

The State University of New York

As a comprehensive public university, the State University of New York provides a meaningful educational
experience to the broadest spectrum of learners. More than 414,000 students are pursuing traditional study in classrooms and laboratories or are working at home, at their own pace, through such innovative institutions as the SUNY Learning Network and Empire State College.

The Covenant

Buffalo State Is Committed to Providing:

**Superb Teaching Faculty**
Buffalo State faculty members are:
- Dedicated teachers.
- Nationally renowned scholars who bring the latest research to the classroom.
- Degreed professionals, not teaching assistants.
- Among the best in SUNY—more than 50 have received the SUNY Chancellor’s Award for Excellence.

**Innovative and Relevant Programs**
- The Intellectual Foundations 2014 (IF 14) or core curriculum ensures that students have a broad-based education.
- The professional curriculum—the academic major—prepares students for career success.
- Accredited professional programs.*
- State-of-the-art technologies, facilities, and library.

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

The Buffalo State Student Is Committed to:

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

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

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

---

**Oath of Matriculation**
As a new student to Buffalo State, 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, 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. This I pledge to myself.
**Academic Opportunities Cluster**
University College
South Wing 510, (716) 878-3093

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

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

**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 warning (GPA below 2.0 after a student's first semester at Buffalo State) or on academic probation (GPA below 2.0 after a student's second or later semester at Buffalo State).

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

**Burchfield Penney Art Center at Buffalo State**
(716) 878-6011
www.burchfieldpenney.org
In November 2008, the new Burchfield Penney Art Center opened to the public. The $33 million structure is the first new art museum to be built in Buffalo in more than a century and is the first "green" art museum in New York State. The museum is home to more than 7,800 works by more than 600 artists from Western New York, including the largest public collection of works by Charles E. Burchfield. The Burchfield Penney is accredited by the American Association of Museums. General admission to the Burchfield Penney is free to faculty, staff, and students of Buffalo State. Gallery hours are Tuesday, Wednesday, Friday, and Saturday from 10:00 a.m. to 5:00 p.m., Thursday from 10:00 a.m. to 9:00 p.m., and Sunday from 1:00 to 5:00 p.m. The Museum Store, offering one-of-a-kind gifts by Western New York artisans and merchandise celebrating Burchfield, is open during gallery hours.

**Campbell Student Union**
Campbell Student Union 223A, (716) 878-6511
www.buffalostate.edu/studentunion/
http://www.buffalostate.edu/studentunion/
The Campbell Student Union is located in the center of campus and is your on campus "Home Away from Home"! We house an exciting blend of student services, activities, and recreation designed to help you make the most of your college experience. The Barnes & Noble Bookstore, USG Game Room, and Campbell Student Union Information Center are located in this facility, as are
the offices of the Dean of Students, the Associate Vice President for Student Success, Campus Dining Services, Associate Vice President for Housing and Auxiliary Services, United Students Government (USG), the International Student Affairs Office, and the Student Life Office. The campus radio station, WB NY-FM 91.3, makes its home here, along with 19 other diverse student organization offices. The Student Union offers a variety of newly renovated, state of the art programming space for the campus community, along with several informal lounges, café, and study areas, and the state of the art Residential and Retail dining facilities. Stop by for a cup of coffee, a meal with friends or faculty members, shoot some pool, and then stay for a fashion show, a band, a lecture, and all of the other fun things we have to offer!

Campus Dining Services  
Campbell Student Union 223, (716) 878-5214  
www.buffalostate.edu/offices/dining  

Buffalo State Dining understands and caters to the unique needs and expectations of today's college students. We ensure each student’s dining experience is distinctive, memorable and satisfying. We nourish students with great food, healthy menu options and stimulate their minds by meeting and exceeding their expectations. Buffalo State Dining offers many dining locations throughout campus, which include an all-you-care-to-eat dining hall, Argo Tea, Cafe' Oh-Le, and a food court containing nine concepts including Subway, Salsarita's, SPOT coffee, fresh juice bar, grill, made-to-order salads and italian, jamaican and asian cuisine.

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

Career Development Center  
www.buffalostate.edu/offices/cdc  
Volunteer & Service Learning Center  
www.vslc.buffalostate.edu  
Cleveland Hall 306, (716) 878-5811

The Career Development Center (CDC) provides a full range of career counseling services to help students select a major, plan a career, apply to graduate school, and identify internship and employment opportunities. They also connect student with current occupational information, including salary, qualifications and educational requirements. Assessment and exploration programs are available to assist in selecting a career well-suited to students' interests, strengths, and other personal characteristics. In addition to hosting ORCA, a website listing full-time, summer, and part-time jobs, as well as internships and volunteer opportunities, the CDC links students with employers through job fairs, on-campus interviews, and job-search programs. The CDC also houses the Volunteer and Service-Learning Center (VSLC), where students can find a wide-range of both long and short-term volunteer opportunities including Alternative Break, Community Service Days, and Volunteer Fair. The VSLC also supports service-learning courses, giving students the opportunity to apply what they learn in the classroom and make a difference in the community.

Center for Excellence in Urban and Rural Education  
Caudell Hall 107, (716) 878-3610  
www.buffalostate.edu/centers/ceure

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

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

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

Child Care Center (Buffalo State Child Care Center)  
Campus West, (716) 878-5335  
www.buffalostate.edu/offices/bscchild

The Buffalo State Child Care Center is open to the children of Buffalo State students, faculty, and staff. The Center is also open to children of community members. Accredited by the National Association for the Education of Young Children (NAEYC) and licensed by the New York State Office of Children and Family Services, the Center accepts children between the ages of 6 weeks and 5 years on a first-come, first-served basis. A summer school-age program is also available for children (up to age 12). The Center is committed to providing developmentally appropriate programs in a safe, predictable environment, where children can develop socially, emotionally, cognitively, and physically.
College Writing Program
South Wing 130, (716) 878-5451
www.buffalostate.edu/writingprogram

The College Writing Program provides oversight for the writing courses required of all Buffalo State students, CWP 101 and CWP 102, as well as the non-credit-bearing CWP 099, which is sometimes required to prepare students for those writing courses. The College Writing Program also provides support for the Intellectual Foundations 2014 (IF 14) Writing Across the Curriculum requirement.

Computing and Technology Services
Twin Rise 206, (716) 878-4611
www.buffalostate.edu/cts http://www.buffalostate.edu/cts

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

Continuing Professional Studies
Cleveland Hall 210, (716) 878-5907
www.buffalostate.edu/continuingstudies
http://www.buffalostate.edu/continuingstudies

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

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

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

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

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

Dean of Students and Student Judicial Affairs
Campbell Student Union 306, (716) 878-4618

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

The dean of students works closely with students and student groups to further their intellectual, emotional, and social development. The dean serves as an advocate for the rights of students; offers individual student support; provides programs, services, and co-curricular opportunities; and contributes to policy development. The dean’s office will assist victims of sexual violence and assault and helps ensure compliance with victim rights under Title IX of the Civil Rights Act. The dean also provides parents with information about college policies and procedures, along with referrals for assistance to both on- and off-campus resources.

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

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

Disability Services Office
South Wing 120, (716) 878-4500

Buffalo State ensures access to its academic programs, services, and activities on campus to otherwise qualified individuals with disabilities in accordance with guidelines established by the Rehabilitation Act of 1973, Section 504, and by the Americans with Disabilities Amendment Act of 2009. Disability Services http://www.buffalostate.edu/disabilityservices provides advocacy and coordinates appropriate accommodations for students with disabilities. To receive services, students should contact Disability Services and provide appropriate disability-related documentation. If you believe you may have an undiagnosed disability, please feel free to contact the office and you will be referred to the correct resource.

If you are in need of academic tutoring, please contact the Academic Skills Center http://academicsupport.buffalostate.edu/academic-skills-center.

Educational Opportunity Program
University College
South Wing 710, (716) 878-4225
www.buffalostate.edu/eop

The Arthur O. Eve Educational Opportunity Program (EOP) was established in 1967 to fulfill New York State’s commitment to access to higher education. The program is for students of all racial and ethnic backgrounds who have the talent and ability to succeed in college but have been placed at a disadvantage for access by financial and academic circumstances. See EOP admission 18 for more information.

First-Year and Academic Support Programs

Academic Advisement Center
South Wing 110, (716) 878-5223
http://academicsupport.buffalostate.edu/academic-advisement-center

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

Academic Skills Center
South Wing 330, (716) 878-4041
http://academicsupport.buffalostate.edu/academic-skills-center
http://academicsupport.buffalostate.edu/academic-skills-center

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

Academic Support Programs
South Wing 310, (716) 878-5303
http://academicsupport.buffalostate.edu
http://academicsupport.buffalostate.edu

The Academic Support Programs unit offers services that are designed to help ensure successful study at Buffalo State. Units include the Academic Advisement Center, the Academic Skills Center, Collegiate Science and Technology Entry Program (C-STEP), developmental college success courses, and Credit for Experiential Learning.

Collegiate Science and Technology Entry (C-STEP) Program
South Wing 220A, (716) 878-4197
http://academicsupport.buffalostate.edu/collegiate-science-and-technology-entry-program-cstep
http://academicsupport.buffalostate.edu/collegiate-science-and-technology-entry-program-cstep

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

Credit for Experiential Learning
South Wing 310B, (716) 878-5303

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

First-Year Programs
Twin Rise 100, (716) 878-5906
www.buffalostate.edu/firstyearprograms

Buffalo State offers several courses and programs designed to help new students refine and strengthen academic skills that will serve as a basis for success. UNC 100, UNC 111, UNC 120, and UNC 150 offer entering students access to small classes.
Learning Communities
Twin Rise 100, (716) 878-5906
www.buffalostate.edu/firstyearprograms

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

Great Lakes Center
Science Building 261 and Porter Avenue, Buffalo, (716) 878-4329
www.buffalostate.edu/greatlakescenter

The Great Lakes Center brings together more than 25 affiliated faculty from eight academic departments at Buffalo State to conduct research in aquatic ecology, fisheries, environmental toxicology and chemistry, urban ecology, watershed dynamics, and environmental education. The center consists of a complex of laboratories on the main campus and an aquatic research laboratory on the 4.5-acre site at the junction of Lake Erie and the Niagara River. The Great Lakes Center also maintains two 28-foot vessels, a 25-foot heavy lifting work boat, several Boston Whalers, an electrofishing boat, johnboats, and a number of smaller boats for near-shore work, as well as a variety of sampling instruments.

Instructional Design Office
Instructional Resources
Bulger Communication Center 113, (716) 878-3877
www.buffalostate.edu/offices/ir/E-Learning
http://www.buffalostate.edu/offices/ir/E-Learning

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

Intellectual Foundations
University College
Twin Rise 100, (716) 878-5906
www.buffalostate.edu/intellectualfoundations

The Intellectual Foundations 2014 (IF 14) program is the general education program at Buffalo State. Serving as the college’s liberal arts curriculum since fall 2006, the Intellectual Foundations program promotes an understanding of the continuity of human history, the depth of inherited knowledge, the validity of diverse modes of inquiry, the value of artistic expression, and the richness of our collective experience. Its purpose is to develop the skills and habits of the mind required for a life of intellectual curiosity and civic engagement.

International and Exchange Programs
University College
South Wing 410, (716) 878-4620
www.buffalostate.edu/universitycollege

Center for China Studies
South Wing 430D, (716) 878-6328
www.buffalostate.edu/centers/ccs

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

International Education Office
South Wing 410B, (716) 878-4620
www.buffalostate.edu/studyabroad

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

International Graduate Programs for Educators
South Wing 430, (716) 878-6832
www.buffalostate.edu/lisc

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

International Student Affairs Office
Campbell Student Union 400, (716) 878-5331
www.buffalostate.edu/internationalstudentaffairs

Various services are available to international students through the International Student Affairs Office, including academic advisement and personal counseling. In addition, the office helps students regarding visas, work permits, and regulations of the Department of Homeland Security. A one-day international orientation program is provided for new international students at the beginning of each
Global Studies (minor program)
South Wing 420B, (716) 878-6116
The global studies minor is designed to provide students with an international perspective, encouraging the study of issues based around international themes, as well as the advanced study of another language.

Special Programs Office
South Wing 420C, (716) 878-4328
The Special Programs Office administers National Student Exchange and the Visiting Student Program.

National Student Exchange
South Wing 420
www.nse.org
National Student Exchange is designed to expand the scope and variety of academic, social, and cultural experiences available to students. It enables qualified students to spend a semester or a year at one of more than 200 colleges and universities in the United States, its territories, and Canada. The program, organized through the National Student Exchange Consortium, provides an inexpensive means of studying in another state by paying tuition at Buffalo State or at the host school at the resident rate. To be eligible, a student must be in good academic standing and have a minimum GPA of 2.5.

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

Library (E. H. Butler Library)
(716) 878-6300
library.buffalostate.edu http://library.buffalostate.edu

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

Butler Library’s Information Commons brings together important services to help students succeed academically. Librarians are available at the Research Help Desk to provide expert research assistance. The Writing Help Center, a partnership with the College Writing Program, is available to assist students with writing and composition of all types. The Application Support Desk is the central point of service for software-related assistance and equipment loan. Computing Help Desk staff members provide technical assistance with campus computers, printers, and network issues.

Computer labs are located on the first floor of the library, and wireless access is available throughout the library building. StudyQuad and QuietQuad, open 24 hours a day during the fall and spring semesters, feature computers with a variety of software applications, an assistive technology room, quiet study space, and group study rooms.

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

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

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

Orientation and New Student Programs Office
Porter Hall 14J, (716) 878-5336
http://orientation.buffalostate.edu/
http://orientation.buffalostate.edu/

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

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

The Performing Arts Center (PAC) at Rockwell Hall is an 856-seat multipurpose theater that enhances the cultural vitality of the campus and Western New York community. The PAC hosts a variety of events each year. Lectures, concerts, musicals, and more highlight the annual calendar of more than 150 events. The Great Performers Series showcases world-class artists from a wide range of performance genres. The Artsplorations Series offers Western New York schoolchildren the opportunity to attend a live theater performance. The Buffalo State Music Department presents more than 50 concerts each year at the PAC, featuring the Philharmonia, Wind and Jazz Ensembles, Chamber Music Ensembles, and Choral presentations.

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

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

Pre-Medical and Pre-Health Professional Advisement
School of Natural and Social Sciences, Dean’s Office
Classroom Building A113, (716) 878-6674
School of Natural and Social Sciences http://www., http://www.buffalostate.edu/naturalandsocialsciences/x461 .xml

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

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

Reserve Officer Training Corps
U.S. Army Reserve Officer Training Corps (ROTC) classes are offered at Buffalo State through Niagara University. Military science classes are 1 credit hour each semester and are intended to introduce students to Army leadership principles and basic military concepts. A 2-credit-hour military lab also is available to Buffalo State students. The lab meets once a week at either Niagara University or the University at Buffalo South Campus. Military science classes are offered free of charge to all interested, and no commitment or obligation is required. Students may enroll in any of these courses during the Buffalo State registration period. Contact Major Peter B. Wilson at (716) 286-8235.

Residence Life Office (On-Campus Housing)
Porter Hall, (716) 878-3000
www.buffalostate.edu/residencelife

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

Buffalo State Housing Residency Requirement
All full-time students are required to live on campus until they have earned junior-level standing (completion of 60 credit hours). Students who are married, single parents, veterans, age 21 or older, or commuting from the home of a parent or relative (aunt, uncle, brother, sister, etc.) within a 35-mile radius of the Buffalo State campus are exempt from this policy. Verification is required for students who
who has been issued a waiver to this policy receives a period of time as determined by the committee. If a student All waivers to this policy are to be submitted in writing by the student to the Parking Appeals Committee. Requests for exceptions to other exceptional circumstances will be considered by the committee. Pre-college credits, advanced placement credits, CLEP credits, and similar credits are not relevant to this regulation. Any credit awarded for coursework taken prior to high school graduation or during the summer does not change student status as it relates to being a first- or second-year college student.

Students entering their third year (i.e., fifth semester) at Buffalo State are eligible to register a vehicle on campus even if they have not completed enough credits to obtain junior standing. They are no longer considered first- or second-year college students. Students who begin as sophomores in the spring semester of an academic year are permitted to register a vehicle on campus for the coming fall semester, even though they may not have accumulated sufficient credits to attain junior standing.

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

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

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

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

Other exceptional circumstances will be considered by the Parking Appeals Committee. Requests for exceptions to this policy are to be submitted in writing by the student to Director of Parking Services, Buffalo State College, 1300 Elmwood Avenue, Buffalo, NY 14222. Requests will be reviewed by the Parking Appeals Committee. Decisions of this board are final and not subject to further appeal. All waivers to this policy will be issued for a specific period of time as determined by the committee. If a student who has been issued a waiver to this policy receives a violation to the campus parking policy, the waiver will be revoked.

Speech-Language-Hearing Clinic
Caudell Hall, (716) 878-3530
www.buffalostate.edu/speech

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

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

The Buffalo State Speech-Language-Hearing Clinic does not discriminate in the delivery of clinical services on the basis of race or ethnicity, gender, age, religion, national origin, sexual orientation, or disability.

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

USG is the United Students Government, representing the students of Buffalo State since 1971. USG is headed by students who are elected each year by the undergraduate student body. USG is maintained with the support of a professional staff and funding through the mandatory student activity fee. In addition to the activities of the student government, USG supports over 60 funded and recognized student organizations, each providing general and specialized events and activities for students with diverse interests. Some of the services USG provides to students include the Dental Clinic, USG Game Room, Press Services, USG Media Sign, and Whispering Pines College Camp; a one square mile piece of property in Franklinville, New York with two visitor lodges for which USG member organizations are given priority to reserve.

USG consists of three operating branches of governance: the executive branch, responsible for establishing long-term goals for student government; the senate, the legislative branch of USG; and the judicial council. All undergraduate students are members of USG and are eligible to run for any elected position for which they are qualified. Senate meetings are held every Tuesday night during the academic year at 8:45pm in the Assembly Hall of the Campbell Student Union and are open to the general student body to attend.
Student Life Office
Campbell Student Union 400, (716) 878-4631
www.buffalostate.edu/studentlife

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

The Student Life Office encompasses the following areas: campus activities, including Weeks of Welcome and Union Bash; Greek Affairs, overseeing 26 fraternities and sororities; leadership programs; and is the home of the NIA (Nurturing Initiative and Achievement) Mentor Program and several retention and support programs (MAP-Works and COMPASS). The Student Life Office also provides cultural, educational, and social activities that encourage student excellence, support racial and cultural understanding, and promote student success.

Student Success Office
Campbell Student Union 400, (716) 878-4631

Student Success is responsible for coordinating, supporting and managing programs in Student Affairs that help to facilitate student retention and graduation through the synergy of the offices of Orientation and New Student Programs, Residence Life, and Student Life, and the Buffalo State Child Care Center. Student Success manages a comprehensive institutional approach to the administration of Student Success by collaborating with external and internal constituencies, faculty, staff, academic departments and student support services to attain student success goals. Student Success works closely with faculty and staff to promote best practices in student retention and coordinates Student Affairs division-wide assessment initiatives to ensure we are meeting student retention goals. The office also works with other units across the College to foster a campus climate that is welcoming and supportive of our diverse student population.

Undergraduate Research Office
South Wing 510, (716) 878-3093
http://www.buffalostate.edu/undergradueresearch/

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.

Transportation Services
As an urban campus, Buffalo State is a very accessible, walkable college and is located in a vibrant district and surrounded by trendy cafes, restaurants, shops, and Victorian-styled housing.

Information on various modes of transportation for traveling to and from Buffalo State, campus parking, and much more, is accessible at our Transportation Services Web site.
http://www.buffalostate.edu/financeandmanagement/x672.xml.

University Police
Chase Hall 100, (716) 878-6333
http://police.buffalostate.edu http://police.buffalostate.edu

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, and a found-property department.

To make arrangements for educational programs, complete the request form at
http://police.buffalostate.edu/educational-programs
http://police.buffalostate.edu/educational-programs.

Crime Statistics Availability
A copy of the Buffalo State campus crime statistics as reported annually to the U.S. Department of Education will be provided upon request. Please direct all requests to the Chief of University Police, Chase Hall, Buffalo State, 1300 Elmwood Avenue, Buffalo, NY 14222. (716) 878-6332. Information also can be obtained from the U.S. Department of Education Web site at http://ope.ed.gov/security http://ope.ed.gov/security or University Police’s Web site at https://police.buffalostate.edu/sites/police.buffalostate.edu/files/uploads/Documents/stats20092012.pdf

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 Parking Services office, Chase Hall 126 and at http://www.buffalostate.edu/parking.xml.

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 online at http://suni.buffalostate.edu/parking, in the Parking Services Office, Chase 126 (by Visa or MasterCard), or in the Student Accounts Office, Moot Hall 260. Payments may also be made via US Mail to SUNY Buffalo State Parking Services, Chase 126, 1300 Elmwood Avenue, Buffalo, NY 14222 (check or money order only). For more information, call the Parking Services Office at (716) 878-3041.

Veterans Services/Certification Office
Cleveland Hall 210, (716) 878-5907
www.buffalostate.edu/continuingstudies/veterans
http://www.buffalostate.edu/continuingstudies/veterans

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

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

Weigel Health Center
(716) 878-6711
www.buffalostate.edu/weigel
http://www.buffalostate.edu/weigel/

The Weigel Health Center provides health and wellness services for all registered students. In addition to diagnosing and treating illness and injury, the professional staff stresses health education and preventive medicine. Students are seen on an appointment basis or a walk-in basis if a clinician is available. There is no charge for most services. Laboratory services are available at Weigel Health Center. Some services may be sent to an outside lab which may result in insurance co-pays.

The Health Promotions program provides the campus community with workshops, trainings, events, and campaigns. Topics include: bystander intervention, wellness, stress, sexual health, tobacco prevention, alcohol and other drug abuse prevention. Internship and volunteer opportunities are available to students. Educational resources also are available for student research or classroom projects.

All students must be in compliance with New York State law regarding immunizations. Measles, mumps, and rubella immunizations are provided at no charge at the center for those students who need vaccinations. Students must be in compliance to register for classes. New York State Public Law and SUNY Buffalo State also requires that all students enrolled complete and return the Meningitis Information Response Form to Weigel Health Center. The form is available at www.buffalostate.edu/weigel
http://www.buffalostate.edu/weigel/.

All full-time students (12 credit hours or more) are required to have health insurance. Students with their own health coverage must submit proof of insurance by completing an insurance waiver [online] by stated deadlines. Students who have not completed waivers will be automatically enrolled in and charged for the SUNY Buffalo State Plan. Students who lose their existing insurance coverage at any time after completing the waiver are NOT automatically enrolled in the student health insurance plan. Once waived, students must request enrollment to be covered under the college’s student health insurance plan. Part-time students are not automatically enrolled but may apply for coverage.

International students must purchase SUNY international health insurance or have comparable coverage.

Whitworth Ferguson Planetarium
Science Building 115, (716) 878-4911
Department of Earth Sciences and Science Education
http://www.fergusonplanetarium.net
http://www.fergusonplanetarium.net

Due to construction of the new Science and Mathematics Complex, the Whitworth Ferguson Planetarium is now closed. A new state-of-the-art planetarium will be open in the final phase of construction, currently scheduled for 2018.

When re-opened, the Whitworth Ferguson Planetarium will continue to serve as a unique Buffalo State resource for the Western New York community. Students studying astronomy, geology, and other courses will use the planetarium as an immersive visualization laboratory. The planetarium will again offer public programs about the planets, stars, constellations, and recent advances in the exploration of the universe as well as programs for schoolchildren, scout groups and a variety of other private groups.
Admission to SUNY Buffalo State 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, marital or veteran status of individuals. Detailed information regarding procedures is available at www.buffalostate.edu/admissions. Questions and requests for applications should be directed to the Admissions Office, Moot Hall 110, (716) 878-4017; admissions@buffalostate.edu.

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

Early Decision
Buffalo State does not participate in Early Decision. Freshman admission decisions are made on a rolling basis beginning in mid-December for fall applicants. Processing continues until new -student enrollment is at capacity. Applicants are encouraged to submit their application as early as possible. Please refer to the Buffalo State website for additional information about the application process http://admissions.buffalostate.edu.

Early Admission
Well-qualified high school juniors may apply to Buffalo State for full- or part-time study during their senior year in high school under the early admission option. The college offers several options:
- Enrollment on a part-time basis while attending high school.
- Enrollment as a full-time freshman during the last semester of the senior year.
- Enrollment as a freshman for the entire academic year instead of completing the senior year of high school.

The college arranges with the high school to have remaining diploma requirements fulfilled by taking appropriate freshman courses; therefore, high school diploma requirements are met while college credit is earned. Early-admission students are not eligible for federal financial aid.

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

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

All international students must enroll in a group health insurance plan available through the college unless they carry a health insurance policy that provides comparable coverage and the plan is approved by the medical director of the Weigel Health Center. The premium is subject to change each year. There also are rates for coverage during any semester. Please see International Student Health Insurance in the Finance section for information regarding premium amounts. 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.
Transfer Students

A student who has completed at least 3 credit hours of college-level work at a college or university after receiving a high school diploma (or its equivalent) will be considered a transfer applicant. Transfer admission is based on academic performance in college and on space availability. If 24 or more credit hours have been completed at the time of application, the previous college academic record is reviewed; if fewer than 24 credits have been completed, a high school transcript and other supporting documents may be requested (see Freshman Admission). All colleges attended must be reported at the time of application.

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

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

Effective summer 2014, all new transfer and readmitted students at Buffalo State are required to fulfill Intellectual Foundations 2014 (IF 14) requirements regardless of their initial entry into the previous institution.

Students transferring to Buffalo State with an A.A., A.S., B.A., or B.S. degree are expected to:

- Satisfy the knowledge, competencies, and skills areas in the SUNY GER as defined by the 2010 Policy (Trustee Resolution 2010-006) of the Board of Trustees.
- Earn 30 credits of courses approved for SUNY GER.
- Satisfy the SUNY Buffalo State diversity requirement.

It is important to note that only credit is transferable. Credit is granted only from institutions listed on the application for admission. Grades, quality points, and cumulative averages do not transfer. Additional information on transfer credit policies is available 34 in the Academic Policies section. Students dissatisfied with credit evaluations may contact the Admissions Office.

Special Credit

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

<table>
<thead>
<tr>
<th>Source</th>
<th>Maximum Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Published examinations</td>
<td>No more than 18</td>
</tr>
<tr>
<td></td>
<td>credit hours may be</td>
</tr>
<tr>
<td></td>
<td>in general</td>
</tr>
<tr>
<td></td>
<td>examinations</td>
</tr>
<tr>
<td>2. Course challenge</td>
<td>30</td>
</tr>
<tr>
<td>3. Noncollegiate institutions</td>
<td>15</td>
</tr>
<tr>
<td>4. Proprietary institutions</td>
<td>15</td>
</tr>
</tbody>
</table>

Further details may be found in the section on Academic Policies 34.

Military Credit

Credit for military experience and training provided by the Armed Forces will be granted on a case-by-case basis. In addition to credit awarded for traditional college work, every effort is made to award credit for learning acquired in military service that satisfies degree completion, consistent with recommendations of the American Council on Education (ACE) and/or those awarded by the Community College of the Air Force. Official documents (AARTS, SMART, Community College of the Air Force or DANTES) transcripts should be submitted directly to the Office of Admissions.

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 SUNY Application Services Center by March 1 for fall admission or October 1 for spring admission.
- Provide four-year campuses with an official two-year college transcript, showing three semesters of completed studies, by March 15 for fall admission or by October 15 for spring admission.
- Complete any required supplemental application materials by April 15 for fall admission or by November 15 for spring admission.
The transfer guarantee becomes effective if applicants are denied admission at all SUNY four-year college choices. All applications at baccalaureate campuses must be complete.

Dual Admission Programs
Erie Community College
Finger Lakes Community College
Genesee Community College
Jamestown Community College
Monroe Community College
Niagara County Community College
Onondaga Community College

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

The admission, Intellectual Foundations 2014 (IF 14), and major requirements for the bachelor’s degree at Buffalo State will be those in effect at the time of the student’s application for dual admission at the two-year college. Further details are available from the Undergraduate Admissions Office at Buffalo State or the transfer counseling office at the participating two-year college.

Admission Procedures
The college participates in the SUNY application (freshman and transfer) and the national Common Application (freshman only). These forms can be completed and submitted online at www.suny.edu/student, admissions.buffalostate.edu, http://admissions.buffalostate.edu, or www.commonapp.org. Admission decisions are made on a rolling basis beginning in mid-September for spring applicants and mid-December for fall applicants. Processing continues until new-student enrollment goals have been met. Applicants are encouraged to submit their application and supporting materials as early as possible to receive timely consideration.

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

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

Refunds of the tuition deposit are made only under the following circumstances:
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.
If the college withdraws a conditional acceptance.
If the student withdraws to enter military service.
If the college comptroller deems that conditions beyond the student’s control warrant a refund and appropriate documentation is provided.

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

Non-degree Status
Non-degree status enables individuals to take college courses for credit without working toward a degree. Students may enroll in up to 11 credit hours of coursework each semester on a space-available basis. Credits earned may be applicable to a degree at the college if the student applies and is accepted as a formally matriculated student. The only entrance requirement is a high school diploma or its equivalent. Students who have been academically dismissed from any institution must wait one full year from the time of dismissal before enrolling under non-degree status. You may apply online https://bscintra.buffalostate.edu/non-degree/ or download and complete a one-page non degree application http://admissions.buffalostate.edu/sites/admissions.buffalostate.edu/files/uploads/Documents/nondegreeapp514.pdf to be submitted to the Admissions Office. Non-degree students are not eligible for financial aid.

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

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

Readmission
Students who attended Buffalo State previously in a matriculated status and wish to re-enroll must apply for a specific program and have their applications reviewed by the appropriate department. Readmitted students are required to follow the major/degree requirements in effect for the semester in which they are readmitted, as outlined in the undergraduate catalog for that semester/year. If other courses have been taken at other institutions since leaving the college, official transcripts must be submitted.
Undergraduate and graduate students who discontinue attendance without taking a leave of absence can register for classes, without applying for readmission, for up to four fall and spring semesters beyond the semester in which they were last registered, unless they attend another institution, in which case a readmission application is required. Baccalaureate graduates and undergraduate students with less than a 2.0 cumulative average retain registration eligibility for only one fall or spring semester beyond the semester in which they were last registered. Effective summer 2014, all new transfer and readmitted students at Buffalo State are required to fulfill Intellectual Foundations 2014 (IF 14) requirements regardless of their initial matriculation date into a regionally accredited four-year institution or two-year college. Students who have been academically dismissed must wait one full year from the time of dismissal before being considered for readmission. If readmitted, all coursework taken previously will be considered in computing the cumulative average.

Readmission forms http://www.buffalostate.edu/admissions/documents/readmissionapp0612.pdf are available online.

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, including online courses. A number of scheduling options are available beginning in late May and running through mid-August. Summer Session courses and course registration dates are posted in January online at www.buffalostate.edu/summer. Students from other colleges are required to complete a non-degree application for admission in advance of registration.

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

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

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

Student Retention
The college routinely collects and maintains data regarding student persistence and graduation rates. Buffalo State graduation rates compare most favorably with national benchmarks, averages, and graduation rates for other similar public metropolitan institutions. Further information is available upon request.
Electronic bills (eBills) are now the exclusive billing method for all Buffalo State student account balances. Paper bills are no longer mailed to students. Students should print their QuikPAY statement if needed. All e-billing notifications will be sent to your Buffalo State student email address.

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

Room and board charges must be paid prior to arrival on campus. These charges are usually included in the bill covering tuition and fees. The rates listed below are subject to review and may change without prior notice. Further information concerning payment is available in the Student Accounts Office, Moot Hall 260, (716) 878-4121, www.buffalostate.edu/studentaccounts.

**Explanation of Terms**

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

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

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

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

**Tuition**

Tuition for full-time Buffalo State undergraduate students is $3,085 per semester for New York State residents and $7,910 per semester for out-of-state students. Tuition for part-time undergraduate students is $257 per credit hour for New York State residents and $659 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 $75 per semester for full-time students and $6.25 per credit hour for part-time students is collected to support the activities of more than 80 student groups on campus.

**Health Fee**

All full-time students are required to pay a $145.00 per-semester health fee; part-time students pay $12.10 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 $146.00 per semester for full-time students and $12.20 per credit hour for part-time students is collected to support intercollegiate athletics.

Technology Fee
A mandatory technology fee of $158.00 per semester for full-time students and $13.20 per credit hour for part-time students is collected to provide enhancements to campus technology.

Transportation Fee
A mandatory fee of $52.00 per semester for full-time students and $4.35 per credit hour for part-time students is collected for the Buffalo State-Niagara Frontier Transportation Authority (NFTA) CRAM (College Riders Accessing Metro) Pass Program. Under this program, all undergraduate students receive an NFTA Metro Pass, which provides unlimited use of both the extensive NFTA bus services on and around campus and all NFTA bus and rail services throughout the region.

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

Room and Board
Residence hall room rates are $3,530 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 $2,287 per semester. Residence hall room rates and meal plan rates are subject to change.

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

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

International Student Health Insurance
All international students must enroll in a group health insurance plan available through the college. If a student carries a health insurance policy that provides coverage comparable to the SUNY-mandated health insurance, it may be accepted as an alternative, if approved by the medical director of the Weigel Health Center. The premium was $1,184.75 per year for August 2013 through August 2014. 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 2014–2015 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 2014–2015 Fall and Spring Semesters
(New York State Residents)

<table>
<thead>
<tr>
<th></th>
<th>Commuter</th>
<th>Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Costs (per semester)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>$3,085.00</td>
<td>$3,085.00</td>
</tr>
<tr>
<td>Fees</td>
<td>$591.50</td>
<td>$591.50</td>
</tr>
<tr>
<td><strong>Total Fixed Costs</strong></td>
<td>$3,673.50</td>
<td>$3,673.50</td>
</tr>
<tr>
<td><strong>Variable Costs (per semester)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and supplies</td>
<td>$510.00</td>
<td>$510.00</td>
</tr>
<tr>
<td>Maintenance at home</td>
<td>$2,396.00</td>
<td>—</td>
</tr>
<tr>
<td>Room &amp; Board</td>
<td>—</td>
<td>$5,926.00</td>
</tr>
<tr>
<td>Miscellaneous expenses</td>
<td>$608.00</td>
<td>$608.00</td>
</tr>
<tr>
<td>Transportation</td>
<td>$826.00</td>
<td>$520.00</td>
</tr>
<tr>
<td><strong>Total Variable Costs</strong></td>
<td>$4,340.00</td>
<td>$7,564.00</td>
</tr>
<tr>
<td><strong>Estimated Total Costs/Semester</strong></td>
<td>$8,013.50</td>
<td>$11,273.50</td>
</tr>
<tr>
<td><strong>Estimated Annual Cost</strong></td>
<td>$16,027.00</td>
<td>$22,475.00</td>
</tr>
<tr>
<td>(two semesters)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Automatic Payment Plan
The college has established a payment plan to assist students and their families in meeting the cost of tuition, fees, room, and board. Information and online enrollment is available from the Student Accounts website at www.buffalostate.edu/studentaccounts.

Refund Policies
All financial refunds are sent to students in the following order:
1. Transferred electronically to the student’s bank account if a direct deposit application is on file in the Student Accounts Office.
2. Mailed to the permanent address of record on file in the Registrar’s Office. Students are responsible for informing the Registrar’s Office of any address change.

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

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

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

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

Activity Fee
College Fee
Health Fee
Athletic Fee
Technology Fee
These fees are refunded only when registration is canceled during drop/add period.

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

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

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

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

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

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

Academic Transcript Fee
There is a $5 fee for each transcript request.

Returned-Check Fee
A $20 fee is charged for each check returned by the bank or any declined credit card transaction. The fee is nonrefundable 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.
The goal of the Financial Aid Office is to assist students with securing sufficient funding to cover their educational expenses. Annually, 85 percent of all undergraduate students receive some form of financial aid (federal, state, institutional, and/or private) while attending SUNY Buffalo State.

Staff members in the Financial Aid Office, Moot Hall 230, are available year-round to assist students and their families with the financial aid application process. The staff adheres to the industry’s Codes of Conduct.

http://www.buffalostate.edu/financialaid/x1135.xml

Contact the Financial Aid Office at (716) 878-4902 and/or finaid@buffalostate.edu. Additional financial aid information is available on-line at www.buffalostate.edu/financialaid.

Application Procedures
There are multiple steps in the financial aid application process. Students must file the Free Application for Federal Student Aid (FAFSA) after January 1st of each year to apply for aid for the upcoming year. We encourage students to apply by March 1st, Buffalo State's priority filing deadline date.

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

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

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

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

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

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

To be considered eligible for federal financial aid, students must:
• be in good academic standing;
• be a U.S. citizen or eligible non-citizen;
• be registered for selective service (males only);
• be matriculated;
• be registered for at least 6 credits (except for Pell Grant and TEACH Grant);
• not be in default on a previous educational loan;
• have a high school diploma or equivalent: General Education Development (GED) certificate.
Return of Title IV (R2T4) Funds

Federal regulations mandate a Return of Title IV Funds calculation when a student receiving Title IV financial aid (e.g., Pell, Perkins, SEOG, and Direct Loans) completely withdraws. If a student never attends, ceases enrollment or withdraws from all courses in the semester and he/she received federal financial aid, the college must determine if these funds are required to be returned to the appropriate financial aid programs within forty-five (45) days.

R2T4 Calculation

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

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

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

Unofficial Withdrawal

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

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

Academic Withdrawal

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

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

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

Withdrawal from Modular (Mini-Session/Term) Courses

A student who withdraws from a modular course(s) before the start of a future course within the same payment period (semester) will be considered as withdrawn for Return of Title IV (R2T4) purposes.

An exception is made if the student provides written notification affirming his/her intent to attend a future
course (prior to start of the course) within the payment period or the student provides affirmation of attendance by enrolling/registering in a future course within the same payment period after the original withdrawal date. Written notification MUST be received prior to the first day of the future course.

Notification of attendance in a future course must be made in writing by submitting the Affirmation of Future Attendance form. It is the responsibility of the student to provide complete, accurate and timely information to the Financial Aid Office, Moot Hall, 230.

Unearned Aid

A determination regarding the percentage of the semester the student completed must be performed and this will reveal the percentage of the federal Title IV aid that the student has earned. The total amount of federal aid disbursed to the student, or that could have been disbursed to the student minus the amount of federal aid earned by the student equals the amount of federal loan(s) and grant(s) that is unearned and that must be returned: (688.22(e)).

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

\[ \text{Total Title IV Disbursable Aid} - \text{(minus) Title IV Aid Earned} \]

\[ = \text{Title IV Loan(s) and Grant(s) to be Returned} \]

If the college is required to return any unearned aid, we will reduce or cancel the federal award(s), debit the student’s account and return the unearned portion of aid to the U.S. Department of Education. This adjustment may result in a balance due to Buffalo State. It is the student’s responsibility to repay the “unearned” portion of aid that was charged back to the student account. Students will

Post-Withdrawal Disbursement

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

R2T4 Distribution of Financial Aid Refund

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

1. Unsubsidized Federal Direct Stafford Loan
2. Subsidized Federal Direct Stafford Loan
3. Federal Perkins Loan
4. Federal Direct Parent Loan for Undergraduate Students
5. Federal Pell Grant
6. Federal Supplemental Educational Opportunity Grant
7. Federal Graduate Plus Loans for Graduate Students

Notification

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

Satisfactory Academic Progress (Federal)

Satisfactory Academic Progress (SAP) is the process used to determine if a student is making acceptable progress toward a degree or certificate. At the end of each payment period (semester), a review of a student’s progress is conducted. A student’s failure to meet any of the three of the Satisfactory Academic Progress standards (for all terms enrolled, not just those terms that aid was received) may result in loss of federal aid eligibility.

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

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

1. Cumulative Grade Point Average (GPA) - Qualitative Component
   a. A student must have a minimum cumulative GPA of 2.0 (Buffalo State’s GPA only).

Minimum Pace rate for Attempted Credit Hours - Quantitative Component
   a. A student must complete at least two-thirds (66.67%) of all cumulative attempted credit hours.

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

c. The following grade designations are considered to be attempted credit hours but are not considered to be successfully completed: I, N, X, W, U, E, EV, IP and F grades.

d. All courses removed through the academic clemency process will be counted as attempted credit hours.

   On a case-by-case basis, academic clemency may be subject to appeal.

e. Noncredit remedial courses will not be counted (effective fall 2013).

f. Transfer credit hours posted to the official transcript record will be counted as attempted credit hours.

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

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

   b. Federal financial aid eligibility will be terminated when a student has attempted 180 credit hours (for a
Federal Financial Aid Sources

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

Eligibility for the Federal Pell Grant

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

Eligibility for Federal Supplemental Educational Opportunity Grant (FSEOG)

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

Eligibility for the Federal TEACH Grant

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

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

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

Eligibility for Federal Perkins Loans

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

Eligibility for Federal Direct Loans

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

Federal Direct Subsidized Loans are for students with financial need. Students are not charged interest while in school at least half time and during grace periods and deferment periods. A first-time borrower as of July 1, 2013, is no longer eligible for a Federal Direct Subsidized Loan once the borrower has received Federal Direct Subsidized Loans for a period that is 150% of the published length of the borrower’s current educational program.

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

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

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

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

Eligibility for Federal Direct PLUS Loan for Parents of Undergraduate Students

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

If a parent receives credit approval, he or she will also need to complete a Direct PLUS Master Promissory Note at www.studentloans.gov https://studentloans.gov/myDirectLoan/index.action. If a parent is applying for a PLUS loan for more than one student in college, a separate note is required for each student. If more than one parent is applying for a PLUS loan for the same student, each parent must complete a note.

Eligibility for Federal Work-Study

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

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

Scholarships

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

Eligibility for New York State Financial Aid

Eligibility for Tuition Assistance Program

The Tuition Assistance Program (TAP) is a grant program for New York State residents who are enrolled full time
To be eligible for TAP, students must:
- Be accepted into a major prior to their completion of 60 credit hours
- Pre-major and undeclared status are unacceptable for TAP purposes once a student has earned 60 credit hours
- Enroll full-time each semester only in courses that apply to the program of study or major
- Minimum of 12 new credit hours required
- Enrollment in course(s) previously failed or withdrawn from is allowed as part of the minimum 12 credit hours
- Maintain satisfactory academic progress according to the published TAP chart below.

Students enrolled for less than 12 credit hours can apply for Aid for Part-Time Study (APTS).

SUNY Tuition Credit (SUNYTC)

SUNYTC is a SUNY grant for TAP-eligible students that helps to offset the rising tuition cost.

TAP Academic Eligibility Chart***

<table>
<thead>
<tr>
<th>Before being certified for this payment</th>
<th>TAP Award Payment Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Having accrued this many TAP Points**)</td>
<td>1st</td>
</tr>
<tr>
<td>A student must have</td>
<td>0</td>
</tr>
<tr>
<td>completed this many credit</td>
<td></td>
</tr>
<tr>
<td>hours with a passing or failing grade</td>
<td></td>
</tr>
<tr>
<td>in the prior semester</td>
<td></td>
</tr>
<tr>
<td>Must have accrued at least this</td>
<td>0</td>
</tr>
<tr>
<td>many credit hours</td>
<td></td>
</tr>
<tr>
<td>With at least this cumulative GPA</td>
<td>0.0</td>
</tr>
</tbody>
</table>

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

Eligibility for Aid for Part-Time Study

Aid for Part-Time Study (APTS) is a grant program for New York State residents who are enrolled for 3–11 credit hours per semester.

Applications are available on-line at http://www.buffalostate.edu/financialaid/x487.xml and in the Financial Aid Office, Moot Hall 230.

Satisfactory Academic Progress (State)

To receive TAP/APTS, students must be in good academic standing as defined by 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, above.

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

Students who fail to maintain good academic standing become ineligible for TAP/APTS until they achieve the appropriate standards. In exceptional situations, students who become ineligible may be granted a one-time waiver of their ineligibility. All waiver requests should be considered on an individual basis.
submitted to the Academic Standards Office, Twin Rise 100.

Arthur O. Eve Educational Opportunity Program (EOP)
EOP provides educational access for academically and economically disadvantaged students who reside in New York State. EOP is an alternative means of acceptance to SUNY Buffalo State for students who show ability and motivation despite the effects of economic and academic struggles. Students who do not meet the college's general academic admissions standards may instead qualify for admission through EOP. Application for the program is made on the SUNY Application for Admission. If a student isn't admitted initially into the college through EOP, he or she cannot join the program at a later time.

Military, Veteran, and Dependent Benefits
(Location: Cleveland Hall Room 210)
Military, Veterans, and/or Dependents (i.e., Spouse/Child) may be able to receive aid for approved postsecondary study. To find out what your eligibility is, please contact Veteran and Military Services at (716) 878-5907.

Aid for Students with Disabilities
Students with disabilities pursuing higher education may be eligible for assistance through the state Adult Career and Continuing Education Services – Vocational Rehabilitation

Applications and eligibility requirements may be obtained at the Buffalo-area offices or at your local area offices for ACCES-VR and CBVH.

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

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

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

Eligibility for Summer Aid
Students wishing to apply for summer financial aid must complete the supplemental Summer Aid Application form that becomes available by early-April each year.

Summer financial aid eligibility is predicated upon a student's remaining eligibility from the fall and spring semesters. Therefore, students should seek guidance from the Financial Aid Office before registering for summer classes.

Eligibility for Study Abroad Programs
Many Buffalo State students take advantage of the National Student Exchange (NSE) and Study Abroad programs. Financial aid is available for both of these 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 federal financial aid for participation in the NSE and Study Abroad programs. To receive TAP for either of these programs, tuition payment must be to a New York State institution.

Award Notification
After you are accepted and have a valid Free Application for Federal Student Aid (FAFSA) on file, the Financial Aid Office will generate a SUNY Award Letter detailing the aid you are eligible to receive based on program eligibility requirements. Students must accept, revise, or decline award(s) by the prescribed deadline date. Failure to accept aid by the deadline date may result in the loss of some types of financial aid.

The Financial Aid Office will send a hard copy SUNY Award Letter to all new students (freshmen, transfer and graduate). Continuing students will receive an e-mail notification directing them to view their award package on-line at the Banner Self-service site. All students are given the opportunity to accept as is, reduce or decline any award offered via Banner Self-service. Some aid programs require additional steps to complete the application process.

All students are responsible for monitoring their campus e-mail and their financial aid status on-line by accessing Banner Self-service.

TAP Notification
New York State TAP award notifications are sent to students directly from HESC shortly after the state budget is set each year. TAP awards are school specific and must
have "SUC Buffalo" on the certificate to be valid at Buffalo State. Actual award dollars are sent directly to the Student Accounts Office.
The following college academic procedures, policies, and guidelines apply to all students and all college sessions. Students are responsible for determining their academic programs and for meeting every degree requirement. Faculty or professional staff members who act as advisers are obligated only to assist students in meeting this responsibility. Clarification of any requirements for the baccalaureate degree may be obtained from the academic adviser, department chair, or academic dean. Check with the Academic Standards Office, Twin Rise 100, (716) 878-5222, for clarification of other regulations or procedures. A list of academic policies can be found at www.buffalostate.edu/academicaffairs/x481.xml.

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

Role of Students and Faculty in the Advisement Process
Effective academic advisement is the interaction between a qualified adviser who is knowledgeable and supportive and a serious student who is motivated and receptive, as together they evaluate and plan the student’s course of study. The task of the adviser is to provide guidance and information for the student to make efficient progress in the pursuit of an academic goal. The adviser is responsible for being well informed and ready to provide aid in the selection of specific areas and courses, and for helping the student 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 Educational Rights and Privacy Act (FERPA)
The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student’s education records within 45 days of the day the college receives a request for access. A student should submit to the registrar, dean, head of the academic department, or other appropriate official a written request that identifies the record(s) the student wishes to inspect. The college official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the college official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

The right to request the amendment of the student’s education records that the student believes are inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA. A student who wishes to ask the college to amend a record should write the college official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the college decides not to amend the record as requested, the college will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The right to provide written consent before the college discloses personally identifiable information from the student’s education records, except to the extent that FERPA authorizes disclosure without consent. The college discloses education records without a student’s prior written consent under the FERPA exception for disclosure to school officials with legitimate 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 as its agent to provide a service
instead of using college employees or officials (such as an attorney, auditor, or collection agent); a person serving on the College Council; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks; and National Student Clearinghouse officials. A school official has a legitimate educational interest if the official needs to review an education record to fulfill his or her professional responsibilities for the college. Upon request, the college also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

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

a. Name, address, electronic mail address, telephone listing, dates of attendance, enrollment status (e.g., undergraduate or graduate; full-time or part-time), class level, and academic adviser.

b. Most recent educational agency or institution attended; major field of study, degrees, honors, and awards received.

c. Participation in officially recognized activities and sports, weight and height of members of athletic teams, date and place of birth, photographs.

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

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

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 is Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-5901.

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

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

Students should check their Gmail account regularly, especially during registration. Students on a waitlist should check their Buffalo State Gmail at least daily. Email notifications are sent when a seat becomes available. All correspondence to faculty members or college staff should be sent from a student’s Buffalo State Gmail account.

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

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

To graduate in four years (eight semesters), at least 15 credits must be earned each semester to earn the minimum 120 credits required for a degree. Some majors require more than 120 credits.
Attendance
There is no uniform attendance policy set by the college. Attendance regulations are established by each instructor and will be distributed at the start of each semester.

Auditing Courses
Persons may audit or take courses without earning credit, on a space-available basis, 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. Auditors must submit a non-degree application http://admissions.buffalostate.edu/sites/admissions.buffalostate.edu/files/uploads/Documents/nondegreeapp514.pdf, along with supporting documents from the appropriate faculty, to the Admissions Office, Moot Hall, before auditing a course.
Exception: Auditing is not permitted in any study-abroad program.

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

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

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

Students withdrawing from some coursework may be eligible for a refund in accordance with the college refund schedule, which is posted each term at www.buffalostate.edu/studentaccounts. Beyond the end of the refund schedule’s time limit, full charges are assessed.

Student-teaching courses have different deadlines. Students should check with their departments.

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

Before withdrawing from a course, careful thought should be given to the reasons for withdrawing and possible consequences. Course Withdrawals can have a negative impact on both your progress toward graduation and eligibility for financial aid. Withdrawal from Course should be used infrequently and considered an action of last resort. It is to your advantage to read the instructions under Withdrawal from Course at http://www.buffalostate.edu/registrar/x741.xml before withdrawing.

Academic Clemency
Any student is eligible to apply for Academic Clemency when he or she applies for matriculated readmission to the college through the Admissions Office. The student’s last semester of enrollment must have been at least three years prior to the application for readmission. Students can request clemency for up to two semesters of work (consecutive or nonconsecutive). These semesters 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 the semester(s) at Buffalo State; it is not selectively applied.

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

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

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

Leave of Absence

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

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

Withdrawal from College

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

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

Grading

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

Grades awarded by the college:
A = Superior
A–
B+

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
</tr>
<tr>
<td>A–</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>Above average</td>
</tr>
</tbody>
</table>
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 to take a course for credit without receiving a letter grade of A, B, C, D, E, or EV. Students may enroll in one course each semester or summer on a pass-fail basis. All sessions combined make up the summer semester. A pass (P) grade provides credit but no quality points and is not counted in total hours used to determine cumulative average. A fail (F) grade is treated as a failure although the hours are not used in computing the cumulative average.

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

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

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

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

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

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A−</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B−</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Credit</th>
<th>Quality Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 161</td>
<td>B−</td>
<td>4</td>
<td>(2.67)</td>
</tr>
<tr>
<td>SOC 101</td>
<td>A</td>
<td>3</td>
<td>(4)</td>
</tr>
<tr>
<td>ENG 250</td>
<td>E</td>
<td>3</td>
<td>(0)</td>
</tr>
<tr>
<td>HEW 101</td>
<td>C</td>
<td>1</td>
<td>(2)</td>
</tr>
<tr>
<td>PHI 220</td>
<td>D+</td>
<td>3</td>
<td>(1.33)</td>
</tr>
</tbody>
</table>

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. In the even that the original instructor is incapacitated or otherwise unavailable, a change of grade may be submitted by the department chair. The appropriate associate dean must approve all grade changes and forward the grade change form to the Registrar’s Office, Moot Hall 210. 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.

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

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

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

Declaring an Academic Major
All students must declare a major before completing credits that would result in achieving "junior class level" standing (60 hours). It is recommended that all students declare a major upon completing 30 credit hours. Before declaring a major, students should seek the advice of the chair of the department or the associate dean of the school/college responsible for the major. A Change of Major form, available from the chair or the associate dean, must then be completed and sent to the Registrar’s Office. Some academic programs have special requirements that the student must meet before being admitted as a major. For example, fine arts candidates must submit a portfolio of representative work. The department chair or program coordinator can provide information on specific requirements.

Changing a Major
Incoming first-year students who want to change their major before the start of their first semester may initiate the major change process with the University College Dean’s Office. First-year students who want to change their major after the start of their first semester may initiate the major-change process by contacting the department office of the new major to gain the approval of the department chair.

Continuing students who want to change their major may initiate the major change process by contacting the department office of the new major to gain the approval of the department chair.

If the department chair of the new department approves the change, a Change of Major Form will be forwarded to the Registrar’s Office for recording. Change requests should be made at least four weeks before registration for the next semester to allow students to register for courses in the new major. Departments may refuse a student’s request for acceptance to a major based on published requirements and prerequisites.

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 the following 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. An exception to this requirement is the bachelor of fine arts, 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 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. A minor may include no more than 9 total hours that overlap with the student’s major disciplinary requirements. A minor may include no more than 2 courses at a lower division level. Students who complete the minor with a minimum GPA of 2.0 will have the minor recorded on their official transcript.

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

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

For a list of minors, please refer to Undergraduate Minor Programs at a Glance chart on page 60.

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

Basic Writing Requirement for Freshmen
Entering freshmen will be placed in the appropriate writing-level course through the College Writing Program’s placement policy. See www.buffalostate.edu/writingprogram for the placement policy. Students are placed at one of the three levels:
- CWP 099
- CWP 101
- CWP 102

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

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

Students who are considering taking a composition course at another institution that they expect will fulfill the 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 two course (2–6 credit hours) Writing Across the Curriculum requirement for all students to enhance and reinforce basic writing skills learned in CWP 101 and CWP 102. Taking two Writing Across the Curriculum (W) courses satisfies this requirement. Like many courses offered on this campus, W courses include both formal and informal writing. W courses, however, emphasize writing as a major course component for both instruction and evaluation. Instructors employ writing-to-learn techniques as a major way of teaching. In such courses, students learn to use writing as a tool that can be used in all their learning processes. A significant portion of the coursework, and subsequently grades in these W courses, will be allocated on the basis of the student’s writing performance. Every piece of formal writing submitted as part of the requirement should meet the following minimum standards, as appropriate to the course and the nature of the assignment:
- Clearly stated purpose/main idea/thesis
- Adequate support-proofdevelopment of main idea
- Clear and logical organization of information
- Complete sentences
- Standard usage of grammar, punctuation, and spelling
- Correct documentation (interior documentation, references, and/or bibliography) in a format appropriate to the field
- Evidence of critical thinking

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

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

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

Graduation Requirements

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

1. File Application for Undergraduate Degree with the Registrar’s Office, Moot Hall, by the specified date. Failure to make application before the date may eliminate the student from the Commencement program and delay the granting of the degree.

Students must meet all financial obligations to the college and return all college property.

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. The minimum cumulative GPA for courses taken in a minor is 2.0.

b. Students must complete the 33-39 credit hours of Intellectual Foundations 2014 requirements.

c. All candidates must have completed a minimum of 33 credit hours of upper-division coursework, courses generally considered advanced and numbered 300-499.

d. A minimum of 32 credit hours, including the last 16, must be completed at the college.

e. A minimum of 120 academic credit hours must be completed.

f. Students are required to successfully complete 4-6 credit hours of “writing intensive” courses (two courses) indicated by the designation W following the course number.

g. Students must complete at least 6 credit hours in their major at Buffalo State.

Education majors leading to certification for teaching in the early childhood and upper-elementary grades must fulfill a drug-education requirement and should file a certification application with the Teacher Certification Office, Chase Hall 222.

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 website at www.buffalostate.edu/commencement.

Dean’s Honor List

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

1. Must earn a minimum term GPA of 3.5.

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.

All courses must be taken at Buffalo State.

Part-Time Dean's List

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

Eligibility also requires the following:

1. A minimum GPA of 3.5 for all coursework taken in that academic year

No grades of I, N, X, or U in a course during that year

Completion of at least 12 hours of letter grade work per academic year

Baccalaureate Academic Honors/Gold Honors Cord

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

Degree candidates with a minimum GPA of 3.5 who have completed or have in progress 54 credit hours at Buffalo State may be eligible for academic honors. These students are invited to wear a gold cord at Commencement to signify their academic achievement, and they are recognized in the Commencement program. Honors cords are issued to degree candidates based on their current GPA in their last semester. 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.

Muriel A. Howard Honors Program
The Muriel A. Howard Honors Program addresses the needs of academically gifted students. Open to a select number of incoming freshman, transfer, and local students, the Muriel A. Howard Honors Program requires students to earn honors credits across disciplines in the arts, humanities, social sciences, math/science, and applied science and technology. Students must maintain a minimum cumulative GPA of 3.5 to remain in the program. Students interested in this program should contact the Admissions Office at (716) 878-5713.

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

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

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

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

In accordance with the Buffalo State Advisement Policy, students on Academic Warning may be subject to an advisement hold in order to encourage a discussion with the student’s academic adviser to help build an effective academic strategy before the student may register for additional coursework at Buffalo State. An extended Academic Warning semester may be granted at the discretion of the college if the student has demonstrated exceptional academic progress during the Academic Warning term. Students on Academic Warning may be ineligible for financial aid based on failure to meet federal and/or state aid eligibility standards. Students on Academic Warning are limited to registering for 15 credits per semester, unless special permission to register for additional credits is granted by their Dean’s office.

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

In accordance with the Buffalo State Advisement Policy, students on Academic Probation may be subject to an advisement hold in order to encourage a discussion with the student’s academic adviser to help build an effective academic strategy before the student may register for additional coursework at Buffalo State. Students on Academic Probation may be ineligible for financial aid based on failure to meet federal and/or state aid eligibility standards. Students on Academic Probation are not eligible to participate in extracurricular college activities. Students on Academic Probation are limited to registering for 15 credits per semester, unless special permission to register for additional credits is granted by their Dean’s office.

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

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

Students who have been academically dismissed must wait one full year from the time of dismissal before being considered for readmission and/or nonmatriculated enrollment at Buffalo State. A dismissed student may not attend Buffalo State Summer or J-Term Session courses. If readmitted, all coursework taken previously at Buffalo State will be considered in computing the cumulative average, unless the student has opted for Academic Clemency. All prior Buffalo State coursework, including clemency-bearing credits, will be used in calculating the readmitted student’s federal and state financial aid eligibility at Buffalo State. Readmission forms are available in the Admissions Office, Moot Hall 110.

Academic Eligibility for Financial Aid

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

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. Textual similarity detection software compares submitted student text to a database 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 testing service. When similarities between student text and an existing document are found, the software identifies those similarities for instructor and/or student review. (Similarity alone is not evidence of academic misconduct, as such material may be correctly cited.) This software may be used as an educational tool to assist students in learning how to properly cite resources, decrease instances of academic misconduct, and/or assist in the identification of acts of academic misconduct.

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

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

Graduate Courses

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 undergraduate request to enroll in a graduate course must be made by contacting the academic department offering the course. Permission must be granted by the instructor and department chair.

Graduate Programs of Study

The Graduate School offers 40 master’s programs, two certificate of advanced study programs, five graduate certificate programs, and 9 postbaccalaureate teacher certification programs. For more information see postbaccalaureate and graduate program options. Nearly 2,000 students enrolled in graduate study at Buffalo State find that a graduate degree allows them entry into new or related fields or eligibility for promotion in their current fields.

Specialized graduate degree programs include art conservation, creative studies, educational technology, teaching bilingual exceptional individuals, literacy specialist and a certificate of advanced study in art conservation. While teacher education remains a tradition at Buffalo State, other graduate programs in adult
education, applied economics, and higher education and student affairs administration are unique within SUNY. New and applied programs in music education, great lakes ecosystem science, public and nonprofit management (MPA), museum studies, professional applied and computational mathematics, science education, and students with disabilities 7-12 generalist and students with disabilities 7-12 subject extensions offer exceptional opportunities for professional advancement.

Other notable graduate degree programs include criminal justice, industrial technology, applied economics, biology, English, history, and multidisciplinary studies.

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 the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores. Admissions applications, application online fee payment, transcript request forms, and supplemental department materials are available to download
www.buffalostate.edu/graduateschool/admissions
http://www.buffalostate.edu/graduateschool/admissions or contact the Graduate School Office, Cleveland Hall 204 or email gradoffc@buffalostate.edu.

In accordance with federal regulations, all students are required to submit a final transcript with a degree posted to the Graduate School by the start of their graduate work for financial aid eligibility.

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

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

Course Challenge
Each department determines which courses may be challenged by examination. Matriculated undergraduate students may earn credit hours by challenging the specially designated courses. The following rules apply:
1. Total challenge credit may not exceed 30 credit hours.

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

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

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

Freshmen are also eligible to take courses by contract under special circumstances. They may do so if
1. they are in their second semester of a one-year course and have a grade of A or B in the first semester part of the course;
they have successfully challenged the preceding course in the sequence;
they have entered the college with excellent high school records or have done honors work in pertinent fields in high school.

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

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

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

Cross-Registration
There are two cross registration programs available for undergraduate students who are full-time at Buffalo State and are matriculated (have declared a major).

The SUNY Cross Registration Agreement is for students cross-registering at a SUNY college. Students may cross register for up to 6 credit hours per semester (fall and spring). Transcripts are forwarded automatically to Buffalo State at the end of the semester. Courses are recorded as transfer credits (credit hours and grade do not count in cumulative GPA). If a student drops below full-time status at their home institution, they may be liable for tuition at the host institution. "Course equivalency" information must be provided on the form in addition to approval of the department chair offering the course equivalent at Buffalo State, approval of department chair in which student is majoring, and student signature. All forms must have appropriate signatures before they are returned to the Registrar’s Office for a verification signature. Students must then take the completed cross-registration approval to the appropriate campus where they will register according to the procedures at that campus.

The Western New York Consortium of Registrar’s Cross-Registration Agreement is for students cross-registering at one of the private colleges that participate in the WNY Consortium Agreement. Students may enroll in one course per semester (fall and spring). Transcripts are forwarded automatically to Buffalo State at the end of the semester. Courses are recorded as they have been taken at Buffalo State (credit hours and grade counts in cumulative GPA). If a student drops below full-time status at their home institution, they may be liable for tuition at the host institution. Advisor or department chair signature is required along with student signature. All forms must have appropriate signatures before they are returned to the Registrar’s Office for a verification signature. Students must then take the completed cross-registration approval to the appropriate campus where they will register according to the procedures at that campus.

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

Cross-registration forms are available in the Registrar’s Office, Moot Hall, or online at www.buffalostate.edu/registrar/forms.xml http://www.buffalostate.edu/registrar/forms.xml.

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.

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.

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

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

Project (495)
Upper-division students may undertake a project related to a required course for up to 3 credit hours per project. No more than 6 credit hours of academic project work are allowed. Application forms are available in the academic department and the Registrar’s Office, Moot Hall, and must be filed with that office by the established deadline each semester.

Internship (488)
Internship programs provide students with guided and supervised field experiences (experiential learning) as part of their degree programs. Students who wish to participate in the program must have a minimum GPA of 2.0 and a background of courses or experience within the area of interest. Approval for experiential learning situations must be obtained from either the student’s adviser or the chair of the department within which the student is a major, the supervising faculty member, and the chair of the
department within which credit will be granted. An individual student will be permitted to apply a maximum of 15 credit hours toward the baccalaureate degree.

**Topics Courses (189 and 389)**

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

**Military Service Educational Experience**

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

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

**Credit by Evaluation**

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

<table>
<thead>
<tr>
<th>Source</th>
<th>Maximum credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published examinations</td>
<td>30</td>
</tr>
<tr>
<td>No more than 18 credit hours may be in general examinations.</td>
<td></td>
</tr>
<tr>
<td>Course challenge</td>
<td>30</td>
</tr>
</tbody>
</table>

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.

*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 ITT Technical Institute. Such credit is applied primarily to the major and is determined by the appropriate department.

**Transcript of Academic Record**

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

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

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

**New York State Certification**

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

Graduates are able to apply for a New York State Teacher Certificate online through the TEACH Online Service system at www.highered.nysed.gov/ctert/teach. In order for the Teacher Certification Office to provide verification of program completion to the New York State Office of Teaching, students need to provide the certification office with permission to release this information. Release forms may be obtained from the office’s website or the Teacher Certification Office.
All teacher certification candidates who are applying for Initial Certification and Professional Certification through our Teacher Certification Office are required to complete two clock hours of coursework or training in the following seminars:

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

Information regarding these seminars may be obtained from departmental offices and the Teacher Certification Office or website. Students completing an early childhood education and/or childhood education B.S. program through Buffalo State 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

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 Works, the audit system located at http://www.buffalostate.edu/registrar/dwforstudent.xml http://www.buffalostate.edu/registrar/dwforstudent.xml The system records the major and general college requirements that have already been fulfilled, and those that remain.

Departments reserve the right to refuse to accept transfer credit hours in fulfillment of their own major requirements. Whether or not a course fulfills a major requirement may be open to discussion with the department chair or 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 website at www.buffalostate.edu/academicstandards/x463.xml.

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

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

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

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

Student Complaints Regarding Academic Issues
The procedures outlined in the next section pertain to complaints about academic issues other than those dealing with waiver of collegewide academic regulations or graduation issues, which are addressed by petitions to the Academic Appeals Committee. The college seeks to resolve student grievances as promptly and informally as possible. No adverse action will be taken against any student initiating a complaint.

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

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

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

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

1. Jurisdiction
   A grievance shall include, but not be restricted to, a complaint by a student
   a. That college regulations and/or policies have been violated or misapplied to him or her
   b. That he or she has been treated unfairly, defined in terms of established academic policy or practice governing or affecting students at the college

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

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 the following:
      1. A statement of the case in detail
      All information about the conference with the instructor
      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
      All relevant supporting materials, which should be identified and listed in an index

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

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

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

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

If the panel recommends a different grade, the instructor shall have 10 academic days from receipt of the panel’s report to inform the dean of the faculty of the intent to change the grade. If necessary, the dean may direct that the grade be changed. A change of grade shall not be interpreted as an admission of unfairness in grading. In the case of a grievance, if the majority of the committee members adjudge the grievance to be without foundation, written notification of their findings will be forwarded to the student, the instructor, and the dean of the faculty. If, in the judgment of the committee, there is a basis for the grievance, a written report will be forwarded to the dean of the faculty with specific recommendations for redress. Copies shall be forwarded to the student and the instructor.

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

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

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.

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.

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.

Academic Levels (Class Level)

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

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

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.

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.

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.

If registration, classes, examinations, study, or work requirements are held on Friday after 4:00 p.m. or on Saturday, similar or makeup classes, examinations, study, or work requirements shall be made available on other days, where it is possible and practical to do so. No special fees shall be charged to the student for these classes, examinations, study, or work requirements held on other days.

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.

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.

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.

At Buffalo State, 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 assessment methods. Student participation in these activities may be a completion requirement for some degree programs.

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 majors should consult with the Academic Advisement Office, South Wing 110.
SUNY Buffalo State is organized into five schools: the School of Arts and Humanities, the School of Education, the School of Natural and Social Sciences, the School of the Professions, and the Graduate School. Each school contains specific departments responsible for the degree programs offered there. Each school reports to an academic dean who is responsible for the administration of the departments and the degree programs residing in that area. Students should consult with their dean, usually by appointment, when issues remain unresolved after having met with their department chair. All the major areas of study or interdisciplinary programs described below fall under the responsibility of one or more of the departments.

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

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

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

School of Natural and Social Sciences
The following undergraduate departments are in the School of Natural and Social Sciences: Anthropology, Biology, Chemistry, Earth Sciences and Science Education, Economics and Finance, Geography and Planning, Health and Wellness, History and Social Studies Education, 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 the Professions: Business, Computer Information Systems, Creative Studies, Criminal Justice, Engineering Technology, Dietetics and Nutrition, Fashion and Textile Technology, Hospitality and Tourism, Social Work, and Speech-Language Pathology. The School of the Professions also offers degree programs in individualized studies.

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

Continuing Professional Studies
Continuing Professional Studies is the academic home of programs for adult students at Buffalo State. In partnership with schools and departments, Continuing Professional Studies provides high-quality credit and noncredit courses, workshops, and certificate programs to both traditional and nontraditional learners using a variety of locations, schedules, and technologies. Continuing Professional Studies manages Summer Session, January Term, Veterans Services/Certification Office, individualized studies, evening and weekend programs for adult students, online learning programming and development, conference planning, and noncredit programming.
Students entering Buffalo State before fall 2006 or who were readmitted in fall 2006 should consult with their adviser for general education requirements.

Students entering Buffalo State between fall 2006 and spring 2014 should consult with their adviser and http://intellectualfoundations.buffalostate.edu/if-fall-2006-spring-2014 http://intellectualfoundations.buffalostate.edu/if-fall-2006-spring-2014 for general requirements.

The Intellectual Foundations 2014 (IF 14) program is required of all undergraduates entering Buffalo State who begin their college careers in summer 214 or later. For the most-up-to-date information, consult http://intellectualfoundations.buffalostate.edu/if-2014-fall-2014 http://intellectualfoundations.buffalostate.edu/if-fall-2006-spring-2014.

Transfer Students
Transfer Students with AA, AS, BA, BS degrees are expected to:

- Satisfy the knowledge, competencies, and skills areas in the SUNY GER as defined by the 2010 Policy (Trustee Resolution 2010-006) of the Board of Trustees. Requirements are satisfaction of two competencies and satisfaction of 7 of 10 of the knowledge and skills areas including two required areas.
- Earn 30 credits of courses approved by SUNY GER.
- Satisfy the SUNY Buffalo State diversity requirement via course completion or transfer course equivalency.

Mission of the Intellectual Foundations 2014 Program
Intellectual Foundations 2014 (IF 14) is the general education, or liberal arts, curriculum at Buffalo State. It encompasses the SUNY General Education Requirements and is designed to provide the intellectual and creative foundations for all educated persons regardless of their chosen profession. IF 14 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 IF 14 is to develop the skills and habits of mind required for a life of intellectual curiosity and civic engagement.

Intellectual Foundations 2014 Program Requirements
The Intellectual Foundations 2014 (IF 14) program constitutes 33-39 of the 120 credit hours necessary for graduation, divided among 11 areas of knowledge and 3 areas of intellectual skills and competencies. In each of the 11 areas of knowledge, 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 IF 14 requirements. The 3 areas of intellectual skills and competencies in major courses or their equivalents.

The courses that meet the IF 14 requirement as of this printing are listed on the following pages with the specific categories and credit distribution. For up-to-date course listings:
http://intellectualfoundations.buffalostate.edu/courses-and-requirements
http://intellectualfoundations.buffalostate.edu/courses-and-requirements

If you have questions about the Intellectual Foundations 2014 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 http://intellectualfoundations.buffalostate.edu/if-2014-fall-2014 http://intellectualfoundations.buffalostate.edu/if-fall-2006-spring-2014.

Categories and Credit Distribution
Under the Intellectual Foundations 2014 requirements, student must complete the requisite number of credit hours in the following categories:

- 0–6 credit hours Basic Writing and Oral Communication:
  CWP 101 and CWP 102 or equivalent
- 3 credit hours Mathematics/Quantitative Reasoning*
3 credit hours  Cognate Foundations: Arts†
3 credit hours  Cognate Foundations: Humanities†
3 credit hours  Cognate Foundations: Natural Sciences†
3 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
0–6 credit hours  Global Engagement††
3 credit hours  Diversity
0 credit hours  Writing Across the Curriculum††
0 credit hours  Critical Thinking
0 credit hours  Information Management
33–39  Total credit hours

*Students cannot be exempted from this requirement. Students must complete MAT 097 or MAT 098 or the equivalent before taking the Mathematics and Quantitative Reasoning required course unless they have completed three years of high school math or attained an SAT math score of 460 or an ACT math score of 16.
†Course must be outside of the primary major prefix.
††Proficiency may be wholly or partially completed prior to college.

Students may count mathematics and quantitative reasoning, foundations of civilizations, diversity, and global engagement courses toward their major and minor requirements.

Additional Degree Requirements
In addition to the liberal arts education coursework described on the following pages, all undergraduate degree candidates must meet the following college wide graduation requirements:
- Successful completion of required coursework in the declared major
- Successful completion of at least 120 credit hours, of which at least 33 must be upper division. At least 32 credits must be taken at Buffalo State, including the last 16 credits
- Final minimum overall cumulative GPA of 2.0
- Final minimum major GPA of 2.0
- Final minimum cumulative GPA for courses taken in a minor is 2.0.
- Successful clearing of all I, N, or X grades

Course Coding System
A four-character code is used to identify which Intellectual Foundations 2014 requirement(s) a course fulfills. This information is printed in the legend of the online undergraduate class schedule. The IF 2014 codes are as follows:
AH14  American History
AR14  Arts
WO14  Basic Written and Oral Communication
DI14  Diversity
GE14  Global Engagement
HU14  Humanities
MQ14  Mathematics and Quantitative Reasoning
NS14  Natural Science
NW14  Non-Western Civilization
SS14  Social Science
WC14  Western Civilization

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

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

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

Global Engagement Requirement
Discuss this requirement with your academic adviser. Students can satisfy the Global Engagement requirement through four options:
Option 1  Study a Foreign Language
Option 2  Pass a Proficiency Exam at the Novice-High Level
Option 3  Participate in a Study Abroad Experience
Option 4  Participate in a Global at Home and Abroad Experience


For Option 1, 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 global engagement requirement. Proficiency in foreign language also may be achieved by completing 6 credits on the College-Level Examination Program test (see section on Alternative Methods of Earning College Credit).

Sign language may be substituted for foreign language for students in the following majors (listed on the Registrar website http://buffalostate.edu/registrar/documents/Intellectualfoundations.htm#Language)

- Anthropology
- Business Administration
- Criminal Justice
- Childhood Education and Early Childhood Education
- Communication Programs (ALL)
- Exceptional Education
- Education Programs (ALL)
- Hospitality Administration
- Interior Design
- Speech-Language Pathology
- Social Work
- Theater

**Upper-Division Course Requirement**

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

**Intellectual Skills and Competencies**

Writing, critical thinking, and information management represents a critical components of a Buffalo State education. The infusion of these skills and competencies into all types of courses across the curriculum is widely encouraged.

**Basic Writing Requirement**

The college requires all matriculated students to demonstrate college-level skills in composition. For more information, see Basic Writing Requirement 40 in the Academic Policies section of this catalog.

For information regarding the proficiency exam, Option 2, contact the Assistant Dean of International and Exchange Program, (716) 878-4620. For further information about Options 3 and 4, contact University College, Twin Rise 100, (716) 878-5906.

**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. A minor may include no more than 9 total hours that overlap with the student’s major disciplinary requirements. A minor may include no more than 2 courses at a lower division level. Students who complete the minor with a minimum GPA of 2.0 will have the minor recorded on their official transcript.

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

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

For a list of minors, please refer to Undergraduate Minor Programs at a Glance chart on page 60.
### Intellectual Foundations Courses

The courses listed below will satisfy the relevant Intellectual Foundations 2014 requirement. Choose the number of required courses and credits from each of the following categories. (Most courses equal 3 credits.)

**Basic Written and Oral Communication**
- CWP 101
- CWP 102

**Mathematics/Quantitative Reasoning**
- ECO 305
- MAT 103
- MAT 114
- MAT 122
- MAT 124
- MAT 126
- MAT 161
- MAT 311
- PHI 107

**Cognate Foundations: Arts**
Choose one course for a total of at least 3 credits. course must be outside of the primary major prefix.
- AED 100
- AED 200
- DAN 214
- DAN 224
- DES 114
- DES 190
- FAR 100
- FAR 101
- FAR 250
- FAR 251
- HON 103
- MUS 201
- MUS 206
- MUS 208
- MUS 210
- MUS 290
- THA 106
- THA 107

**Cognate Foundations: Humanities**
Choose one course for a total of at least 3 credits. course must be outside of the primary major prefix.
- AAS 240
- COM 100
- ENG 151
- ENG 160
- ENG 205
- ENG 206
- ENG 210
- ENG 211
- ENG 212
- ENG 220
- ENG 221

**Cognate Foundations: Natural Sciences**
Choose one course for a total of at least 3 credits. course must be outside of the primary major prefix.
- ANT 100
- BIO 100
- CHE 100
- CHE 101
- CHE 111
- GEG 101
- GEG 241
- GES 101
- GES 102
- GES 111
- GES 131
- GES 223
- GES 224
- GES 232
- GES 241
- HON 102
- NSF 102
- PHY 100
- PHY 103
- PHY 104
- PHY 107
- PHY 111
- SCI 100
- SCI 105
- SCI 231
- SCI 232

**Cognate Foundations: Social Sciences**
Choose one course for a total of at least 3 credits. course must be outside of the primary major prefix.
- ANT 244
- CRJ 101
- ECO 101
- ECO 201
- ECO 202

**Foundations of Civilizations: American History**
- ANT 250
- ECO 103
- HIS 106
- HIS 107
- PSC 102

**Foundations of Civilizations: Western Civilization**
- AED 315
- ANT 303
- DAN 324
- ENG 130
- GEG 364
- HIS 115
- HIS 116
- HIS 117
- MUS 224
- PHI 301
- PHI 310
- PHI 347
- PSC 351
- PSC 352
- REL 105
- REL 121
- THA 317
- THA 332

**Foundations of Civilizations: Non-Western Civilizations**
- ANT 101
- ANT 300
- ANT 301
- ANT 310
- ANT 327/
- ANT 329
- ANT 377
- ANT 381
- ENG 353
- FTT 349
- GEG 359
- GEG 360
- HEW 327
- HIS 230
- HIS 231
- HIS 306
- HIS 307
- HIS 310
- HIS 320
- HIS 337
- HIS 338
<table>
<thead>
<tr>
<th>HIS 373</th>
<th>EDU 310</th>
<th>SOC 366</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 445</td>
<td>ENG 231</td>
<td>SPC 311</td>
</tr>
<tr>
<td>HIS 465</td>
<td>ENG 240</td>
<td>SPC 333</td>
</tr>
<tr>
<td>MUS 209</td>
<td>ENG 241</td>
<td>SPF 366</td>
</tr>
<tr>
<td>NFS 108</td>
<td>ENG 243</td>
<td>SSE 363</td>
</tr>
<tr>
<td>PSC 337</td>
<td>ENG 353</td>
<td>SST 363</td>
</tr>
<tr>
<td>PSC 340</td>
<td>ENG 354</td>
<td>SWK 301</td>
</tr>
<tr>
<td>REL 303</td>
<td>ENG 385</td>
<td>WGS 101</td>
</tr>
<tr>
<td>REL 321</td>
<td>EXE 100</td>
<td></td>
</tr>
<tr>
<td>THA 332</td>
<td>GEG 309</td>
<td></td>
</tr>
</tbody>
</table>

**Diversity**

AAS 100  | HIS 302  |        |
AAS 240  | HIS 311  |        |
AAS 321  | HIS 322  |        |
AAS 351  | HIS 363  |        |
ANT 300  | MUS 206  |        |
ANT 301  | PLN 215  |        |
ATS 325  | PSC 225  |        |
BUS 305  | PSY 387  |        |
CRJ 425  | SOC 240  |        |
CRJ 430  | SOC 301  |        |
DAN 230  | SOC 312  |        |
DAN 234  | SOC 321  |        |
ECO 302  | SOC 333  |        |

**Writing Across the Curriculum**

Two (2-6 credits) courses designated "writing intensive" (marked "W" next to the course number in the schedule, such as "ENG 300W"). Writing Across the Curriculum courses may satisfy multiple requirements.

**Foreign Language (Global Engagement Option 1)**

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

- CHI 101 and CHI 102
- FRE 101 and FRE 102
- GER 101 and GER 102
- GRK 101 and GRK 102
- ITA 101 and ITA 102
- LAT 101 and LAT 102
- SLP 101 and SLP 102
- SPA 101 and SPA 102

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

*Students in selected majors.

**Upper Division**

200 level foreign languages count as upper division courses.
   | Major Program                                      | Degree | HEGIS code | Buffalo State code | Department                |
---|---------------------------------------------------|--------|------------|---------------------|---------------------------|
<p>| Anthropology                                      | B.A.   | 2202       | BA-NS ANT           | Anthropology              |
| Art                                               | B.A.   | 1002       | BA-AH ART           | Fine Arts                 |
| Art Education (K–12)                              | B.S.   | 0831       | BS-AH AED           | Art Education             |
| Art History                                       | B.A.   | 1003       | BA-AH ARH           | Fine Arts                 |
| Arts and Letters                                  | B.A.   | 4091       | BA-AH ALT           | Dean, A&amp;H                 |
| Biology                                           | B.A.   | 0401       | BA-NS BIO           | Biology                   |
| Biology Education (7–12)                          | B.S.   | 0401.01    | BS-NS BGS           | Biology                   |
| Biology Education (7–12; 5–6 Extension)           | B.S.   | 0401.01    | BS-NS BGX           | Biology                   |
| Business Administration                           | B.S.   | 0506       | BS-SP BSA           | Business                  |
| Business and Marketing Education                  | B.S.   | 0838.01    | BS-ED BME           | Career and Technical Education |
| Career and Technical Education                    | B.S.   | 0839.03    | BS-ED CTE           | Career and Technical Education |
| Ceramics                                          | B.F.A. | 1009       | BFA-AH CER          | Design                    |
| Ceramics                                          | B.S.   | 1009       | BS-AH CER           | Design                    |
| Chemistry                                         | B.S.   | 1905       | BS-NS CHE           | Chemistry                 |
| Chemistry Education (7–12)                        | B.S.   | 1905.01    | BS-NS CGS           | Chemistry                 |
| Chemistry Education (7–12; 5–6 Extension)         | B.S.   | 1905.01    | BS-NS CGX           | Chemistry                 |
| Childhood Education (Grades 1–6)                   | B.S.   | 0802       | BS-ED CED           | Elementary Education and Reading |
| Communication Design                              | B.F.A. | 1009       | BFA-AH CMD          | Design                    |
| Communication Studies                             | B.A.   | 0699       | BA-AH COM           | Communication              |
| Computer Information Systems*                     | B.S.   | 0702       | BS-SP CIS           | Computer Information Systems |
| Criminal Justice                                  | B.S.   | 2105       | BS-SP CRJ           | Criminal Justice           |
| Dietetics: Coordinated Program                    | B.S.   | 1306       | BS-SP DIE           | Dietetics and Nutrition   |
| Dietetics: Didactic Program                       | B.S.   | 1306       | BS-SP DIE           | Dietetics and Nutrition   |
| Early Childhood and Childhood Education (Birth–Grade 6) | B.S.   | 0522       | BS-ED ECC           | Elementary Education and Reading |
| Early Childhood Education (Birth–Grade 2)         | B.S.   | 0802       | BS-ED ECE           | Elementary Education and Reading |</p>
<table>
<thead>
<tr>
<th>Major Program</th>
<th>Degree</th>
<th>HEGIS code</th>
<th>Buffalo State code</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth Science Education (7–12)¹</td>
<td>B.S.</td>
<td>1917.01</td>
<td>BS-NS EGS</td>
<td>Earth Sciences and Science Education</td>
</tr>
<tr>
<td>Earth Science Education (7–12; 5–6 Extension)¹</td>
<td>B.S.</td>
<td>1917.01</td>
<td>BS-NS EGX</td>
<td>Earth Sciences and Science Education</td>
</tr>
<tr>
<td>Earth Sciences</td>
<td>B.S.</td>
<td>1917</td>
<td>BS-NS EAS</td>
<td>Earth Sciences and Science Education</td>
</tr>
<tr>
<td>Economics</td>
<td>B.A.</td>
<td>2204</td>
<td>BA-NS ECO</td>
<td>Economics and Finance</td>
</tr>
<tr>
<td>Economics</td>
<td>B.S.</td>
<td>2204</td>
<td>BS-NS ECO</td>
<td>Economics and Finance</td>
</tr>
<tr>
<td>Electrical Engineering Technology (Electronics)*</td>
<td>B.S.</td>
<td>0925</td>
<td>BS-SP ETE</td>
<td>Technology</td>
</tr>
<tr>
<td>Electrical Engineering Technology (Smart Grid)*</td>
<td>B.S.</td>
<td>0925</td>
<td>BS-SP ETP</td>
<td>Technology</td>
</tr>
<tr>
<td>English</td>
<td>B.A.</td>
<td>1501</td>
<td>BA-AH ENG</td>
<td>English</td>
</tr>
<tr>
<td>English Education (7–12)¹</td>
<td>B.S.</td>
<td>1501.01</td>
<td>BS-AH ENS</td>
<td>English</td>
</tr>
<tr>
<td>Exceptional Education (Dual Certification—Teachers of Special Education and Elementary Education)</td>
<td>B.S.Ed.</td>
<td>0808</td>
<td>BSED-ED EXE</td>
<td>Exceptional Education</td>
</tr>
<tr>
<td>Family and Consumer Sciences Education</td>
<td>B.S.</td>
<td>1301.1</td>
<td>BS-ED FCS</td>
<td>Career and Technical Education</td>
</tr>
<tr>
<td>Fashion and Textile Technology</td>
<td>B.S.</td>
<td>1303</td>
<td>BS-SP FTT</td>
<td>Technology</td>
</tr>
<tr>
<td>Fibers</td>
<td>B.F.A.</td>
<td>1009</td>
<td>BFA-AH FIB</td>
<td>Design</td>
</tr>
<tr>
<td>Fibers</td>
<td>B.S.</td>
<td>1009</td>
<td>BS-AH FIB</td>
<td>Design</td>
</tr>
<tr>
<td>Forensic Chemistry</td>
<td>B.S.</td>
<td>1999.20</td>
<td>BS-NS FRC</td>
<td>Chemistry</td>
</tr>
<tr>
<td>French Education (7–12)¹</td>
<td>B.S.</td>
<td>1102.01</td>
<td>BS-AH FRS</td>
<td>Modern and Classical Languages</td>
</tr>
<tr>
<td>French</td>
<td>B.A.</td>
<td>1102</td>
<td>BA-AH FRE</td>
<td>Modern and Classical Languages</td>
</tr>
<tr>
<td>Geography</td>
<td>B.A.</td>
<td>2206</td>
<td>BA-NS GEG</td>
<td>Geography and Planning</td>
</tr>
<tr>
<td>Geology</td>
<td>B.A.</td>
<td>1914</td>
<td>BA-NS GEO</td>
<td>Earth Sciences and Science Education</td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>B.S.</td>
<td>0837</td>
<td>BS-SP HEW</td>
<td>Health and Wellness</td>
</tr>
<tr>
<td>History</td>
<td>B.A.</td>
<td>2205</td>
<td>BA-NS HIS</td>
<td>History and Social Studies Education</td>
</tr>
<tr>
<td>Hospitality Administration</td>
<td>B.S.</td>
<td>1307</td>
<td>BS-SP HTR</td>
<td>Hospitality and Tourism</td>
</tr>
<tr>
<td>Individualized Studies*</td>
<td>B.S.</td>
<td>4901</td>
<td>BS-UC INS</td>
<td>Deans’ Offices</td>
</tr>
<tr>
<td>Industrial Technology*</td>
<td>B.S.</td>
<td>0925</td>
<td>BS-SP TEC</td>
<td>Technology</td>
</tr>
<tr>
<td>Interior Design</td>
<td>B.F.A.</td>
<td>1009</td>
<td>BFA-AH INT</td>
<td>Interior Design</td>
</tr>
<tr>
<td>Journalism</td>
<td>B.A.</td>
<td>0602</td>
<td>BA-AH JBS</td>
<td>Communication</td>
</tr>
<tr>
<td>Mathematics</td>
<td>B.A.</td>
<td>1701</td>
<td>BA-NS MAT</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mathematics—Applied</td>
<td>B.S.</td>
<td>1703</td>
<td>BS-NS AMT</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mathematics Education (7–12)¹</td>
<td>B.S.</td>
<td>1701.01</td>
<td>BS-NS MTS</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mathematics Education (7–12; 5–6 Extension)¹</td>
<td>B.S.</td>
<td>1701.01</td>
<td>BS-NS MTX</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mechanical Engineering Technology*</td>
<td>B.S.</td>
<td>0925</td>
<td>BS-SP MET</td>
<td>Technology</td>
</tr>
<tr>
<td>Media Production</td>
<td>B.A.</td>
<td>0603</td>
<td>BA-AH MDP</td>
<td>Communication</td>
</tr>
<tr>
<td>Metals/Jewelry</td>
<td>B.F.A.</td>
<td>1009</td>
<td>BFA-AH MJD</td>
<td>Design</td>
</tr>
<tr>
<td>Metals/Jewelry</td>
<td>B.S.</td>
<td>1009</td>
<td>BS-AH MJD</td>
<td>Design</td>
</tr>
<tr>
<td>Music</td>
<td>B.A.</td>
<td>1005</td>
<td>BA-AH MUS</td>
<td>Music</td>
</tr>
<tr>
<td>Music Education (Pre-K–12)</td>
<td>B.Mus.</td>
<td>1005</td>
<td>MUSB-AH</td>
<td>Music</td>
</tr>
<tr>
<td>Major Program</td>
<td>Degree</td>
<td>HEGIS code</td>
<td>Buffalo State code</td>
<td>Department</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------</td>
<td>------------</td>
<td>--------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Painting</td>
<td>B.F.A.</td>
<td>1002</td>
<td>BFA-AH PTG</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Philosophy</td>
<td>B.A.</td>
<td>1509</td>
<td>BA-AH PHI</td>
<td>Philosophy and Humanities</td>
</tr>
<tr>
<td>Photography</td>
<td>B.F.A.</td>
<td>1011</td>
<td>BFA-AH PHO</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Physics</td>
<td>B.A.</td>
<td>1902</td>
<td>BA-NS PHY</td>
<td>Physics</td>
</tr>
<tr>
<td>Physics</td>
<td>B.S.</td>
<td>1902</td>
<td>BS-NS PHY</td>
<td>Physics</td>
</tr>
<tr>
<td>Physics-Engineering 3-2 Cooperative Program</td>
<td>B.S.</td>
<td>1902</td>
<td>BS-NS PHY</td>
<td>Physics</td>
</tr>
<tr>
<td>Physics Education (7–12)1</td>
<td>B.S.</td>
<td>1902.01</td>
<td>BS-NS PGS</td>
<td>Physics</td>
</tr>
<tr>
<td>Physics Education (7–12; 5–6 Extension)¹</td>
<td>B.S.</td>
<td>1902.01</td>
<td>BS-NS PGX</td>
<td>Physics</td>
</tr>
<tr>
<td>Political Science</td>
<td>B.A.</td>
<td>2207</td>
<td>BA-NS PSC</td>
<td>Political Science</td>
</tr>
<tr>
<td>Printmaking</td>
<td>B.F.A.</td>
<td>1009</td>
<td>BFA-AH PRT</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Psychology</td>
<td>B.A.</td>
<td>2001</td>
<td>BA-NS PSY</td>
<td>Psychology</td>
</tr>
<tr>
<td>Psychology</td>
<td>B.S.</td>
<td>2001</td>
<td>BS-NS PSY</td>
<td>Psychology</td>
</tr>
<tr>
<td>Public Communication</td>
<td>B.A.</td>
<td>0699</td>
<td>BA-AH PCM</td>
<td>Communication</td>
</tr>
<tr>
<td>Sculpture</td>
<td>B.F.A.</td>
<td>1002</td>
<td>BFA-AH SCL</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Social Studies Education (7–12)¹</td>
<td>B.S.</td>
<td>2201.01</td>
<td>BS-NS SSS</td>
<td>History and Social Studies Education</td>
</tr>
<tr>
<td>Social Studies Education (7–12; 5–6 Extension)¹</td>
<td>B.S.</td>
<td>2201.01</td>
<td>BS-NS SSX</td>
<td>History and Social Studies Education</td>
</tr>
<tr>
<td>Social Work*</td>
<td>B.S.</td>
<td>2104</td>
<td>BS-SP SWK</td>
<td>Social Work</td>
</tr>
<tr>
<td>Sociology</td>
<td>B.A.</td>
<td>2208</td>
<td>BA-NS SOC</td>
<td>Sociology</td>
</tr>
<tr>
<td>Spanish</td>
<td>B.A.</td>
<td>1105</td>
<td>BA-AH SPA</td>
<td>Modern and Classical Languages</td>
</tr>
<tr>
<td>Spanish Education (7–12)¹</td>
<td>B.S.</td>
<td>1105.01</td>
<td>BS-SP SPS</td>
<td>Modern and Classical Languages</td>
</tr>
<tr>
<td>Speech-Language Pathology</td>
<td>B.S.</td>
<td>1220</td>
<td>BS-SP SLP</td>
<td>Speech-Language Pathology</td>
</tr>
<tr>
<td>Technology Education¹</td>
<td>B.S.</td>
<td>0839.01</td>
<td>BS-SP TED</td>
<td>Technology</td>
</tr>
<tr>
<td>Television and Film Arts</td>
<td>B.A.</td>
<td>0603</td>
<td>BA-AG TFA</td>
<td>Communication</td>
</tr>
<tr>
<td>Theater</td>
<td>B.A.</td>
<td>1506</td>
<td>BA-AH THA</td>
<td>Theater</td>
</tr>
<tr>
<td>Urban and Regional Analysis and Planning*</td>
<td>B.S.</td>
<td>2214</td>
<td>BS-NS URP</td>
<td>Geography and Planning</td>
</tr>
<tr>
<td>Wood/Furniture</td>
<td>B.F.A.</td>
<td>1009</td>
<td>BFA-AH WFD</td>
<td>Design</td>
</tr>
<tr>
<td>Wood/Furniture</td>
<td>B.S.</td>
<td>1009</td>
<td>BS-AH WFD</td>
<td>Design</td>
</tr>
<tr>
<td>Writing</td>
<td>B.A.</td>
<td>10605</td>
<td>BA-AH WRT</td>
<td>English</td>
</tr>
</tbody>
</table>
### Undergraduate Minor Programs at a Glance

*Evening study available.

<table>
<thead>
<tr>
<th>Minor Program</th>
<th>Code</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>African and African American Studies</td>
<td>AAS</td>
<td>Dean’s Office, Natural and Social Sciences</td>
</tr>
<tr>
<td>Aging</td>
<td>AGE</td>
<td>Psychology</td>
</tr>
<tr>
<td>Anthropology</td>
<td>ANT</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Apparel Construction and Pattern making</td>
<td>ACP</td>
<td>Fashion and Textile Technology</td>
</tr>
<tr>
<td>Art History</td>
<td>ARH</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Art Therapy</td>
<td>ATH</td>
<td>Art Education</td>
</tr>
<tr>
<td>Asian Studies</td>
<td>ASI</td>
<td>History and Social Studies Education</td>
</tr>
<tr>
<td>Astronomy</td>
<td>AST</td>
<td>Earth Sciences and Science Education</td>
</tr>
<tr>
<td>Biology</td>
<td>BIO</td>
<td>Biology</td>
</tr>
<tr>
<td>Business Economics</td>
<td>BEC</td>
<td>Economics and Finance</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHE</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Coaching</td>
<td>COA</td>
<td>Coaching and Physical Education</td>
</tr>
<tr>
<td>Computer Information Systems*</td>
<td>CIS</td>
<td>Computer Information Systems</td>
</tr>
<tr>
<td>Creative Studies</td>
<td>CRS</td>
<td>Center for Studies in Creativity</td>
</tr>
<tr>
<td>Criminal Justice*</td>
<td>CRJ</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>Dance</td>
<td>DAN</td>
<td>Theater</td>
</tr>
<tr>
<td>Design (Ceramic, Fiber, Furniture, Jewelry)</td>
<td>DES</td>
<td>Design</td>
</tr>
<tr>
<td>Deviance</td>
<td>DEV</td>
<td>Sociology</td>
</tr>
<tr>
<td>Digital Music Production</td>
<td>DMP</td>
<td>Music</td>
</tr>
<tr>
<td>Economic Policy Analysis</td>
<td>EPA</td>
<td>Economics and Finance</td>
</tr>
<tr>
<td>English</td>
<td>ENG</td>
<td>English</td>
</tr>
<tr>
<td>Environment and Society</td>
<td>EVS</td>
<td>Earth Sciences and Science Education</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>ENV</td>
<td>Earth Sciences and Science Education</td>
</tr>
<tr>
<td>Ethics</td>
<td>ETH</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Exercise Science</td>
<td>ESM</td>
<td>Health and Wellness</td>
</tr>
<tr>
<td>Fashion Design</td>
<td>FAS</td>
<td>Fashion and Textile Technology</td>
</tr>
<tr>
<td>Forensic Anthropology</td>
<td>FAN</td>
<td>Anthropology</td>
</tr>
<tr>
<td>French</td>
<td>FRE</td>
<td>Modern and Classical Languages</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>GIS</td>
<td>Geography and Planning</td>
</tr>
<tr>
<td>Geography</td>
<td>GEG</td>
<td>Geography and Planning</td>
</tr>
<tr>
<td>Geology</td>
<td>GEO</td>
<td>Earth Sciences and Science Education</td>
</tr>
<tr>
<td>German</td>
<td>GER</td>
<td>Modern and Classical Languages</td>
</tr>
<tr>
<td>Global Studies</td>
<td>GLB</td>
<td>International and Exchange Office</td>
</tr>
<tr>
<td>History</td>
<td>HIS</td>
<td>History and Social Studies Education</td>
</tr>
<tr>
<td>Hospitality Administration</td>
<td>HTR</td>
<td>Hospitality and Tourism</td>
</tr>
<tr>
<td>Indigenous Studies</td>
<td>ING</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Intelligence Analysis</td>
<td>INA</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>International Economics</td>
<td>IEC</td>
<td>Economics and Finance</td>
</tr>
<tr>
<td>International Relations</td>
<td>IRE</td>
<td>Political Science</td>
</tr>
<tr>
<td>Italian</td>
<td>ITA</td>
<td>Modern and Classical Languages</td>
</tr>
<tr>
<td>Leadership</td>
<td>LDR</td>
<td>Dean’s Office, School of the Professions</td>
</tr>
<tr>
<td>Legal Studies</td>
<td>LGL</td>
<td>Political Science</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MAT</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Meteorology and Climatology</td>
<td>MTC</td>
<td>Geography and Planning</td>
</tr>
<tr>
<td>Museum Studies</td>
<td>MST</td>
<td>History and Social Studies Education</td>
</tr>
<tr>
<td>Painting</td>
<td>PTG</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Philosophy</td>
<td>PHI</td>
<td>Philosophy and Humanities</td>
</tr>
<tr>
<td>Photography</td>
<td>PHO</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Minor Program</td>
<td>Code</td>
<td>Department</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Physics</td>
<td>PHY</td>
<td>Physics</td>
</tr>
<tr>
<td>Planning</td>
<td>PLN</td>
<td>Geography and Planning</td>
</tr>
<tr>
<td>Political Science</td>
<td>PSC</td>
<td>Political Science</td>
</tr>
<tr>
<td>Printmaking</td>
<td>PRT</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Psychology</td>
<td>PSY</td>
<td>Psychology</td>
</tr>
<tr>
<td>Quality*</td>
<td>QUA</td>
<td>Technology</td>
</tr>
<tr>
<td>Religious Studies</td>
<td>REL</td>
<td>Philosophy and Humanities</td>
</tr>
<tr>
<td>Safety Studies*</td>
<td>SAF</td>
<td>Technology</td>
</tr>
<tr>
<td>Sculpture</td>
<td>SCL</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Social Welfare</td>
<td>SOW</td>
<td>Social Work</td>
</tr>
<tr>
<td>Sociology</td>
<td>SOC</td>
<td>Sociology</td>
</tr>
<tr>
<td>Spanish</td>
<td>SPA</td>
<td>Modern and Classical Languages</td>
</tr>
<tr>
<td>Speech</td>
<td>SPE</td>
<td>Communication</td>
</tr>
<tr>
<td>Theater</td>
<td>THA</td>
<td>Theater</td>
</tr>
<tr>
<td>Urban Civic Education</td>
<td>UCE</td>
<td>Social and Psychological Foundations of Education</td>
</tr>
<tr>
<td>Women and Gender Studies</td>
<td>WGS</td>
<td>Dean's Office, Natural and Social Sciences</td>
</tr>
<tr>
<td>Writing</td>
<td>WTG</td>
<td>English</td>
</tr>
</tbody>
</table>
ANTHROPOLOGY (B.A.)

BA-NS ANT
Anthropology Department
Bachelor of Arts (HEGIS 2202)
Classroom Building B107 (716) 878-6110

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

Intellectual Foundations Requirements 33–39 cr

Total Required Credit Hours in Anthropology 33–36

A. Required Courses (15 cr)
- ANT 100 Human Origins
- ANT 101 Understanding Culture
- ANT 488 Internship

TWO of the following three courses:
- ANT 412 Seminar in Cultural Anthropology
- ANT 415 Seminar in Archaeology
- ANT 418W Seminar in Physical Anthropology

B. Electives (12–15 cr)
Select one course from each of the following areas:

Archaeology (3 cr)
- *ANT 250 Historical Archaeology
- ANT 310 Mesoamerican Archaeology
- ANT 312 Archaeology of North America
- ANT 329 World Prehistory
- ANT 377 Ancient Civilization

Physical Anthropology (3 cr)
- *ANT 220 Case Studies in Physical Anthropology
- ANT 321 Primatology
- ANT 323 Anthropology of Disease
- ANT 324 The Human Skeleton
- ANT 325 Forensic Anthropology
- ANT 326 The Human Fossil Record

Regional/Social Cultural/Topical Courses (3 cr)
- ANT 300 Indigenous Peoples of Western North America
- ANT 301 Indigenous Peoples of Eastern North America
- ANT 303 The Anthropology of Europe
- ANT 305 Peoples of Africa
- ANT 306 Peoples of Asia
- ANT 307 Urban Anthropology
- ANT 327 Medical Anthropology
- ANT 330 Pacific Islanders
- ANT 340 Women in Anthropological Perspective
- ANT 341 Art and Culture in Anthropological Perspective

Note: ANT 389 may count towards the major requirements ONLY if student is also a Forensic Anthropology or Indigenous Studies Minor.

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

All College Electives 45-54 cr

Total Required Credit Hours 120 cr

* Courses listed with asterisks may count towards the major requirements ONLY if student is also a Forensic Anthropology or Indigenous Studies Minor.

Note: ANT 389 may be used to fill one or more of the elective requirements according to content in any given semester. You may take only three ANT 389 courses over the duration of your time at Buffalo State. Please contact your adviser to determine the appropriate designation.

ART (B.A.)

BA-AH ART
Fine Arts Department
Bachelor of Arts (HEGIS 1002)

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

Upton Hall 502 (716) 878-6014

The Art program provides students with the opportunity to study a wide variety of visual arts media. Together with basic instruction in drawing, design, and art history, students, under advisement, select 24 credit hours in electives in fine arts and/or design. The Fine Arts Department reserves the right to retain artwork for official purposes, such as exhibits, catalogs, or teaching aids. Students are expected to assume the costs of materials they use in their courses. All studio courses may have an additional instructional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

Intellectual Foundations Requirements 33–39 cr

Total Required Credit Hours in Art 42 cr

A. Required Courses (21 cr)
- DES 101 Introductory Design 2D I
- DES 103 Introductory Design 3D I
- FAR 101 Drawing I
- FAR 102 Drawing II
- FAR104 Themes and Issues in Contemporary Arts
The Art Education program prepares students for initial certification to teach pre-kindergarten through grade 12 (PK-12) in New York State schools. The program develops art education professionals who are knowledgeable about the subject of art; who think systematically about the act of teaching; who are committed to teaching 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 pre-kindergarten through grade 12 students in an urban environment.

Requirements of Major: For students to enroll and remain in the art education program, they must maintain a minimum cumulative GPA of 2.5 and a minimum GPA of 3.0 in their major, which includes all Art Education, Fine Art, and Design coursework. 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 classes. Students are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class. Students 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.

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, middle, 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 must 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 post-baccalaureate certification-only programs. Art teacher certification is a function of the Office of Teaching Initiatives, NYS Education Department, Albany. For information contact the Buffalo State Teacher Certification Office.

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

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Fine Arts and Design 36 cr

A. Required Courses (24 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AED 200</td>
<td>Fundamentals of Art Inquiry</td>
</tr>
<tr>
<td>AED 300W</td>
<td>Foundations in Art Education</td>
</tr>
<tr>
<td>AED 301W</td>
<td>Theoretical Constructs in Art Education</td>
</tr>
<tr>
<td>AED 302W</td>
<td>Functions and Practice in Art Education</td>
</tr>
<tr>
<td>AED 315</td>
<td>Arts in Living</td>
</tr>
<tr>
<td>AED 398</td>
<td>Computer Applications for Art Educators</td>
</tr>
<tr>
<td>AED 400</td>
<td>Student Teaching Seminar</td>
</tr>
<tr>
<td>ATS 325</td>
<td>Arts and Special Needs</td>
</tr>
</tbody>
</table>

B. Required Field Experience (12 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AED 303</td>
<td>Elementary Student Teaching in Art (6)</td>
</tr>
<tr>
<td>AED 304</td>
<td>Secondary Student Teaching in Art (6)</td>
</tr>
</tbody>
</table>

Total Required Credit Hours in Fine Arts and Design 36 cr

A. Required Fine Arts Courses (15 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAR 101</td>
<td>Drawing I</td>
</tr>
<tr>
<td>FAR 102</td>
<td>Drawing II</td>
</tr>
<tr>
<td>FAR 104</td>
<td>Themes and Issues in Contemporary Arts</td>
</tr>
<tr>
<td>FAR 250</td>
<td>Art History I</td>
</tr>
<tr>
<td>FAR 251</td>
<td>Art History II</td>
</tr>
</tbody>
</table>

B. Required Design Courses (6 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 101</td>
<td>Introductory Design 2D I</td>
</tr>
<tr>
<td>DES 103</td>
<td>Introductory Design 3D I</td>
</tr>
</tbody>
</table>

C. Studio (FAR and DES) Electives Selected by Advisement (15 cr)

All College Electives 9-15 cr

Total Required Credit Hours 120 cr

ART EDUCATION (PK–12, PTCP)

UG-PBC-AH AED
Art Education Department
Postbaccalaureate Teacher Certification Program (HEGIS 0831)

Bishop Hall 103 (716) 878-4106

National Association of Schools of Art and Design (NASAD) Accredited National Council for Accreditation of Teacher Education (NCATE) Accredited

The Art Education Postbaccalaureate Certification-only Program offers a course sequence meeting the educational requirements for certification in grades pre-kindergarten through 12 (PK-12). Students are expected to complete the entire sequence and are responsible for any additional certification requirements established by the New York State Education Department, Teacher Certification Division, including the NYS Teacher Certification Examinations and mandated seminars. In order to be eligible for the program, applicants must have and maintain a minimum 2.5 overall GPA and a 3.0 GPA in the major, which includes Art Education, Design, and Fine Arts coursework. Except for the student teaching semester, Postbaccalaureate Certification-only students may elect to attend part-time or full-time. Courses are offered each semester (not summer) during daytime hours.

Art teacher certification is a function of the Office of Teaching Initiatives, NYS Education Department, Albany. For information contact the Buffalo State Teacher Certification Office.

First Semester 12 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AED 200</td>
<td>Fundamentals of Art Inquiry</td>
</tr>
</tbody>
</table>
B. Electives in Art History (15 cr)

A. Required Courses (27 Total Required Credit Hours in Art History Intellectual Foundations 2014 Requirements)

Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

Intellectual Foundations 2014 Requirements 33-39 cr

Total Required Credit Hours in Art History 42 cr

A. Required Courses (27 cr)
FAR 101 Drawing I
FAR 104 Themes and Issues in Contemporary Arts
FAR 250 Art History I
FAR 251 Art History II
FAR 354 Art and Culture of Greece
FAR 359 High Renaissance and Mannerism
FAR 362 Nineteenth-Century Art or FAR 363 or Twentieth-Century Art
One course in medieval art from list below
One course in non-Western art from list below

B. Electives in Art History (15 cr)
Select three courses from the following:
FAR 325 History of Photography
FAR 352 Art and Culture of Islam
FAR 353 Art and Culture of Egypt and the Near East
FAR 356 Early Medieval Art
FAR 357 Late Medieval Art
FAR 358 Early Renaissance Art in Italy
FAR 361 Italian Baroque Art
FAR 364 Art After 1940
FAR 365 American Art

All College Electives 39-45 cr

Total Required Credit Hours 120 cr

ART HISTORY (B.A.)

BA-AH ARH
Fine Arts Department
Bachelor of Arts (HEGIS 1003)

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

Intellectual Foundations 2014 Requirements 33-39 cr

Total Required Credit Hours in Art History 42 cr

A. Required Courses (27 cr)
FAR 101 Drawing I
FAR 104 Themes and Issues in Contemporary Arts
FAR 250 Art History I
FAR 251 Art History II
FAR 354 Art and Culture of Greece
FAR 359 High Renaissance and Mannerism
FAR 362 Nineteenth-Century Art or FAR 363 or Twentieth-Century Art
One course in medieval art from list below
One course in non-Western art from list below

B. Electives in Art History (15 cr)
Select three courses from the following:
FAR 325 History of Photography
FAR 352 Art and Culture of Islam
FAR 353 Art and Culture of Egypt and the Near East
FAR 356 Early Medieval Art
FAR 357 Late Medieval Art
FAR 358 Early Renaissance Art in Italy
FAR 361 Italian Baroque Art
FAR 364 Art After 1940
FAR 365 American Art

All College Electives 39-45 cr

Total Required Credit Hours 120 cr

ARTS AND LETTERS (B.A.)

BA-AH ALT
Dean's Office, School of Arts and Humanities
Bachelor of Arts (HEGIS 4901)
Rockwell Hall 222 (716) 878-6326

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

Intellectual Foundations 2014 Requirement 33-39 cr

Total Required Credit Hours in the Major 39 cr
(at least 21 credits upper division)

A. Primary Concentration (18 cr)
Courses selected by advisement (at least 9 credit hours in upper division except student teaching) in one of the following areas:
Art Education (with certain limitations)
Communication
Dance
Design
English
Fine Arts
Modern and Classical Languages (not allowing 101-102)
Music
Philosophy and Humanities
Theater

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

C. Arts and Humanities Courses (9 cr)

D. Senior Paper or Project (3 cr)
A capstone experience under the guidance of the faculty adviser, this activity must be approved by the adviser and the topic forwarded to the dean before work is begun.

All College Electives 42-48 cr

Total Required Credit Hours 120 cr

BIOLOGY (B.A.)

BA-NS BIO
Biology Department
Bachelor of Arts (HEGIS 0401)
Science Building 261 (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.

BIO 111 Introduction to Biology is the required initial biology course in the program. Students must earn a C or better in BIO 111 to take more advanced biology courses.

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

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Biology 39-40 cr

A. Required Courses (16 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>Introduction to Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 212</td>
<td>Introduction to Organismal Biology and Diversity</td>
<td>4</td>
</tr>
<tr>
<td>BIO 213</td>
<td>Introduction to Ecology, Evolution, and Behavior</td>
<td>4</td>
</tr>
<tr>
<td>BIO 214</td>
<td>Introduction to Cell Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

B. Concentration Courses

Students are required to complete one of the following concentrations:

Integrative Biology Concentration (23 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 303</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 405</td>
<td>Organic Evolution</td>
<td></td>
</tr>
</tbody>
</table>

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

Aquatic Biology Concentration (23 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 300</td>
<td>Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 325</td>
<td>Ichthyology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 418</td>
<td>Limnology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 429</td>
<td>Fisheries Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 430</td>
<td>Stream Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 488</td>
<td>Internship in Aquatic Biology</td>
<td></td>
</tr>
</tbody>
</table>

Biotechnology Concentration (23 – 24 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 303</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 314</td>
<td>Advanced Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 316</td>
<td>General Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 450</td>
<td>Recombinant DNA Technology</td>
<td>4</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 301</td>
<td>Cell Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 305</td>
<td>Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 350</td>
<td>Genes in Populations</td>
<td>4</td>
</tr>
<tr>
<td>BIO 402</td>
<td>Comparative Animal Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 408</td>
<td>Plant Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

CHE 470  Biochemistry

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

Total Required Credit Hours in Other Fields 8–18 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 111, CHE 112</td>
<td>Fundamentals of Chemistry I, II (4, 4)</td>
<td></td>
</tr>
<tr>
<td>CHE 201, CHE 203</td>
<td>Organic Chemistry I with Laboratory (3,1)</td>
<td></td>
</tr>
<tr>
<td>CHE 202</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
</tbody>
</table>

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

Recommended Courses in Related Fields

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

All College Electives 23-40 cr

Total Required Credit Hours 120 cr

BIOLOGY EDUCATION (7–12, B.S.)

BS-NS BGS
Biology Department
Bachelor of Science (HEGIS 0401.01)
Science Building 261 (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. NOTE: Undergraduate or post-baccalaureate candidates seeking New York State Teacher Certification are advised to review the M.S.Ed. in Science Education degree program. This program is designed to enable students to quickly and efficiently develop the knowledge and skills required for teaching; the program leads to initial NYS certification for those candidates already holding undergraduate science degrees. Candidates currently in undergraduate or post-baccalaureate programs should strongly consider transitioning to the new program.

Intellectual Foundations 14 Requirements

Total Required Credit Hours in Biology 33-39 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>Introduction to Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 212</td>
<td>Introduction to Organismal Biology and Diversity</td>
<td>4</td>
</tr>
<tr>
<td>BIO 213</td>
<td>Introduction to Ecology, Evolution, and Behavior</td>
<td>4</td>
</tr>
<tr>
<td>BIO 214</td>
<td>Introduction to Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 303</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 308</td>
<td>Human Anatomy and Physiology (with lab)</td>
<td>3, 1</td>
</tr>
<tr>
<td>BIO 309</td>
<td>Educational Psychology</td>
<td></td>
</tr>
<tr>
<td>BIO 402</td>
<td>Comparative Animal Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Required Credit Hours in Professional Education 24 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 303</td>
<td>Educational Psychology: Middle and Secondary Education</td>
<td></td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
<td></td>
</tr>
<tr>
<td>SCI 445</td>
<td>Literacy for Teaching Science</td>
<td></td>
</tr>
<tr>
<td>EXE 372</td>
<td>Foundations of Teaching Adolescents with Disabilities</td>
<td></td>
</tr>
<tr>
<td>SED 200</td>
<td>Field Experience in Secondary Science Education</td>
<td></td>
</tr>
<tr>
<td>SED 401</td>
<td>Techniques for Teaching Laboratory Activities in the Secondary Science Classroom</td>
<td></td>
</tr>
<tr>
<td>SED 405</td>
<td>Methods and Materials in Teaching Secondary School Science</td>
<td></td>
</tr>
<tr>
<td>SED 409</td>
<td>Seminar in Secondary Science Education</td>
<td></td>
</tr>
</tbody>
</table>
Total Required Credit Hours in Student Teaching  
12 cr
- SED 407 Practice Teaching Science in the Middle School (6)
- SED 408 Practice Teaching Science in the High School (6)

Total Required Credit Hours in Other Fields for Certification  
27-35 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)
B. Cognate Sciences* (23-25 cr)
   - CHE 111 and CHE 112 Fundamentals of Chemistry I, II (4, 4)
   - GES 101 Introductory Geology
   - GES 103 Introductory Geology Laboratory (1)
   - PHY 107 and PHY 108 General Physics I, II (4,4)
   - OR
     - PHY 111 and PHY 112 University Physics I, II (5, 5)
     - Select one of the following:
       - GES 111 General Oceanography
       - GES 131 Introductory Astronomy
       - GES 241 Meteorology

C. Mathematics* (4 cr)
   - MAT 126 Calculus (or equivalent) (4)

*In most cases, two courses can fulfill Intellectual Foundations 14 requirements.

Total Required Credit Hours  
127-141 cr

---

**Biology Education (7-12, 5-6 Extenson, B.S.)**

BS-NS BGX  
Biology Department  
Bachelor of Science (HEGIS 0401.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Science Building 261 (716) 878-5203

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

NOTE: Undergraduate or post-baccalaureate candidates seeking New York State Teacher Certification are advised to review the M.S.Ed. in Science Education degree program. This program is designed to enable students to quickly and efficiently develop the knowledge and skills required for teaching; the program leads to initial NYS certification for those candidates already holding undergraduate science degrees.

Candidates currently in undergraduate or post-baccalaureate programs should strongly consider transitioning to the new program.

**Intellectual Foundations Requirements**  
39–66 cr

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

- BIO 111 Introduction to Biology (4)
- BIO 212 Introduction to Organismal Biology and Diversity (4)
- BIO 213 Introduction to Ecology, Evolution, and Behavior (4)
- BIO 214 Introduction to Cell Biology (4)
- BIO 303 Genetics (4)
- BIO 315 Ecology (4)
- BIO 405 Organic Evolution

Select one of the following:
- BIO 308, Human Anatomy and Physiology (with lab) (3, 1)
- BIO 309
- BIO 402 Comparative Animal Physiology (4)

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

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

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

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

**Total Required Credit Hours in Other Fields for Certification**  
27-35 cr

A. One Year (or Equivalent) of a Foreign Language (0-6 cr)
B. Cognate Sciences* (23-25 cr)
   - CHE 111 and CHE 112 Fundamentals of Chemistry I, II (4, 4)
   - GES 101 Introductory Geology
   - GES 103 Introductory Geology Laboratory (1)
   - PHY 107 and PHY 108 General Physics I, II (4,4)
   - OR
     - PHY 111 and PHY 112 University Physics I, II (5, 5)
     - Select one of the following:
       - GES 111 General Oceanography
       - GES 131 Introductory Astronomy
       - GES 241 Meteorology

C. Mathematics* (4 cr)
   - MAT 126 Calculus (or equivalent) (4)

*In most cases, two courses can fulfill Intellectual Foundations 14 requirements.

**Total Required Credit Hours**  
139 cr

---

**Business Administration (B.S.)**

BS-SP BSA  
Business Department  
Bachelor of Science (HEGIS 0506)

Chase Hall 302 (716) 878-4239

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

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

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

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Required Credit Hours in Business</strong></td>
<td>60 cr</td>
</tr>
<tr>
<td><strong>A. Business Core (39 cr)</strong></td>
<td></td>
</tr>
<tr>
<td>CIS 101</td>
<td>Computer Fundamentals</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>BUS 312</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>BUS 313</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>BUS 320</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>BUS 325</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>BUS 334</td>
<td>Business Law I</td>
</tr>
<tr>
<td>BUS 360</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>FIN 314</td>
<td>Corporate Finance</td>
</tr>
<tr>
<td>ECO 305</td>
<td>Statistics for Economics</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAT 311</td>
<td>Introductory Probability and Statistics</td>
</tr>
<tr>
<td>BUS 460</td>
<td>Production and Operations Management</td>
</tr>
<tr>
<td>BUS 430</td>
<td>Strategic Management</td>
</tr>
<tr>
<td><strong>B. Concentration (15 cr)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 321</td>
<td>Marketing on the Internet</td>
</tr>
<tr>
<td>BUS 323</td>
<td>Sales Methods and Techniques</td>
</tr>
<tr>
<td>BUS 327</td>
<td>Advertising Concepts and Practices</td>
</tr>
<tr>
<td>BUS 329</td>
<td>Sales Management</td>
</tr>
<tr>
<td>BUS 330</td>
<td>Marketing Management</td>
</tr>
<tr>
<td>BUS 347</td>
<td>Retail Management</td>
</tr>
<tr>
<td>BUS 348</td>
<td>Electronic Commerce</td>
</tr>
<tr>
<td>BUS 403</td>
<td>Consumer Behavior</td>
</tr>
<tr>
<td>BUS 404</td>
<td>Marketing Research</td>
</tr>
<tr>
<td>BUS 420</td>
<td>International Marketing Management</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 300</td>
<td>International Business</td>
</tr>
<tr>
<td>BUS 324</td>
<td>Business Communication</td>
</tr>
<tr>
<td>BUS 329</td>
<td>Sales Management</td>
</tr>
<tr>
<td>BUS 335</td>
<td>Business Law II</td>
</tr>
<tr>
<td>BUS 347</td>
<td>Retail Management</td>
</tr>
<tr>
<td>BUS 350</td>
<td>Current Practices in Technology</td>
</tr>
<tr>
<td>BUS 365</td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td>BUS 366</td>
<td>Management Information Systems</td>
</tr>
<tr>
<td>BUS 367</td>
<td>Strategic Management of Innovation and Technology</td>
</tr>
<tr>
<td>BUS 368</td>
<td>Sports Management and Marketing</td>
</tr>
<tr>
<td>BUS 369</td>
<td>Organizational Change and Development</td>
</tr>
<tr>
<td><strong>BUS 424</strong></td>
<td>International Business Communication</td>
</tr>
<tr>
<td><strong>BUS 473</strong></td>
<td>International Management</td>
</tr>
<tr>
<td><strong>International Business</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 300</td>
<td>International Business</td>
</tr>
<tr>
<td>BUS 363</td>
<td>Business in the Western Hemisphere</td>
</tr>
<tr>
<td>BUS 417</td>
<td>International Accounting</td>
</tr>
<tr>
<td>BUS 420</td>
<td>International Marketing</td>
</tr>
<tr>
<td>BUS 424</td>
<td>International Business Communication</td>
</tr>
<tr>
<td>BUS 425</td>
<td>International and Cross-Cultural Training</td>
</tr>
<tr>
<td>BUS 473</td>
<td>International Management</td>
</tr>
<tr>
<td>ECO 401</td>
<td>International Economics</td>
</tr>
<tr>
<td>FIN 400</td>
<td>International Finance</td>
</tr>
</tbody>
</table>

Foreign language competency is recommended for the International Business Concentration.

<table>
<thead>
<tr>
<th>C. Business Electives (6 cr)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any upper-level Business Department course that is not required in the business core or used in your concentration may be taken as a business elective. The department recommends that students meet the business elective requirement through participation in the internship program, BUS 378: Business Professional Practice.</td>
<td></td>
</tr>
<tr>
<td><strong>All College Electives</strong></td>
<td>21-27 cr</td>
</tr>
<tr>
<td><strong>Total Required Credit Hours</strong></td>
<td>120 cr</td>
</tr>
</tbody>
</table>

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

BS-ED BME
Department of Career and Technical Education
Bachelor of Science (HEGIS 0838.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bacon Hall 316S (716) 878-4717

N. John Popovich, Ed.D. Department Chair

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.

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Required Credit Hours in Business</strong></td>
<td>36 cr</td>
</tr>
<tr>
<td>BUS 300</td>
<td>International Business</td>
</tr>
<tr>
<td>BUS 312</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>BUS 313</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>BUS 320</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>BUS 324W</td>
<td>Business Communications</td>
</tr>
<tr>
<td>BUS 325</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>BUS 334</td>
<td>Business Law I</td>
</tr>
<tr>
<td>BUS 360W</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>BUS 430</td>
<td>Strategic Management</td>
</tr>
<tr>
<td>Two 300-level or higher BUS electives selected by advisement.</td>
<td></td>
</tr>
<tr>
<td><strong>Total Required Credit Hours in Professional Education</strong></td>
<td>33 cr</td>
</tr>
<tr>
<td>BME301W/</td>
<td>Principles of Business/Marketing and Technology</td>
</tr>
<tr>
<td>CTE 301</td>
<td>Education</td>
</tr>
<tr>
<td>BME302/</td>
<td>Curriculum and Evaluation in Business/Marketing</td>
</tr>
<tr>
<td>CTE 302</td>
<td>and Technology Education</td>
</tr>
</tbody>
</table>
Interested students should apply through the Graduate School.

Note: This program includes courses in the business/marketing education major. (2) Provide a résumé.

This program includes courses related to CIS and/or economics. All other courses should match the required coursework in career and technical education.

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 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 Core 36 cr

Accepted courses per review of Business and Marketing Education Program.

Professional Core 33 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 301/CTE 301</td>
<td>Principles of Business/Marketing and Technology Education</td>
</tr>
<tr>
<td>BME 302/CTE 302</td>
<td>Curriculum and Evaluation in Business/Marketing and Technology Education</td>
</tr>
<tr>
<td>BME 303</td>
<td>Instructional Strategies in Business and Marketing Education</td>
</tr>
<tr>
<td>BME 411/CTE 404</td>
<td>Applied Teaching Methods in Business Education</td>
</tr>
<tr>
<td>BME415</td>
<td>Student Teaching (6)</td>
</tr>
<tr>
<td>BME 416</td>
<td>Student Teaching (6)</td>
</tr>
<tr>
<td>SPF 303/503</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy In Middle and Secondary Schools</td>
</tr>
<tr>
<td>EXE 100/CTE 421</td>
<td>Nature and Needs of Individuals with Special Needs</td>
</tr>
</tbody>
</table>

Total Required Credit Hours 69 cr

---

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

BS-ED CTE
Department of Career and Technical Education
Bachelor of Science (HEGIS 0839.03)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bacon Hall 316S (716) 878-4717
N. John Popovich, Ed.D. Department Chair

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).

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.

Admission review.

Trade proficiency verified by a practical and theoretical examination.

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.

**Intellectual Foundations Requirements 33-39 cr**

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
</table>

**Total Required Credit Hours in Career and Technical Education 66 cr**

A. **Major Field (30 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 100</td>
<td>Comprehensive Theoretical Trade or Technical Skills (15)</td>
</tr>
<tr>
<td>CTE 200</td>
<td>Comprehensive Theoretical Trade or Performance Skills (15)</td>
</tr>
</tbody>
</table>

B. **Professional Requirements (36 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 301/BME 301</td>
<td>Principles of Business/Marketing and Technology Education</td>
</tr>
<tr>
<td>CTE 302/BME 302</td>
<td>Curriculum and Evaluation in Business/Marketing and Technology Education</td>
</tr>
<tr>
<td>CTE 306</td>
<td>Laboratory Management</td>
</tr>
<tr>
<td>CTE 311</td>
<td>Career Mentoring Internship</td>
</tr>
<tr>
<td>CTE 350</td>
<td>School and Community Relationship Field Experience</td>
</tr>
<tr>
<td>ENG 370</td>
<td>Foundations of Language</td>
</tr>
<tr>
<td>CTE 402</td>
<td>Assessment Techniques in Career and Technical Subjects</td>
</tr>
<tr>
<td>CTE 404</td>
<td>Methods of Teaching Career and Technical Subjects</td>
</tr>
</tbody>
</table>

---

**BUSINESS AND MARKETING EDUCATION (PTCP)**

UG-PBC-ED BME
Department of Career and Technical Education
Postbaccalaureate Teacher Certification Program
HEGIS (0838.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bacon Hall 316S (716) 878-4717
N. John Popovich, Ed.D. Department Chair

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 Core** 36 cr

Accepted courses per review of Business and Marketing Education Program.

**Professional Core** 33 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 301/CTE 301</td>
<td>Principles of Business/Marketing and Technology Education</td>
</tr>
<tr>
<td>BME 302/CTE 302</td>
<td>Curriculum and Evaluation in Business/Marketing and Technology Education</td>
</tr>
<tr>
<td>BME 303</td>
<td>Instructional Strategies in Business and Marketing Education</td>
</tr>
<tr>
<td>BME 411/CTE 404</td>
<td>Applied Teaching Methods in Business Education</td>
</tr>
<tr>
<td>BME415</td>
<td>Student Teaching (6)</td>
</tr>
<tr>
<td>BME 416</td>
<td>Student Teaching (6)</td>
</tr>
<tr>
<td>SPF 303/503</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy In Middle and Secondary Schools</td>
</tr>
<tr>
<td>EXE 100/CTE 421</td>
<td>Nature and Needs of Individuals with Special Needs</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours** 120 cr
C. Required Courses in Behavioral Studies (6 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 200</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>SPF 353</td>
<td>Human Development During Early Adolescence</td>
</tr>
</tbody>
</table>

All College Electives 15-21 cr

Total Required Credit Hours 120 cr

**CAREER AND TECHNICAL EDUCATION (PTCP)**

UG-PBC-ED CTE  
Department of Career and Technical Education  
Postbaccalaureate Teacher Certification Program (HEGIS 0839.03)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bacon Hall 316S (716) 878-4717

N. John Popovich, Ed.D., Department Chair

This program is designed for students who have earned a baccalaureate degree in an area other than career and technical education (CTE) from an accredited college or university, and intend to complete the coursework required for New York State certification as a career and technical teacher.

This postbaccalaureate teacher certification program prepares career and technical teachers for positions in high schools, vocational schools, technical institutes, correctional facilities, and community colleges. It provides theoretical and practical preparation in planning, instructing, and managing the learning environment for students who have or will have extensive work experience in a specific trade. After successfully completing the teacher certification program and passing required New York State teacher certification exams, students are eligible to apply for New York State certification through the Teacher Certification Office, Caudell Hall 101. No degree or certificate is awarded by Buffalo State.

This program is offered during the evening at Buffalo State. Some courses are offered via interactive distance learning at off-campus BOCES sites. Financial Assistance: For financial aid purposes, students are considered transfer in order to facilitate placement in departmental courses and/or for possible commitment to major.

Admission Requirements:

1. A bachelor’s degree from an accredited college or university in an area other than career and technical education, with a minimum cumulative GPA of 2.5 (4.0 scale).

Minimum of one year of work experience in a CTE area. In addition, all applicants should review the Admission to a Graduate Program section in this catalog.

*Evening study available.

**Occupational Competency Exams** 30 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 100</td>
<td>Comprehensive Theoretical Trade or Technical Skills  (15)</td>
</tr>
<tr>
<td>CTE 200</td>
<td>Practice (or equivalent) (15)</td>
</tr>
</tbody>
</table>

**Required Courses** 36 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 301/BME</td>
<td>Principles of Business/Marketing and Technology Education</td>
</tr>
<tr>
<td>301</td>
<td></td>
</tr>
<tr>
<td>CTE 302/BME</td>
<td>Curriculum and Evaluation in Business/Marketing and Technology Education</td>
</tr>
<tr>
<td>302</td>
<td></td>
</tr>
<tr>
<td>CTE 306</td>
<td>Laboratory Management</td>
</tr>
<tr>
<td>CTE 311</td>
<td>Career Mentoring Internship</td>
</tr>
<tr>
<td>CTE 350</td>
<td>School and Community Relationship Field</td>
</tr>
</tbody>
</table>

**CERAMICS (B.F.A.)**

BFA-AH CER  
Design Department  
Bachelor of Fine Arts (HEGIS 1009)

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

Upton Hall 212 (716) 878-6032

The B.F.A. degree in Ceramics is a studio-intensive program of study focused on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, art history, and design history, along with courses in metals, fibers, and wood. Major courses in ceramics and sculpture complete the requirements. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

**Admission Requirements:** There is no entrance portfolio review for admission. All students will enter the ceramics major with a bachelor of science (BS-AH CER) intent, and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for admission into the bachelor of fine arts program (BFA-AH CER). Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.F.A. degree program a 3.0 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commitment to major.

The Design Department reserves the right to retain students’ work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class. The Design Department may be in the process of curricular revision. Please refer to the college Web site or the department for updated information.

**Intellectual Foundations Requirements** 33-39 cr

**Total Required Credit Hours in Ceramics** 79 cr

**A. Foundation Courses (37 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 101</td>
<td>Introduction to Design: 2D I</td>
</tr>
<tr>
<td>DES 103</td>
<td>Introduction to Design: 3D I</td>
</tr>
<tr>
<td>FAR 101</td>
<td>Drawing I</td>
</tr>
<tr>
<td>DES 104</td>
<td>Introduction to Design: 3D II</td>
</tr>
<tr>
<td>DES 230</td>
<td>Introduction to Jewelry</td>
</tr>
<tr>
<td>DES 242</td>
<td>Fibers I</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours** 36-66 cr
The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

### Admission Requirements:
Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, and design history, along with courses in metals, fibers, and wood. Major courses in ceramics focus on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student’s choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

### Intellectual Foundations Requirements
- **Total Required Credit Hours in Ceramics**: 39 cr

#### A. Foundation Courses (24 cr)
- **DES 101**: Introduction to Design: 2D I
- **DES 103**: Introduction to Design: 3D I
- **DES 230**: Introduction to Jewelry
- **DES 242**: Fibers I
- **DES 250**: Wood Design I
- **DES 312W**: History of Craft
- **FAR 101**: Drawing I
- **FAR 104**: Themes and Issues in Contemporary Arts

#### B. Major Courses (30 cr)
- **DES 220**: Ceramics I
- **DES 320**: Ceramics II
- **DES 321**: Ceramics: Junior Studio (3, 3)
- **DES 421**: Ceramics: Senior Studio (6, 6)
- **FAR 240**: Introduction to Sculpture
- **FAR 345**: Figure Modeling

#### C. Studio Electives Selected by Advisement (12 cr)
- **DES 330**: Applied Jewelry Techniques
- **DES 336**: Metalsmithing
- **DES 338**: Computer 3D Modeling and Rendering
- **DES 342**: Fibers II
- **DES 350**: Technical Processes in Wood
- **FAR 341**: Intermediate Sculpture I

### Total Required Credit Hours
- **120 cr

### CERAMICS (B.S.)

**BS-AH CER**  
Design Department  
Bachelor of Science (HEGIS 1009)

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

The B.S. degree in Ceramics is a studio degree with a strong academic component. This degree offers students a broadly grounded educational experience as a basis for beginning careers as professional designers or artists. Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, and design history, along with courses in metals, fibers, and wood. Major courses in ceramics focus on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student’s choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

**Admission Requirements:** There is no entrance portfolio review for admission. All students will enter the ceramics major with a bachelor of science (BS-AH CER) intent, and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for continuation in the B.S. degree program. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.S. degree program a 2.5 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students’ work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

### Intellectual Foundations Requirements
- **Total Required Credit Hours in Chemistry**: 48 cr

#### A. Required Courses (28 cr)
- **CHE 111**: Fundamentals of Chemistry I (4)
- **CHE 112**: Fundamentals of Chemistry II (4)
- **CHE 201**: Organic Chemistry I
- **CHE 202**: Organic Chemistry II
- **CHE 203**: Organic Chemistry Laboratory I (1)
- **CHE 204**: Organic Chemistry Laboratory II (1)
- **CHE 301**: Analytical Chemistry (4)

### Transfer Admission Requirements:
Transfer students from two-year colleges should have earned credit for course equivalent to CHE 111, CHE 112, CHE 201, CHE 202, CHE 203, CHE 204, CHE 301, MAT 161, MAT 162, MAT 263, PHY 111, PHY 112, and BIO 211 or BIO 214 (biology course required for biochemistry concentration only) to avoid possible delays in the completion of the degree program. Transfer students must complete a minimum of 10 credits in chemistry at Buffalo State. Chemistry courses taken elsewhere may be substituted for similar courses at Buffalo State only if they have the same or equivalent prerequisites. Chemistry courses not meeting this criterion may be transferred as elective credit.

### Intellectual Foundations Requirements
- **Total Required Credit Hours in Chemistry**: 44–48 cr

#### A. Required Courses (28 cr)
- **CHE 111**: Fundamentals of Chemistry I (4)
- **CHE 112**: Fundamentals of Chemistry II (4)
- **CHE 201**: Organic Chemistry I
- **CHE 202**: Organic Chemistry II
- **CHE 203**: Organic Chemistry Laboratory I (1)
- **CHE 204**: Organic Chemistry Laboratory II (1)
- **CHE 301**: Analytical Chemistry (4)
CHE 305 Physical Chemistry I
CHE 306 Physical Chemistry II
CHE 307 Physical Chemistry Laboratory I (1)
CHE 308 Physical Chemistry Laboratory II (1)

B. Concentration Courses

Students are required to complete one of the following concentrations:

**Chemistry Concentration (16 cr)**
CHE 310 Literature of Chemistry (1)
CHE 360 Introduction to Inorganic Chemistry
CHE 403 Instrumental Analysis (4)
CHE 462 Advanced Inorganic Chemistry
CHE 470 Biochemistry I
CHE 471 Biochemical Techniques (2)

**Biochemistry Concentration (20 cr)**
CHE 310 Literature of Chemistry (1)
CHE 360 Introduction to Inorganic Chemistry
CHE 470 Biochemistry I
CHE 471 Biochemical Techniques (2)
CHE 472 Biochemistry II

Select two courses from the following:
BIO 303 Genetics (4)
BIO 305 Molecular Biology (4)
BIO 314 Advanced Cell Biology (4)
BIO 316 General Microbiology (4)
BIO 450 Recombinant DNA (4)
CHE 403 Instrumental Analysis (4)

**Total Required Credit Hours in Other Fields** 24-28 cr

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 211</td>
<td>Introduction to Cell Biology and Genetics (4)</td>
</tr>
<tr>
<td>or BIO 214</td>
<td>Introduction to Cell Biology (4)</td>
</tr>
<tr>
<td>MAT 161</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>MAT 162</td>
<td>Calculus II (4)</td>
</tr>
<tr>
<td>MAT 163</td>
<td>Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164</td>
<td>Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MAT 264</td>
<td>Using Technology to Explore Calculus III (1)</td>
</tr>
<tr>
<td>PHY 111</td>
<td>University Physics I (5)</td>
</tr>
<tr>
<td>PHY 112</td>
<td>University Physics II (5)</td>
</tr>
</tbody>
</table>

Note: BIO 211 or BIO 214 is required only for the biochemistry concentration.

<table>
<thead>
<tr>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-19</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours** 120 cr

---

**CHEMISTRY EDUCATION (7–12, B.S.)**

BS-NS CGS
Chemistry Department
Bachelor of Science (HEGIS 1905.01)

Science Building 267 (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 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.

NOTE: Undergraduate or post-baccalaureate candidates seeking New York State Teacher Certification are advised to review the M.S.Ed. in Science Education degree program. This program is designed to enable students to quickly and efficiently develop the knowledge and skills required for teaching; the program leads to initial NYS certification for those candidates already holding undergraduate science degrees. Candidates currently in undergraduate or post-baccalaureate programs should strongly consider transitioning to the new program.

**Intellectual Foundations Requirements**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 111, CHE 112</td>
<td>Fundamentals of Chemistry I, II (4, 4)</td>
</tr>
<tr>
<td>CHE 201, CHE 202</td>
<td>Organic Chemistry I, II (3, 3)</td>
</tr>
<tr>
<td>CHE 203, CHE 204</td>
<td>Organic Chemistry Laboratories I, II (1, 1)</td>
</tr>
<tr>
<td>CHE 301</td>
<td>Analytical Chemistry (4)</td>
</tr>
<tr>
<td>CHE 305, CHE 306</td>
<td>Physical Chemistry I, II (3, 3)</td>
</tr>
<tr>
<td>CHE 307, CHE 308</td>
<td>Physical Chemistry Laboratories I, II (1, 1)</td>
</tr>
<tr>
<td>CHE 310</td>
<td>Literature of Chemistry (1)</td>
</tr>
<tr>
<td>CHE 403</td>
<td>Instrumental Analysis (4)</td>
</tr>
<tr>
<td>CHE 460</td>
<td>Inorganic Chemistry</td>
</tr>
<tr>
<td>CHE 461</td>
<td>Inorganic Chemistry Laboratory (2)</td>
</tr>
<tr>
<td>CHE 470</td>
<td>Biochemistry I</td>
</tr>
<tr>
<td>CHE 471</td>
<td>Biochemical Techniques (2)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 303</td>
<td>Educational Psychology: Middle and Secondary Education</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Foundations of Teaching Adolescents with Disabilities</td>
</tr>
<tr>
<td>SCI 445</td>
<td>Literacy for Teaching Science</td>
</tr>
<tr>
<td>SED 200</td>
<td>Field Experience in Secondary Science Education</td>
</tr>
<tr>
<td>SED 401</td>
<td>Techniques for Teaching Laboratory Activities in the Secondary Science Classroom</td>
</tr>
<tr>
<td>SED 405</td>
<td>Methods and Materials in Teaching Secondary School Science</td>
</tr>
<tr>
<td>SED 409</td>
<td>Seminar in Secondary Science Education</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SED 407</td>
<td>Practice Teaching Science in the Middle School (6)</td>
</tr>
<tr>
<td>SED 408</td>
<td>Practice Teaching Science in the High School (6)</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Other Fields for Certification**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. One Year (or Equivalent) of a Foreign Language (0–6 cr)</td>
<td></td>
</tr>
<tr>
<td>B. Cognate Sciences* (25 cr)</td>
<td></td>
</tr>
</tbody>
</table>
skills required for teaching; the program leads to initial NYS certification
enable Science Education degree program. This new program is designed to
courses not meeting this
courses taken elsewhere may be substituted for similar courses at Buffalo
minimum of 10 credit hours in chemistry at Buffalo State. Chemistry
completing the degree program. Transfer students
MAT 162, MAT 263, PHY 111, and PHY 112 to avoid possible delays in
CHE 112, CHE 201, CHE 202, CHE 203, CHE 204, CHE 301, MAT 161,
CHE 111, CHE 112, CHE 201, CHE 202, CHE 203, CHE 204, CHE 301, MAT 161,
CHE 460 Inorganic Chemistry
CHE 461 Inorganic Chemistry Laboratory (2)
CHE 470 Biochemistry I
CHE 471 Biochemical Techniques (2)

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.
NOTE: Undergraduate or post-baccalaureate candidates seeking New
York State Teacher Certification are advised to review the M.S.Ed. in
Science Education degree program. This new program is designed to
enable students to quickly and efficiently develop the knowledge and
skills required for teaching; the program leads to initial NYS certification

CHEMISTRY EDUCATION (7–12, 5–6 EXTENSION, B.S.)
BS-NS CGX
Chemistry Department
Bachelor of Science (HEGIS 1905.01)

Science Building 267 (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.

Total Required Credit Hours 151-163 cr

Total Required Credit Hours in Chemistry 43 cr

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Professional Education 30 cr

Total Required Credit Hours in Student Teaching 12 cr

Total Required Credit Hours in Other Fields for Certification 39–45 cr

A. One Year (or Equivalent) of a Foreign Language (0–6 cr)
B. Cognate Sciences* (25 cr)

CHE 405 Educational Psychology: Middle and Secondary Education
CHE 416 Teaching Literacy in Middle and Secondary Schools
CHE 420 Foundations of Teaching Adolescents with Disabilities
SCI 145 Literacy for Teaching Science
SCI 323 Science as Inquiry
SED 200 Field Experience in Secondary Science Education
SED 310 Teaching Science in the Middle School
SED 401 Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405 Methods and Materials in Teaching Secondary School Science
SED 409 Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

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

Total Required Credit Hours in Other Fields for Certification 39–45 cr

A. One Year (or Equivalent) of a Foreign Language (0–6 cr)
B. Cognate Sciences* (25 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 (2)

*Some of these courses may be counted in the Intellectual Foundations requirements (above) or as electives.

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Nonwestern Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 133-145 credit hours required. Advisement is strongly encouraged.
EDU 411 may be taken prior to or with Student Teaching.

Eligibility and majors include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and majors can be found in the Elementary Education Department Handbook for Majors, or from the department office in cooperation with public schools in the greater Buffalo area. Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidate will graduate with recommendation for two certification areas. Combined majors should anticipate an additional semester of college work.

Successful Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 6 (Combined Childhood and Early Childhood, ECC). Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted; but the majority of courses applied to the Combined Childhood and 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 major. Students planning to transfer as juniors into the Combined program and wishing to complete their program in four semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, Combined majors should anticipate an additional semester of college work.

In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

### Intellectual Foundations Requirements

**Total Required Credit Hours: 157-169 cr**

<table>
<thead>
<tr>
<th>C. Mathematics* (14 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 161 Calculus I (4)</td>
</tr>
<tr>
<td>MAT 162 Calculus II (4)</td>
</tr>
<tr>
<td>MAT 163 Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164 Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 263 Calculus III</td>
</tr>
<tr>
<td>MAT 264 Using Technology to Explore Calculus III (1)</td>
</tr>
</tbody>
</table>

*Some of these courses may be counted in the Intellectual Foundations requirements (above) or as electives.

### BS-ED ECC

**Elementary Education and Reading Department**

Bachelor of Science (HEGIS 0082)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bacon Hall 302 (716) 878-5916

Admission Requirements: To be considered for admission to the Combined Childhood and Early Childhood education major (ECC, grades birth-6), students must have successfully completed at least 24 college credit hours, which must include ENG/CWP 101, and at least one of the following: MAT 202, MAT 203, or EXE 100. ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement or MAT 121 must either have been completed or the student must be registered for them. Applicants to the major must have earned a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected SPF/EDU/EXE courses (professional sequence). An acceptable application to the department includes evidence that the above requirements have been met and a description of relevant experiences. In addition, a writing sample regarding the applicant’s experiences that have helped solidify plans to pursue teaching is required. Applications to ECC are available in Bacon 302. Acceptance into the department enables students to proceed through the curricular courses of their selected major. Combined Childhood and Early Childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Combined education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102). Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development School Consortium. Combined education majors are required to complete a 30-credit hour 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. Currently, the concentration may be chosen from: American studies, English, foreign language, mathematics, science, or social studies.

Successful Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 6 (Combined Childhood and Early Childhood, ECC). Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted; but the majority of courses applied to the Combined Childhood and 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 major. Students planning to transfer as juniors into the Combined program and wishing to complete their program in four semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, Combined majors should anticipate an additional semester of college work.

In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

### Intellectual Foundations Requirements

**Total Required Credit Hours: 157-169 cr**

<table>
<thead>
<tr>
<th>Credit Hours for Concentration</th>
<th>30 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Courses</td>
<td>24 cr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Education</th>
<th>69 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 202 Child Development and Education</td>
<td></td>
</tr>
<tr>
<td>SPF 203 School and Society</td>
<td></td>
</tr>
<tr>
<td>EDU 201 Introduction to Elementary Education</td>
<td></td>
</tr>
<tr>
<td>SPF 302 Educational Psychology: Elementary Education</td>
<td></td>
</tr>
<tr>
<td>EDU 211 Introduction to Literacy</td>
<td></td>
</tr>
<tr>
<td>EDU 220 Programs for Infants and Toddlers</td>
<td></td>
</tr>
<tr>
<td>EDU 310W Teaching and Social Studies in the Elementary School</td>
<td></td>
</tr>
<tr>
<td>EDU 311W The Teaching of Reading and other Language Arts in the Elementary School (6)</td>
<td></td>
</tr>
<tr>
<td>EDU 312 The Teaching of Mathematics and Science in the Elementary School (6)</td>
<td></td>
</tr>
<tr>
<td>EDU 329 Integrated Thematic Instruction for Young Children (6)</td>
<td></td>
</tr>
<tr>
<td>EDU 326 Emergent Literacy</td>
<td></td>
</tr>
<tr>
<td>EXE 362 Behavior and Classroom Management</td>
<td></td>
</tr>
<tr>
<td>EXE 371 Foundations of Teaching Children with Disabilities</td>
<td></td>
</tr>
<tr>
<td>EDU 375 Integration of Technology in Education</td>
<td></td>
</tr>
<tr>
<td>EDU 400 Practicum in Teaching (6)</td>
<td></td>
</tr>
<tr>
<td>EDU 402 Seminar to Accompany Student Teaching</td>
<td></td>
</tr>
<tr>
<td>EDU 410 Practicum in Teaching Early Childhood (6)</td>
<td></td>
</tr>
<tr>
<td>EDU 411 Parents, Schools, and Community (taken with student teaching)</td>
<td></td>
</tr>
</tbody>
</table>

### Total Required Credit Hours Minimum

**Total Required Credit Hours Minimum: 156-162 cr**

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 138-144 credit hours required. Advisement is strongly encouraged.

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic advisor for more detailed information.
Admission Requirements: To be considered for admission to the Childhood education major (CED), students must have successfully completed at least 24 college credit hours, which must include ENG/CWP 101, and at least one of the following: SPF 202, SPF 203, or EXE 100. ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement or MAT 121 must either have been completed or the student must be registered for them. Applicants to the major must have earned a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected SPF/EDU/EXE courses (professional sequence).

An acceptable application to the department includes evidence that the above requirements have been met and a description of relevant experiences. In addition, a writing sample regarding the applicant’s experiences that have helped solidify plans to pursue teaching is required. Applications to CED are available in Bacon 302. Acceptance into the department enables students to proceed through the curricular courses of their selected major.

Childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development School Consortium. Childhood education majors are required to complete a 30-credit hour 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. Currently, the concentration may be chosen from: American studies, English, foreign language, mathematics, science, or social studies. Student Teaching: The culminating courses for the Childhood education majors include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EDU 375. EDU 375 may be taken prior to or with Student Teaching.

Successful Graduates will be recommended for New York State Initial Certification to teach children from first to sixth grade (Childhood, CED).

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the Childhood education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Students planning to transfer as juniors into the Childhood program and wishing to complete their program in four semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met.

In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Hours for Concentration</td>
<td>30 cr</td>
</tr>
<tr>
<td>Distribution Courses</td>
<td>24 cr</td>
</tr>
<tr>
<td>Total Required Credit Hours in Education</td>
<td>54 cr</td>
</tr>
</tbody>
</table>

Total Required Credit Hours 141-147 cr

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 123-129 credit hours required. Advisement is strongly encouraged.

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

**CHILLOOD EDUCATION AND ENGLISH EXTENSION (GRADES 1-6 AND 7-9 ENGLISH EXTENSION, B.S.)**

BS-ED CEN
Elementary Education and Reading Department Bachelor of Science (HEGIS 0802)

Admission Requirements: To be considered for admission to the Childhood Education with English Extension major (CEN), students must have successfully completed at least 24 college credit hours, which must include ENG/CWP 101, and at least one of the following: SPF 202, SPF 203, or EXE 100. ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement or MAT 121 must either have been completed or the student must be registered for them. Applicants to the major must have earned a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected SPF/EDU/EXE courses (professional sequence).

An acceptable application to the department includes evidence that the above requirements have been met and a description of relevant experiences. In addition, a writing sample regarding the applicant’s experiences that have helped solidify plans to pursue teaching is required.

Applications to CEN are available in Bacon 302. Acceptance into the department enables students to proceed through the curricular courses of their selected major.

Childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work.

Childhood education with English extension majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102). English Extension Majors also complete a 30-credit-hour concentration in English as outlined in the elementary education handbook, available in Bacon 302 and the BSC website, www.buffalostate.edu/elementaryeducation.
Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development School Consortium. In addition, English Extension majors will take ENG 463 in the semester prior to student teaching. See the English department for details about course availability and orientations.

Student Teaching: The culminating courses for the Childhood with English extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department offices in cooperation with public schools in the greater Buffalo area. It is expected that students in this major will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 and/or EDU 375. Graduate in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7–9 English.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with mathematics extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Jointly registered program students are admitted directly into the Childhood major (BS-ED CED) only. Students planning to transfer as juniors into the Childhood program with English extension and wishing to complete their programs in four or five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since graduates in this major will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 and/or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7–9 English. Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with mathematics extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Jointly registered program students are admitted directly into the Childhood major (BS-ED CED) only. Students planning to transfer as juniors into the Childhood program with English extension and wishing to complete their programs in four or five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since graduates in this major will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 and/or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7–9 English. Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with mathematics extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Jointly registered program students are admitted directly into the Childhood major (BS-ED CED) only. Students planning to transfer as juniors into the Childhood program with English extension and wishing to complete their program in four or five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since teacher candidates...
will qualify for two certifications, most extension programs will require an additional semester.

In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

**Intellectual Foundations Requirements**

<table>
<thead>
<tr>
<th>Credit Hours for French Concentration</th>
<th>30 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Courses</td>
<td>24 cr</td>
</tr>
<tr>
<td><strong>Total Required Credit Hours in Education</strong></td>
<td>57 cr</td>
</tr>
<tr>
<td>SPF 202</td>
<td>Child Development and Education</td>
</tr>
<tr>
<td>SPF 203</td>
<td>School and Society</td>
</tr>
<tr>
<td>EDU 201</td>
<td>Introduction to Elementary Education</td>
</tr>
<tr>
<td>SPF 302</td>
<td>Educational Psychology: Elementary Education</td>
</tr>
<tr>
<td>EDU 211</td>
<td>Introduction to Literacy</td>
</tr>
<tr>
<td>EDU 310 W</td>
<td>Teaching Social Studies in the Elementary School</td>
</tr>
<tr>
<td>EDU 311 W</td>
<td>The Teaching of Reading and other Language Arts in the Elementary School (6)</td>
</tr>
<tr>
<td>EDU 312</td>
<td>The Teaching of Mathematics and Science in the Elementary School (6)</td>
</tr>
<tr>
<td>EXE 362</td>
<td>Behavior and Classroom Management</td>
</tr>
<tr>
<td>EXE 371</td>
<td>Foundations of Teaching Children with Disabilities</td>
</tr>
<tr>
<td>EDU 375</td>
<td>Integration of Technology in Education</td>
</tr>
<tr>
<td>FLE 401</td>
<td>Teaching Foreign Languages in Middle and High Schools (offered fall semester only)</td>
</tr>
<tr>
<td>FLE 407</td>
<td>Student Teaching of Foreign Languages in the Middle/Junior High School (6 credits)</td>
</tr>
<tr>
<td>EDU 402</td>
<td>Seminar in Education</td>
</tr>
<tr>
<td>EDU 404</td>
<td>Student Teaching (6 credits)</td>
</tr>
<tr>
<td><strong>Total Required Credit Hours Minimum</strong></td>
<td>144-150 cr</td>
</tr>
</tbody>
</table>

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 126-132 credit hours required. Advisement is strongly encouraged.*

**Intellectual Foundations Requirements**

<table>
<thead>
<tr>
<th>Credit Hours for Italian Concentration</th>
<th>30 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Courses</td>
<td>24 cr</td>
</tr>
<tr>
<td><strong>Total Required Credit Hours in Education</strong></td>
<td>57 cr</td>
</tr>
<tr>
<td>SPF 202</td>
<td>Child Development and Education</td>
</tr>
<tr>
<td>SPF 203</td>
<td>School and Society</td>
</tr>
<tr>
<td>EDU 201</td>
<td>Introduction to Elementary Education</td>
</tr>
<tr>
<td>SPF 302</td>
<td>Educational Psychology: Elementary Education</td>
</tr>
<tr>
<td>EDU 211</td>
<td>Introduction to Literacy</td>
</tr>
<tr>
<td>EDU 310 W</td>
<td>Teaching Social Studies in the Elementary School</td>
</tr>
<tr>
<td>EDU 311 W</td>
<td>The Teaching of Reading and other Language Arts in the Elementary School (6)</td>
</tr>
<tr>
<td>EDU 312</td>
<td>The Teaching of Mathematics and Science in the Elementary School (6)</td>
</tr>
<tr>
<td>EXE 362</td>
<td>Behavior and Classroom Management</td>
</tr>
<tr>
<td>EXE 371</td>
<td>Foundations of Teaching Children with Disabilities</td>
</tr>
<tr>
<td>EDU 375</td>
<td>Integration of Technology in Education</td>
</tr>
<tr>
<td>FLE 401</td>
<td>Teaching Foreign Languages in Middle and High Schools (offered fall semester only)</td>
</tr>
<tr>
<td>FLE 407</td>
<td>Student Teaching of Foreign Languages in the Middle/Junior High School (6 credits)</td>
</tr>
<tr>
<td>EDU 402</td>
<td>Seminar in Education</td>
</tr>
<tr>
<td>EDU 404</td>
<td>Student Teaching (6 credits)</td>
</tr>
<tr>
<td><strong>Total Required Credit Hours Minimum</strong></td>
<td>144-150 cr</td>
</tr>
</tbody>
</table>

**BS-ED CIT**

**Elementary Education and Reading Department**

**Bachelor of Science (HEGIS 0802)**

**Admission Requirements:** To be considered for admission to the Childhood Education with Italian Extension (CIT) major, students must have successfully completed at least 24 college credit hours, which must include ENG/CWP 101, and at least one of the following: SPF 202, SPF 203, or EXE 100. ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement or MAT 121 must either have been completed or the student must be registered for them. Applicants to the major must have earned a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected SPF/EDU/EXE courses (professional sequence).

An acceptable application to the department includes evidence that the above requirements have been successfully completed and a description of relevant experiences. In addition, a writing sample regarding the applicant’s experiences that have helped solidify plans to pursue teaching is required. Applications to CIT are available in Bacon 302. Acceptance into the department enables students to proceed through the curricular courses of their selected major.

**Childhood with Italian extension education majors must complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).**

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development School Consortium. In addition, Italian extension majors take FLE 401 in the fall semester closest to their student teaching experience. See the Modern and Classical Languages Department for course availability and orientations.

**Italian extension majors also complete a 30-credit-hour concentration in Italian as outlined in the elementary education handbook, available in Bacon 302 and on the BSC website:**

[www.buffalostate.edu/elementaryeducation](http://www.buffalostate.edu/elementaryeducation).

**Student Teaching:** The culminating courses for the Childhood with Italian extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7–9 Italian. Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the Childhood education with Italian extension major must be courses completed at Buffalo State. Guidelines for transfer courses are generally used in computing the required GPA for admission to the major. Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the Childhood with Italian extension program and wishing to complete their programs in four or five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with the recommendation for two certification areas, extension majors should anticipate an additional semester of college work. In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

**Intellectual Foundations Requirements**

<table>
<thead>
<tr>
<th>Credit Hours for Italian Concentration</th>
<th>30 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Courses</td>
<td>24 cr</td>
</tr>
<tr>
<td><strong>Total Required Credit Hours in Education</strong></td>
<td>57 cr</td>
</tr>
<tr>
<td>SPF 202</td>
<td>Child Development and Education</td>
</tr>
<tr>
<td>SPF 203</td>
<td>School and Society</td>
</tr>
<tr>
<td>EDU 201</td>
<td>Introduction to Elementary Education</td>
</tr>
<tr>
<td>SPF 302</td>
<td>Educational Psychology: Elementary Education</td>
</tr>
<tr>
<td>EDU 211</td>
<td>Introduction to Literacy</td>
</tr>
<tr>
<td>EDU 310 W</td>
<td>Teaching Social Studies in the Elementary School</td>
</tr>
<tr>
<td>EDU 311 W</td>
<td>The Teaching of Reading and other Language Arts in the Elementary School (6)</td>
</tr>
<tr>
<td>EDU 312</td>
<td>The Teaching of Mathematics and Science in the Elementary School (6)</td>
</tr>
<tr>
<td>EXE 362</td>
<td>Behavior and Classroom Management</td>
</tr>
<tr>
<td>EXE 371</td>
<td>Foundations of Teaching Children with Disabilities</td>
</tr>
<tr>
<td>EDU 375</td>
<td>Integration of Technology in Education</td>
</tr>
<tr>
<td>FLE 401</td>
<td>Teaching Foreign Languages in Middle and High Schools (offered fall semester only)</td>
</tr>
<tr>
<td>FLE 407</td>
<td>Student Teaching of Foreign Languages in the Middle/Junior High School (6 credits)</td>
</tr>
<tr>
<td>EDU 402</td>
<td>Seminar in Education</td>
</tr>
<tr>
<td>EDU 404</td>
<td>Student Teaching (6 credits)</td>
</tr>
</tbody>
</table>
EXE 362  Behavior and Classroom Management
EXE 371  Foundations of Teaching Children with Disabilities
EDU 375  Integration of Technology in Education
FLE 401  Teaching Foreign Languages in Middle and High Schools (offered fall semester only)
FLE 407  Student Teaching of Foreign Languages in the Middle/Junior High School (6 credits)
EDU 402  Seminar in Education
EDU 404  Student Teaching (6 credits)

Total Required Credit Hours Minimum 144-150 cr

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 126-132 credit hours required. Advisement is strongly encouraged.

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

CHILDOUGH EDUCATION AND MATHEMATICS EXTENSION (GRADES 1–6 AND 7–9 MATHEMATICS EXTENSION, B.S.)

BS-ED CMT
Elementary Education and Reading Department
Bachelor of Science (HEGIS 0802)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bacon Hall 302 (716) 878-5916

Admission Requirements: To be considered for admission to the Childhood Education with Math Extension major (CMT), students must have successfully completed at least 24 college credit hours, which must include ENG/CWP 101, and at least one of the following: SPF 202, SPF 203, or EXE 100. ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement or MAT 121 must either have been completed or the student must be registered for them. Applicants to the major must have earned a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected SPF/EDU/EXE courses (professional sequence).

An acceptable application to the department includes evidence that the above requirements have been met and a description of relevant experiences. In addition, a writing sample regarding the applicant’s experiences that have helped solidify plans to pursue teaching is required. Applications to CMT are available in Bacon 302. Acceptance into the department enables students to proceed through the curricular courses of their selected major.

Childhood with math extension education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development School Consortium. Math extension majors also complete a 30-credit-hour concentration in mathematics as outlined in the elementary education handbook, available in Bacon 302 and on the Buffalo State website: www.buffalostate.edu/elementaryeducation.

In addition, math extension majors will take MED 309, a methods course, in the spring semester prior to their student teaching experience. See the mathematics department for course availability and orientation.

Student Teaching: The culminating courses for the Childhood with math extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7–9 mathematics.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the Childhood education with mathematics extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the Childhood program with math extension and wishing to complete their programs in four to five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors should anticipate an additional semester of college work.

In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

Intellectual Foundations Requirements 33-39 cr*

<table>
<thead>
<tr>
<th>Credit Hours for Math Concentration</th>
<th>30 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Courses</td>
<td>24 cr</td>
</tr>
</tbody>
</table>

Total Required Credit Hours in Education 57 cr

| SPF 202  | Child Development and Education |
| SPF 203  | School and Society |
| EDU 201  | Introduction to Elementary Education |
| SPF 302  | Educational Psychology: Elementary Education |
| EDU 211  | Introduction to Literacy |
| EDU 310 W | Teaching Social Studies in the Elementary School |
| EDU 311 W | The Teaching of Reading and Other Language Arts in the Elementary School (6) |
| EDU 312  | The Teaching of Mathematics and Science in the Elementary School (6) |
| EXE 362  | Behavior and Classroom Management |
| EXE 371  | Foundations of Teaching Children with Disabilities |
| EDU/EXE 375 | Integration of Technology in Education |
| MED 309  | Teaching Mathematics in the Middle School (offered spring semester only) |
| MED 407  | Student Teaching of Mathematics in Junior High-Middle School (6 credits) |
| EDU 402  | Seminar in Education |
| EDU 404  | Student Teaching (6 credits) |

Total Required Credit Hours Minimum 144-150 cr

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 126-132 credit hours required. Advisement is strongly encouraged.

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.
Admission Requirements: To be considered for admission to the Childhood Education with Spanish Extension major (CSH), students must have successfully completed at least 24 college credit hours, which must include ENG/CWP 101, and at least one of the following: SPF 202, SPF 203, or EXE 100. ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement or MAT 121 must either have been completed or the student must be registered for them. Applicants to the major must have earned a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected SPF/EDU/EXE courses (professional sequence).

An acceptable application to the department includes evidence that the above requirements have been met and a description of relevant experiences. In addition, a writing sample regarding the applicant’s experiences that have helped solidify plans to pursue teaching is required. Applications to CSH are available in Bacon 302. Acceptance into the department enables students to proceed through the curricular courses of their selected major.

Childhood with Spanish extension education majors must complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENGL/CWPW 101 and ENGL/CWPW 102).

Spanish extension majors also complete a 30-credit-hour concentration in Spanish as outlined in the elementary education handbook, available in Bacon 302 and on the Buffalo State website: www.buffalostate.edu/elementaryeducation.

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development School Consortium. In addition, Spanish extension majors will take FLE 401 in the fall semester closest to their student teaching experience. See the Modern and Classical Languages department for seat availability and orientation.

Student Teaching: The culminating courses for the Childhood with Spanish extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1–6 and 7–9 Spanish.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the Childhood education with Spanish extension major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the childhood program with Spanish extension and wishing to complete their programs in four-five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors should anticipate an additional semester of college work.

In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

### Intellectual Foundations Requirements

<table>
<thead>
<tr>
<th>Credit Hours for Spanish Concentration</th>
<th>30 cr</th>
</tr>
</thead>
</table>

### Distribution Courses

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Education</th>
<th>57 cr</th>
</tr>
</thead>
</table>

### Total Required Credit Hours

144-150 cr

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 126-132 credit hours required. Advisement is strongly encouraged.

The total number of required hours will vary with course selection. Students should refer to the Elementary Education Handbook and an academic adviser for more detailed information.
department enables students to proceed through the curricular courses of their selected major.

Childhood with Social Studies Extension education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Childhood education with social studies extension majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Social studies extension majors also complete a 30-credit-hour concentration in social studies as outlined in the elementary education handbook, available in Bacon 302 and on the BSC website: www.buffalostate.edu/elementaryeducation

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development School Consortium. In addition, social studies extension majors take SSE 303 in the semester prior to student teaching. See the social studies education department for seat availability and orientation.

Student Teaching: The culminating courses for the Childhood with social studies extension major include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EXE 362 or EDU 375.

Graduates in this major will be recommended for New York State Initial Certification to teach children in grades 1-6 and 7-9 social studies.

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the childhood education with social studies major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Jointly registered program students are admitted directly into the childhood major (BS-ED CED) only. Students planning to transfer as juniors into the Childhood program with social studies extension and wishing to complete their programs in four-five semesters must seek advisement at the institution in which they initially enrolled to assure that the prerequisite course equivalencies are met. Since the teacher candidate will graduate with recommendation for two certification areas, extension majors should anticipate an additional semester of college work.

In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

**Intellectual Foundations Requirements**

- **Credit Hours for Soc. St. Concentration**: 30 cr
- **Distribution Courses**: 24 cr
- **Total Required Credit Hours in Education**: 57 cr

**Courses Provided by Other Departments**

- **EDU 375**: Foundations of Teaching Children with Disabilities
- **SSE 303**: Methods and Materials in Teaching Middle School Social Studies
- **SSE 409**: Student Teaching of Social Studies in the Middle School (6 credits)
- **EDU 402**: Seminar in Education
- **EDU 404**: Student Teaching (6 credits)

**Total Required Credit Hours Minimum**: 144-150 cr

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 126-132 credit hours required. Advisement is strongly encouraged.

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

**COMMUNICATION PROGRAMS**

**See Individual Majors**

- Communication Studies
- Journalism
- Media Production
- Public Communication
- Television and Film Arts

**COMMUNICATION DESIGN (B.F.A.)**

**BFA-AH CMD**

**Design Department**

**Bachelor of Fine Arts (HEGIS 1009)**

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

Upton Hall 212 (716) 878-6032

The B.F.A. degree in Communication Design is a studio-intensive program of study. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate school, or for beginning careers as professional designers.

Students begin with foundation courses in two-dimensional design, three-dimensional design, color, art history, and design history. The major is completed with courses in communication design and selected major electives. Internships are required of senior level majors.

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

All students entering the communication design major enter with a bachelor of fine arts (B.F.A.-CMD) intent, and are required to pass a portfolio review for admission into the upper division. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year after the completion of selected foundations courses, as well as the first course in the intended major. To continue in the B.F.A. degree program, a 3.0 GPA must be maintained in the major.

Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students’ work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

The Design Department may be in the process of curricular revision. Please refer to the college Web site or the department for updated information.
effectively both independently and in teams. They must possess competence in analyzing and thinking critically, and skill in working with strong writing and speaking proficiency, keen ethical insight, and a broad base of knowledge in the social sciences and humanities. The profile of a successful communication studies graduate is a person who can think independently, analyze creatively, and communicate clearly and persuasively in a variety of settings. The major also provides a base for graduate education in communication and the liberal arts and sciences, as well as for students seeking 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 and the liberal arts and sciences. The major adheres to the standards of the Accrediting Council on Education in Journalism and Mass Communication, the number of course credits for the major is limited.

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 and the liberal arts and sciences. The major adheres to the standards of the Accrediting Council on Education in Journalism and Mass Communication.

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.

Admission Requirements: Incoming freshman and transfer students must have a minimum GPA of 2.6 in the major to register for certain upper-division courses (330- and 400-level). Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors, and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Communication Design 79 cr

A. Foundation Courses (37 cr)
DES 101 Introduction to Design: 2D I
DES 102 Introduction to Design: 2D II
DES 103 Introduction to Design: 3D I
DES 277 Computer Graphics I
DES 314W History of Graphic Design
DES 377 Computer Graphics II
DES 307 Color Theory
DES 414 Senior Seminar (4)
FAR 101 Drawing I
FAR 104 Themes and Issues in Contemporary Arts
FAR 250 Art History I
FAR 251 Art History II

B. Major Courses (33 cr)
DES 270 Visual Communication I
DES 271 Typography
DES 370 Visual Communication II
DES 374 Advertising I
DES 378 Web Design
DES 380 Illustration I
DES 473 Graphic Design
DES 475 Graphic Design Practicum (6)
DES 479 Multimedia
DES 480 Illustration II

C. Studio Electives Selected by Advisement (9 cr)
DES 220 Ceramics I
DES 230 Introduction to Jewelry
DES 242 Fibers I
DES 250 Wood I

All College Electives 2-8 cr

Total Required Credit Hours 120 cr

COMMUNICATION STUDIES (B.A.)

BA-AH COM
Communication Department
Bachelor of Arts (HEGIS 0601)
Bishop Hall 210 (716) 878-6008

This major allows students much flexibility to tailor a program of theory-based and applied courses. It meets the needs of students preferring a generalist approach to communication, as well as for students seeking a more academic, less applied approach. Compare this major with other majors within the Communication Department, the Communication Studies major adheres to the standards of the Accrediting Council on Education in Journalism and Mass Communication.

Career Opportunities: Students in Communication Studies prepare for careers in organizational communication, research, media analysis, public relations, lobbying, speechwriting, fundraising, and other fields that require a liberal arts education enhanced with communication expertise. The major also provides a base for graduate education in communication and the liberal arts and sciences. The profile of a successful communication studies graduate is a person with strong writing and speaking proficiency, keen ethical insight, competence in analyzing and thinking critically, and skill in working effectively both independently and in teams.

Admission Requirements: Incoming freshman and transfer students can declare the major. A 2.6 in the major is needed to register for certain required upper-division courses (300- and 400-level). See www.buffalostate.edu/communication for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

Academic Standards: Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors, and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Communication 42 cr

A. Communication Core (12 cr)
COM 100 Media Literacy
or SPC 103 or Introduction to Human Communication
COM 210 Converged 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 (330- and 400-level).

B. Upper-Level Oral Communication Course (3 cr)
Select one course from the following:
SPC 306 Advanced Public Speaking
SPC 307 Group Communication
SPC 315 Media Performance

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 337 Electronic News I: Producing
COM 390 Special Topics: Journalism 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 and Social Media Production

E. Communication Theory and Criticism (6 cr)
Select two courses from the following:
COM 310 International Communication
COM 327 Literary Journalism
COM 400 Communication Law
COM 401 Applied Communication Research
COM 410 Communication History
SPC 309 Persuasion and Propaganda
SPC 311 Intercultural Communication
SPC 321 Rhetorical Criticism
SPC 333 Minorities and the Media
SPC 407 Organizational Communication
SPC 422 Media Criticism
SPC 424 Special Topics in Media Criticism

F. Senior Seminar (3 cr)
G. Communication Electives (12 cr)

COM 495 Independent Project
or COM 499 or 300/400-level COM or SPC electives by advisement

All College Electives 39-45 cr
Total Required Credit Hours 120 cr

COMPUTER INFORMATION SYSTEMS
(B.S.)*

BS-SP CIS
Computer Information Systems Department
Bachelor of Science (HEGIS 0702)
Technology Building 203 (716) 878-5528

The computer information systems program prepares students for entry-level positions, such as programmer, systems analyst, or network support in the computer field, and provides them with the technical knowledge and managerial skills necessary for a wide range of subsequent career paths. There is a growing demand in all sectors for individuals with this combination of capabilities. This program was developed with the cooperation of employers and information systems professionals and, unlike a computer science program, its emphasis is on commercial applications of computers rather than theory.

Admission Requirements: Transfer students from parallel A.S. or A.A.S. programs in computer information systems or computer science, and students from nonparallel programs who have completed a programming course equivalent to CIS 151, are accepted directly into the CIS major on a competitive basis providing they have a minimum cumulative GPA of 2.5 and a minimum GPA of 2.0 in major courses from the transfer institution. Freshmen and transfer students who do not meet these requirements for admission to the CIS major are accepted into the CIS premajor (0824) with no special requirements. Premajors are expected to take CIS 151 within three semesters of entering the premajor. Freshmen who have 6 credits of AP computer science can be accepted directly into the CIS major (0825). CIS premajors, undeclared students, and students in other majors at Buffalo State can be admitted to the CIS major when they have (a) completed CIS 151 (or an equivalent transfer course) with a minimum grade of C or achieved a minimum GPA of 2.0 in CIS major courses taken at Buffalo State, and (b) achieved a minimum cumulative GPA of 2.5 at Buffalo State.

The CIS department is in the process of curricular revision. Please refer to college Web listings or the department for updated information.

*Evening study available.

Intellectual Foundations Requirements 33-39 cr
Total Required Credit Hours in Computer Information Systems 42 cr

A. Required Courses (24 cr)

CIS 151 Computer-Based Information Processing I
CIS 251 Computer-Based Information Processing II
OR
CIS 361 Fundamental Concepts in Object-Oriented Programming\*
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 375 Programming for the Internet Environment
CIS 391 Information Systems Project Management
CIS 405 Comprehensive COBOL Programming
CIS 413 Multimedia Web Programming
CIS 420 Database Management Systems
CIS 425 Object-Oriented Development
CIS 427 E-Commerce Concepts, Technologies and Implementation
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 478 Information System Security
CIS 488 Internship
CIS 495 Project
CIS 499 Independent Study

In addition to the above courses, one non-CIS course may be taken as an elective with the department chair’s permission.

C. Residency Requirements

A minimum of 21 credit hours must be completed in the CIS department at Buffalo State College.
No more than 3 credit hours of CIS 488 may be used to fulfill the CIS elective requirement.
No more than 3 credit hours of CIS elective requirement can be satisfied by credit hours from CIS 495 and CIS 499.

1 Required only for transfer students who have not taken a course in C programming.

All College Electives 39-45 cr
Total Required Credit Hours 120 cr

CRIMINAL JUSTICE (B.S.)

BS-SP CRJ
Criminal Justice Department
Bachelor of Science (HEGIS 2105)
Classroom Building C114 (716) 878-4517

Criminal justice is a multidisciplinary academic program that examines the characteristics and operations of the criminal justice system and relationships between crime and crime control within the context of a democratic society. The program explores social, cultural, political, and organizational influences on criminal justice policies and operations from both theoretical and real-world perspectives.

Concentrations in Major:

- Concentration in Policing: CRJ 202, CRJ 301, CRJ 409
- Concentration in Corrections: CRJ 204, CRJ 306, CRJ 406, CRJ 420
- Concentration in Intelligence Analysis: CRJ 250, CRJ 355, CRJ 450, CRJ 455

Admission Requirements: Students are not accepted to the criminal justice major during their first semester at Buffalo State. However, students can be admitted as premajors to receive the benefit of departmental information and advisement. A minimum of 12 credit hours of coursework must be completed with a minimum cumulative GPA of 2.5. A student is then eligible to apply for admittance as a criminal justice major. Transfer students from community colleges are accepted based upon their academic average and according to their date of application.

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Criminal Justice 42 cr

A. Core Courses (18 cr)

CRJ 101 Introduction to Criminal Justice
CRJ 201 Criminal Law
CRJ 202 The Police Process
D. Professional, Behavioral, and Social Science Electives (9 cr)

Select three courses from the following:

- CRJ 204 The Correctional Process
- CRJ 303 Criminal Justice Theory and Ideology
- CRJ 315 Research Methods in Criminal Justice

B. Supporting Courses (6 cr)

Select two courses from the following:

- CRJ 250 Introduction to Intelligence Analysis
- CRJ 301 Police Organization and Management
- CRJ 302 Criminal Justice and the Community
- CRJ 305 The Juvenile Justice System
- CRJ 308 Crime Prevention
- CRJ 306 Probation, Parole, and Community Corrections
- CRJ 307 Comparative Criminal Justice Systems
- CRJ 311 Constitutional Issues in Criminal Justice
- CRJ 320 Criminal Courts
- CRJ 356 Crime Analysis

C. Criminal Justice Electives (9 cr)

Select three courses from the following:

- CRJ 425 Race, Ethnicity, and the Administration of Justice
- CRJ 430 Gender and the Administration of Justice

Select two courses from the following:

- CRJ 402 Advanced Administration in Criminal Justice
- CRJ 404 White-Collar and Corporate Crime
- CRJ 406 Correctional Institutions and Programs
- CRJ 408 Proseminar in Criminal Justice
- CRJ 409 Advanced Issues in Law Enforcement
- CRJ 410 Organized Crime
- CRJ 420 Advanced Issues in Punishment and Corrections
- CRJ 440 Drugs, Crime, and Drug Policy
- CRJ 450 Terrorism and Criminal Justice
- CRJ 455 Advanced Intelligence Analysis
- CRJ 470 Advanced Seminar in Criminal Justice
- CRJ 485 Moot Court
- CRJ 488 Internship
- CRJ 495 Special Project
- CRJ 499 Independent Study

D. Professional, Behavioral, and Social Science Electives (9 cr)

Select three courses from the following:

- ANT 307 Urban Anthropology
- ANT 325 Forensic Anthropology
- BUS 312 Financial Accounting
- BUS 313 Managerial Accounting
- BUS 334 Business Law I
- BUS 360 Principles of Management
- BUS 410 Accounting Analysis
- CRJ 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
- ENG 300 Writing for the Professions
- GEG 425 Fundamentals of GIS
- HIS 341 African Americans and Civil Rights
- HIS 342 English Legal History
- LIB 300 Advanced Library Research Methods
- MAT 311 Introductory Probability and Statistics
- PHI 304 Philosophy of Law
- PSC 315 State and Local Government Politics

- PSC 316 Urban Ethnic Politics
- PSC 320 U.S. Constitution/Civil Liberties
- PSC 360 Public Administration
- PSC 364 American Public Policy
- PSY 306 Statistics in Psychological Research
- PSY 325 Social Behavior
- PSY 367 Organizational Behavior
- PSY 375 Forensic Psychology
- PSY 376 Health Psychology
- PSY 411 Abnormal Psychology
- SOC 301 Social Statistics
- SOC 351 Sociology of Race and Ethnicity
- SOC 353 Environment and Society
- SOC 380 Sociology of Crime
- SOC 382 Sociology of Law
- SOC 390 Sociology of Juvenile Delinquency
- SPA 201 Intermediate Spanish I
- SPA 202 Intermediate Spanish II
- SPC 306 Public Speaking
- SPC 311 Family Violence
- SWK 319 Dynamics of Poverty
- SWK 320 Social Services Organizations

1. ECO 305, PSY 306, MAT 311, SOC 301, or an approved statistics course is a prerequisite for CRJ 315.

One of these courses must be included as an elective

CRJ402 requires upper division status, CRJ101 & completion of an introductory course in public administration, business management, or criminal justice administration.

CRJ408 may be taken 3 times as long as 3 CRJ408 courses are taken.

Only two CRJ408 courses will apply to the CRJ major. If you take more than 3 CRJ408 courses, the extra courses will be invalid and you will not receive credit.

CRJ488 requires senior class standing, a minimum cumulative GPA of 3.0 at Buffalo State and/or Instructor Permission.

CRJ 495 and CRJ 499 require senior class standing and a minimum cumulative GPA of 3.0 at Buffalo State. No more than one CRJ 499 and/or CRJ495 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.

No more than 7 credit hours from one department course area (i.e. no more than two PSC courses, two PSY courses, two SOC courses) allowed.

All College Electives 12-39 cr

Total Required Credit Hours 120 cr

See Individual Majors

- Ceramics
- Communication Design
- Fibers
- Metals/Jewelry
- Wood/Furniture

Dietetics- Coordinated Program (B.S.)

BS-SP DIE COR
Dietetics and Nutrition Department
Bachelor of Science (HEGIS 1306)
B. Courses for ADA Requirements (27 cr)

To satisfy the clinical requirements of the A.N.D., 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 (39 cr)**

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
- MAT 311: Introduction to Probability and Statistics (or equivalent)
- LIB 100: Introduction to Library Research Methods (1)
- PSY 101: Introduction to Psychology
- SOC 100: Introduction to Sociology

All College Electives: 0 cr

**Total Required Credit Hours:** 146-152 cr

---

**Dietetics- Didactic Program (B.S.)**

BS-SP DIE DID
Dietetics and Nutrition Department
Bachelor of Science (HEGIS 1306)

Caudell Hall 207 (716) 878-5913

SUNY-Buffalo State’s Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (213) 899-0400 ext 5400. http://www.eatright.org/ACEND http://www.eatright.org/ACEND.

The program provides students with the academic requirements established by ACEND for entry-level dietitians. Graduates of the program receive a verification statement signed by the DPND program director. Graduates are then eligible to apply for a ACEND-accredited supervised practice program via dietetic internships or pre-professional practice programs that are available throughout the country. After completing the supervised practice requirements, individuals may take the registration examination administered by the Commission on Dietetic Registration. Passing the registration examination earns the credentials of registered dietitian (RD). Career opportunities are available to dietitians in health facilities, food service organizations, government agencies, and consulting work. Some individuals use this program to prepare for graduate study in nutrition-related areas.

Admission Requirements: Students are admitted as freshmen or transfers. Transfer students, undeclared students, or students changing majors or desiring a major in this program must have a minimum GPA of 2.75 in related areas.

**Intellectual Foundations Requirements** 33–39 cr

**Total Required Credit Hours in Nutrition and Food Science** 74 cr

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

**A. Required Courses (47 cr)**

- NFS 100: Introduction to Food Preparation
- NFS 102: Introductory Nutrition
- NFS 111: Applied Principles of Management in Dietetics/Food Services
- NFS 200: Applied Food Chemistry
- NFS 211: Food Service Systems Management in Health Care
- NFS 230: Introduction to Dietetics (2)
- NFS 300: Food processing I
- NFS 302: Advanced Nutrition
- NFS 310: Personnel Management in Dietetics/Food Services
- NFS 315: Life Cycle and Community Nutrition I
- NFS 316: Life Cycle and Community Nutrition II (2)
- NFS 330: Seminar on Complementary and Alternative Nutrition (1)
- NFS 401: Medical Nutrition Therapy I
- NFS 402: Medical Nutrition Therapy II
- NFS 403: Medical Nutrition Therapy III
- NFS 405: Principles of Nutrition Education (2)
- NFS 419: Introduction to Clinical Practice (2)
- NFS 430: Introduction to Nutrition Research (2)

**B. Courses for ADA Requirements (27 cr)**

To satisfy the clinical requirements of the A.N.D., 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
Applications to ECE are available in Bacon 302. Acceptance into the experiences that have helped solidify plans to pursue teaching is required. In addition, a writing sample regarding the applicant's above requirements have been met and a description of relevant competency requirement or MAT 121 must either have been completed or at least 24 college credit hours, which must include ENG/CWP 101, and at least one of ENG/CWP 102, and the mathematics and quantitative reasoning (or equivalent) courses taken at an accredited institution and generally used in computing the required GPA for admission to the major. Successful Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 2 (early childhood, ECE).

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the early childhood education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Students planning to transfer as juniors into the early childhood education majors include two supervised student teaching experiences with children at different age levels in different types of schools. Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EDU 375 or EDU 411. EDU 411 and EDU 375 may be taken prior to or with Student Teaching.

The seminar requirements are subject to change at any time and without notice.

<table>
<thead>
<tr>
<th>Credit Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Courses</td>
<td>24 cr</td>
</tr>
<tr>
<td>Total Required Credit Hours in Education</td>
<td>54 cr</td>
</tr>
</tbody>
</table>

| SPF 202 | Child Development and Education |
| EDU 201 | Introduction to Elementary Education |
| SPF 302 | Educational Psychology: Elementary Education |
| EDU 211 | Introduction to Literacy |
| EDU 220 | Programs for Infants and Toddlers |
| EDU 311W | The Teaching of Reading and other Language Arts in the Elementary School (6) |
| EDU 329 | Integrated Thematic Instruction for Young Children (6) |
| EDU 336 | Emergent Literacy |
| EXE 362 | Behavior and Classroom Management (optional) |
| EXE 371 | Foundations of Teaching Children with Disabilities |
| EDU 375 | Integration of Technology in Education |

NFS 200 Applied Food Chemistry
NFS 211 Food Systems Management in Health Care
NFS 230 Introduction to Dietetics Profession (2)
NFS 300 Food Processing I
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 Dietsetics 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
- MAT 311 Introduction to Probability and Statistics (or equivalent)
- LIB 100 Introduction to Library Research Methods (1)
- PSY 101 Introduction to Psychology
- SOC 100 Introduction to Sociology

*Some of these courses meet the Intellectual Foundations requirements.

All College Electives 0cr

Total Required Credit Hours 123-129 cr

---

**EARLY CHILDHOOD EDUCATION (BIRTH - GRADE 2, B.S.)**

BS-ED ECE
Elementary Education and Reading Department
Bachelor of Science (HEGIS 0823)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bacon Hall 302 (716) 878-5916

Admission Requirements: To be considered for admission to the early childhood education major(ECE), students must have successfully completed at least 24 college credit hours, which must include ENG/CWP 101, and at least one of the following: SPF 202, SPF 203, or EXE 100. ENG/CWP 102, and the mathematics and quantitative reasoning competency requirement or MAT 121 must either have been completed or the student must be registered for them. Applicants to the major must have earned a minimum cumulative GPA of 2.5, as well as a minimum 2.5 in these selected SPF/EDU/EXE courses (professional sequence). An acceptable application to the department includes evidence that the above requirements have been met and a description of relevant experiences. In addition, a writing sample regarding the applicant’s experiences that have helped solidify plans to pursue teaching is required. Applications to ECE are available in Bacon 302. Acceptance into the department enables students to proceed through the curricular courses of their selected major.

Early Childhood education majors must complete one year of college-level study of one language other than English. Typically, two years of high school study of one language is equivalent to one year of college-level work. Early childhood education majors must also complete a distribution requirement of at least 6 credit hours in each of the following areas: mathematics, science, social studies, and English (not including ENG/CWP 101 and ENG/CWP 102).

Many of the courses in our professional sequence are taught in authentic settings for clinically-rich mentored experiences. As a result, the teacher candidates will have observation, tutoring, and teaching experiences in a variety of placements in our Professional Development School Consortium. Early childhood education majors are required to complete a 30-credit hour 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. Currently, the concentration may be chosen from: American studies, English, foreign language, mathematics, science, or social studies

Student Teaching: The culminating courses for the early childhood education majors include two supervised student teaching experiences with children at different age levels in different types of schools.

Eligibility and placement for each student teaching experience is determined by the department office in cooperation with public schools in the greater Buffalo area. It is expected that students in these majors will have at least one urban teaching experience. Prior written approval must be obtained from the chair of the department for students to enroll for any other college credit work during a student teaching assignment except for EDU 375 or EDU 411. EDU 411 and EDU 375 may be taken prior to or with Student Teaching.

Successful Graduates will be recommended for New York State Initial Certification to teach children from birth through grade 2 (early childhood, ECE).

Transfer Students: Most courses taken at an accredited institution and relevant to a Buffalo State degree program will be accepted, but the majority of courses applied to the early childhood education major must be courses completed at Buffalo State. Grades for transfer courses are generally used in computing the required GPA for admission to the major. Students planning to transfer as juniors into the early childhood education 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.

In addition to academic requirements, students are required to complete all seminars specifically required by New York State for program completion, including School Violence Prevention and Intervention (SAVE); Identification and Reporting of Child Abuse and Maltreatment; Alcohol and Other Drug Avoidance; Fire and Arson Safety; and Harassment, Bullying, Cyberbullying, and Discrimination in Schools: Prevention and Intervention (DASA Training). The seminar requirements are subject to change at any time and without notice.

---

<table>
<thead>
<tr>
<th>All College Electives</th>
<th>0cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours</td>
<td>123-129 cr</td>
</tr>
</tbody>
</table>

---

**Intellectual Foundations Requirements**

- **Credit Foundations Requirements** 33-39 cr
- **Distribution Courses** 24 cr
- **Total Required Credit Hours in Education** 54 cr
EDU 400 Practicum in Teaching (Primary) (6)
EDU 402 Seminar in Education
EDU 410 Practicum in Teaching Early Childhood (6)
EDU 411 Practicum in Teaching (Secondary) (6)

Total Required Credit Hours 141-147 cr

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number of credit hours required. Advisement is strongly encouraged.

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

EARTH SCIENCE EDUCATION (7–12, B.S.)

BS-NS EGS
Earth Sciences and Science Education Department
Bachelor of Science (HEGIS 1917.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Science Building 271 (716) 878-6731

The earth science secondary education program leads to a New York State Initial Certificate for teaching both earth sciences and general sciences in grades 7–12. Students seeking admission to the B.S. Earth Science Education program should initially enroll in the B.S. Earth Sciences program. After successfully completing at least 6 credits in required geology (GES) courses at Buffalo State with a GPA in these courses of 3.0 or higher, students apply for admission to the B.S. Earth Science Education program during the semester they complete SED 200. A minimum GPA of 3.0 in earth science (GES prefix) courses is required for admission to SED 405, SED 407, and SED 408.

NOTE: Undergraduate or post-baccalaureate candidates seeking New York State Teacher Certification are advised to review the M.S.Ed. in Science Education degree program. This program is designed to enable students to quickly and efficiently develop the knowledge and skills required for teaching; the program leads to initial NYS certification for those candidates already holding undergraduate science degrees.

Candidates currently in undergraduate or post-baccalaureate programs should strongly consider transitioning to the new program.

Intellectual Foundations Requirements

Total Required Credit Hours in Earth Sciences 33-39 cr*

Total Required Credit Hours in Earth Sciences 40 cr

GES 101 Introductory Geology
GES 102 Historical Geology
GES 103 Introductory Geology Laboratory (1)
GES 111 General Oceanography
GES 131 Introductory Astronomy
GES 241 Meteorology
GES 302 Invertebrate Paleontology (4)
GES 303 Mineralogy and Petrology (4)
GES 307 Geomorphology
GES 408 Structural Geology (4)
GES 405 Geology of North America

One astronomy elective.

One upper-division earth science elective.

Total Required Credit Hours in Professional Education 24 cr

SPF 303 Educational Psychology: Middle and Secondary Education
EDU 416 Teaching Literacy in Middle and Secondary Schools

EXE 372 Foundations of Teaching Adolescents with Disabilities
SCI 145 Literacy for Teaching Science
SED 200 Field Experience in Secondary Science Education
SED 401 Techniques for Teaching Laboratory Activities in the Secondary Science Classroom
SED 405 Methods and Materials in Teaching Secondary School Science
SED 409 Seminar in Secondary Science Education

Total Required Credit Hours in Student Teaching 12 cr

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

Total Required Credit Hours in Other Fields for Certification 22–30 cr

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

B. Cognate Sciences (22–24 cr)

CHE 111, CHE 112
PHY 111, PHY 112
OR
PHY 107, PHY 108

Select two courses from the following:

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

Total Required Credit Hours 131-145 cr

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 120-127 credit hours required. Advisement is strongly encouraged.

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

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

BS-NS EGS
Earth Sciences and Science Education Department
Bachelor of Science (HEGIS 1917.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Science Building 271 (716) 878-6731

The secondary education earth science program leads to a New York State Initial Certificate for teaching both earth sciences and general sciences in grades 5–12. Students seeking admission to the B.S. Earth Science Education program should initially enroll in the B.S. Earth Sciences program. After successfully completing at least 6 credits in required geology (GES) courses at Buffalo State with a GPA in these courses of 3.0 or higher, students apply for admission to the B.S. Earth Science Education program during the semester they complete SED 200. A minimum GPA of 3.0 in earth science (GES prefix) courses is required for admission to SED 405, SED 407, and SED 408.

NOTE: Undergraduate or post-baccalaureate candidates seeking New York State Teacher Certification are advised to review the M.S.Ed. in Science Education degree program. This program is designed to enable students to quickly and efficiently develop the knowledge and skills required for teaching; the program leads to initial NYS certification for those candidates already holding undergraduate science degrees.
Candidates currently in undergraduate or post-baccalaureate programs should strongly consider transitioning to the new program.

**Intellectual Foundations Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 101</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td>GES 102</td>
<td>Historical Geology</td>
</tr>
<tr>
<td>GES 103</td>
<td>Introductory Geology Laboratory (1)</td>
</tr>
<tr>
<td>GES 111</td>
<td>General Oceanography</td>
</tr>
<tr>
<td>GES 131</td>
<td>Introductory Astronomy</td>
</tr>
<tr>
<td>GES 241</td>
<td>Meteorology</td>
</tr>
<tr>
<td>GES 302</td>
<td>Invertebrate Paleontology (4)</td>
</tr>
<tr>
<td>GES 303</td>
<td>Mineralogy and Petrology (4)</td>
</tr>
<tr>
<td>GES 307</td>
<td>Geomorphology</td>
</tr>
<tr>
<td>GES 408</td>
<td>Structural Geology (4)</td>
</tr>
<tr>
<td>GES 405</td>
<td>Geology of North America</td>
</tr>
<tr>
<td></td>
<td>One astronomy elective.</td>
</tr>
<tr>
<td></td>
<td>One upper-division earth science elective.</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Earth Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 101</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td>GES 102</td>
<td>Historical Geology</td>
</tr>
<tr>
<td>GES 103</td>
<td>Introductory Geology Laboratory (1)</td>
</tr>
<tr>
<td>GES 111</td>
<td>General Oceanography</td>
</tr>
<tr>
<td>GES 131</td>
<td>Introductory Astronomy</td>
</tr>
<tr>
<td>GES 241</td>
<td>Meteorology</td>
</tr>
<tr>
<td>GES 302</td>
<td>Invertebrate Paleontology (4)</td>
</tr>
<tr>
<td>GES 303</td>
<td>Mineralogy and Petrology (4)</td>
</tr>
<tr>
<td>GES 307</td>
<td>Geomorphology</td>
</tr>
<tr>
<td>GES 408</td>
<td>Structural Geology (4)</td>
</tr>
<tr>
<td>GES 405</td>
<td>Geology of North America</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Professional Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 303</td>
<td>Educational Psychology: Middle and Secondary Education</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Foundations of Teaching Adolescents with Disabilities</td>
</tr>
<tr>
<td>SCI 323</td>
<td>Science as Inquiry</td>
</tr>
<tr>
<td>SCI 445</td>
<td>Literacy for Teaching Science</td>
</tr>
<tr>
<td>SED 200</td>
<td>Field Experience in Secondary Science Education</td>
</tr>
<tr>
<td>SED 310</td>
<td>Teaching Science in the Middle School</td>
</tr>
<tr>
<td>SED 401</td>
<td>Techniques for Teaching Laboratory Activities in the Secondary Science Classroom</td>
</tr>
<tr>
<td>SED 405</td>
<td>Methods and Materials in Teaching Secondary School Science</td>
</tr>
<tr>
<td>SED 409</td>
<td>Seminar in Secondary Science Education</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Student Teaching**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SED 407</td>
<td>Practice Teaching Science in the Middle School (6)</td>
</tr>
<tr>
<td>SED 408</td>
<td>Practice Teaching Science in the High School (6)</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Other Fields for Certification**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Required Credit Hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Earth Sciences (B.S.)**

**BS-NS EAS Earth Sciences and Science Education Department Bachelor of Science (HEGIS 1917)**

科学楼271 (716) 878-6731

The Earth Sciences program offers students the opportunity to develop a broad understanding of the earth as a dynamic, interacting system of land, sea, atmosphere, and solar system. The student, in consultation with a faculty adviser, will select one of the three concentrations, usually after completion of 9 GES credit hours. The concentrations, leading in potentially different career directions, are Earth Science (for secondary education Earth Science candidates), Environmental Earth Sciences, and Geology. Earth Sciences majors may not minor in Astronomy.

Coursework in chemistry, calculus, and physics is expected, particularly for students intent upon careers in the geosciences, contemplating graduate study, or seeking certification as a secondary Earth Science teacher. The recommended courses are CHE 111, CHE 112, MAT 126, MAT 127, PHY 111, PHY 112 and upper-division courses in chemistry, mathematics and physics. Each student should choose the appropriate courses by advisement, beginning with entry into the major. Student majors are given many opportunities to pursue independent research under faculty supervision or an internship experience. Students may find additional information about undergraduate research possibilities from faculty members, and by visiting the Undergraduate Research Office (www.buffalostate.edu/undergraduateresearch). A departmental honors program also is available. Students should contact the department for additional information.

**Intellectual Foundations Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 101</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td>GES 102</td>
<td>Historical Geology</td>
</tr>
<tr>
<td>GES 103</td>
<td>Introductory Geology Laboratory (1)</td>
</tr>
<tr>
<td>GES 111</td>
<td>General Oceanography</td>
</tr>
<tr>
<td>GES 131</td>
<td>Introductory Astronomy</td>
</tr>
<tr>
<td>GES 241</td>
<td>Meteorology</td>
</tr>
<tr>
<td>GES 302</td>
<td>Invertebrate Paleontology (4)</td>
</tr>
<tr>
<td>GES 303</td>
<td>Mineralogy and Petrology (4)</td>
</tr>
<tr>
<td>GES 307</td>
<td>Geomorphology</td>
</tr>
<tr>
<td>GES 408</td>
<td>Structural Geology (4)</td>
</tr>
<tr>
<td>GES 405</td>
<td>Geology of North America</td>
</tr>
<tr>
<td></td>
<td>One astronomy elective.</td>
</tr>
<tr>
<td></td>
<td>One upper-division earth science elective.</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Earth Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 101</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td>GES 102</td>
<td>Historical Geology</td>
</tr>
<tr>
<td>GES 103</td>
<td>Introductory Geology Laboratory (1)</td>
</tr>
<tr>
<td>GES 111</td>
<td>General Oceanography</td>
</tr>
<tr>
<td>GES 131</td>
<td>Introductory Astronomy</td>
</tr>
<tr>
<td>GES 303</td>
<td>Mineralogy and Petrology (4)</td>
</tr>
<tr>
<td>GES 307</td>
<td>Geomorphology</td>
</tr>
<tr>
<td>GES 408</td>
<td>Structural Geology (4)</td>
</tr>
</tbody>
</table>

**A. Required Courses (25 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 101</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td>GES 102</td>
<td>Historical Geology</td>
</tr>
<tr>
<td>GES 103</td>
<td>Introductory Geology Laboratory (1)</td>
</tr>
<tr>
<td>GES 111</td>
<td>General Oceanography</td>
</tr>
<tr>
<td>GES 131</td>
<td>Introductory Astronomy</td>
</tr>
<tr>
<td>GES 303</td>
<td>Mineralogy and Petrology (4)</td>
</tr>
<tr>
<td>GES 307</td>
<td>Geomorphology</td>
</tr>
<tr>
<td>GES 408</td>
<td>Structural Geology (4)</td>
</tr>
</tbody>
</table>

**B. Concentrations (16–18 cr)**

**Environmental Earth Sciences Concentration (18 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 300</td>
<td>Sedimentology</td>
</tr>
<tr>
<td>GES 301</td>
<td>Stratigraphy</td>
</tr>
<tr>
<td>GES 452</td>
<td>Hydrogeology</td>
</tr>
<tr>
<td>GES 460</td>
<td>Applied Environmental Methods</td>
</tr>
</tbody>
</table>

Select two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 350</td>
<td>Environmental Geochemistry</td>
</tr>
<tr>
<td>GEG 365</td>
<td>Soil Science and Management</td>
</tr>
<tr>
<td>GES 444</td>
<td>Global Systems Geomorphology</td>
</tr>
<tr>
<td>GES 450</td>
<td>Field Geology</td>
</tr>
</tbody>
</table>

Students should consider completing the Environmental Science minor program. Completion of CHE 111 and CHE 112 are advised.

**Earth Science Concentration (16 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 241</td>
<td>Meteorology</td>
</tr>
<tr>
<td>GES 302</td>
<td>Invertebrate Paleontology (4)</td>
</tr>
<tr>
<td>GES 405</td>
<td>Geology of North America</td>
</tr>
</tbody>
</table>

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)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES 300</td>
<td>Sedimentology</td>
</tr>
<tr>
<td>GES 301</td>
<td>Stratigraphy</td>
</tr>
<tr>
<td>GES 302</td>
<td>Invertebrate Paleontology (4)</td>
</tr>
<tr>
<td>GES 450</td>
<td>Field Geology</td>
</tr>
</tbody>
</table>

Select one course from the following:

- GES 403 Glacial Geology
- GES 405 Geology of North America

Students contemplating graduate study are advised that CHE 111, CHE 112, MAT 126, MAT 127, PHY 111, and PHY 112 are essential to a modern geology (or related) program. These sequences should begin before the graduate school decision is made; failure to take them limits students’ future options.

### All College Electives

- 20-30 cr

### Total Required Credit Hours

- 120 cr

---

**ECONOMICS (B.A.)**

**BA-NS ECO**

Economics and Finance Department

Bachelor of Arts (HEGIS 2204)

Classroom Building B207 (716) 878-4606

The B.A. degree program in economics provides a solid foundation in the skills and analytical techniques required to understand changes in the economic environment and to be able to formulate decisions as consumers, resource owners, and managerial personnel in business, government, and nonprofit organizations. This program is also designed to prepare students to participate, as career professionals, citizens and as scholars, in the global economy by providing a strong focus on the international aspects of economics. Students who choose this program are encouraged to complement the international focus of the program by taking additional appropriate courses in history, political science, and geography. In addition to providing preparation for a variety of entry-level management positions in business and government, the program also offers excellent preparation for graduate work in international business, economics, and law.

**Admission Requirements:** Transfer or uncommitted students must have a minimum GPA of 2.0 in all previous college credits. **Transfer Students:** Most courses taken at an accredited institution and relevant to the B.A. degree program will be accepted, but the majority of courses applied to the major must be courses completed at Buffalo State. In most cases, grades for transfer courses will be used in computing the required minimum GPA for admission into the program. **Honors Option for the B.A. Program:** An honors designation is available for students who have established high standards of achievement and demonstrated a capacity for independent work. Students should contact the department for information on admission and requirements.

### Intellectual Foundations Requirements

- 33-39 cr

### Total Required Credit Hours in Economics

- 36 cr

#### A. Required Courses (24 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>ECO 305</td>
<td>Statistics for Economics</td>
</tr>
<tr>
<td>ECO 307</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>ECO 308</td>
<td>Intermediate Macroeconomics</td>
</tr>
<tr>
<td>ECO 405</td>
<td>History of Economic Thought</td>
</tr>
<tr>
<td>ECO 490</td>
<td>Senior Seminar</td>
</tr>
</tbody>
</table>

#### B. Select at Least One Course from the Following:

- ECO 401 International Economics
- ECO 403 Comparative Economic Systems
- ECO 404 Economic Development
- FIN 400 International Finance

#### C. Economics Electives Selected by Advisement (12 cr)

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

### All College Electives

- 33–45 cr

It is strongly recommended that students who plan to pursue a Ph.D. in economics also complete, as a minimum, MAT 161, MAT 162, and MAT 202.

### Total Required Credit Hours

- 120 cr

---

**ECONOMICS (B.S.)**

**BS-NS ECO**

Economics and Finance Department

Bachelor of Science (HEGIS 2204)

Classroom Building B207 (716) 878-4606

The B.S. degree program in economics provides a solid foundation in the basic skills and analytical techniques that are necessary to understand changes in the broad economic environment and be able to formulate decisions as consumers, resource owners, and managerial personnel in business, government, and nonprofit organizations. Students choose a concentration in either applied economics or financial economics and complete additional required courses and specialized electives. Both concentrations prepare students for entry-level management positions in business, government, and nonprofit organizations, and provide excellent preparation for graduate work in business administration, economics, and law. Financial economics is the rigorous study of financial markets (bonds, derivatives, swaps, and equities) and their related institutions.

**Admission Requirements:** Transfer or uncommitted students must have a minimum GPA of 2.0 in previous college credits. **Transfer Students:** Most courses taken at an accredited institution and relevant to the B.S. degree program will be accepted, but the majority of courses applied to the major must be courses completed at Buffalo State. In most cases, grades for transfer courses will be used in computing the required GPA for admission into the program.

### Intellectual Foundations Requirements

- 33-39 cr

### Total Required Credit Hours in Economics

- 39–45 cr

#### A. Required Courses (27 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 312</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>ECO 305</td>
<td>Statistics for Economics</td>
</tr>
<tr>
<td>ECO 307</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>ECO 308</td>
<td>Intermediate Macroeconomics</td>
</tr>
<tr>
<td>ECO 424</td>
<td>Econometrics</td>
</tr>
<tr>
<td>ECO 490</td>
<td>Senior Seminar</td>
</tr>
<tr>
<td>MAT 126</td>
<td>Calculus</td>
</tr>
<tr>
<td>OR</td>
<td>MAT 161 Calculus I</td>
</tr>
</tbody>
</table>

#### B. Concentrations

Students are required to select one of two concentrations. Only 3 credit hours of ECO 488, ECO 495, or ECO 499 may be included.

**AEC – Applied Economics Concentration (12 cr)**

#### Required Courses (6 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 320</td>
<td>Managerial Economics</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ECO 325</td>
<td>Industrial Organization</td>
</tr>
</tbody>
</table>
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 304 Money and Banking
ECO 312 Urban Economics
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 411 Urban Economics
ECO 488 Internship
ECO 495 Project
ECO 499 Independent Study
FIN 400 International Finance

FNE – Financial Economics Concentration (18 cr)
Required Courses (9 cr)
BUS 313 Managerial Accounting
ECO 304 Money and Banking
FIN 314 Corporation Finance
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 Corporation 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 36–48 cr
Total Required Credit Hours 120 cr

**Electrical Engineering Technology (Electronics) (B.S.)*

BS-SP ETE
Engineering Technology Department
Bachelor of Science (HEGIS 0925)
The Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org

Technology Building 126 (716) 878-6017

About the Program:
Electrical Engineering Technology graduates 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.

Intellectual Foundations Requirements\(^1\) 33–39 cr

Major Requirements 54 cr

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 104</td>
<td>Essentials of Electrical Engineering Technology</td>
</tr>
<tr>
<td>ENT 300</td>
<td>Analytical Methods for Technologists</td>
</tr>
<tr>
<td>ENT 301</td>
<td>Mechanics I</td>
</tr>
<tr>
<td>ENT 302</td>
<td>Mechanics II</td>
</tr>
<tr>
<td>ENT 331</td>
<td>Electrical Circuits and Devices I</td>
</tr>
<tr>
<td>ENT 332</td>
<td>Electrical Circuits and Devices II</td>
</tr>
<tr>
<td>ENT 341</td>
<td>Electronics</td>
</tr>
<tr>
<td>ENT 342</td>
<td>Networks</td>
</tr>
<tr>
<td>ENT 345</td>
<td>Digital Systems</td>
</tr>
<tr>
<td>ENT 346</td>
<td>Microprocessors</td>
</tr>
<tr>
<td>ENT 351</td>
<td>Analog Electronics</td>
</tr>
<tr>
<td>ENT 352</td>
<td>Digital Electronics</td>
</tr>
<tr>
<td>ENT 371</td>
<td>Electric Machines</td>
</tr>
<tr>
<td>ENT 441</td>
<td>Communication Transmission Technology</td>
</tr>
<tr>
<td>ENT 442</td>
<td>RF and Microwave Communications</td>
</tr>
<tr>
<td>ENT 461</td>
<td>Control Systems I</td>
</tr>
<tr>
<td>ENT 462</td>
<td>Control Systems II</td>
</tr>
<tr>
<td>ENT 465</td>
<td>Electrical Design</td>
</tr>
</tbody>
</table>

Electives\(^1\) 16–28 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 or BIO 211 or PHY 213/310 or PHY 308 or PHY 315, or other science course with a lab approved by faculty advisement.
CIS 151 or CIS 111 or equivalent.

Math Option 1:
MAT 126
MAT 127
MAT 311 (Preferred for this option. Other mathematics courses such as Calculus III, Linear Algebra, or Discrete Mathematics maybe suggested by program advisement to better meet students career choices.)

Math Option 2:
MAT 161/163
MAT 162/164
MAT 315 (Preferred for this option. Other mathematics courses such as Calculus III, Linear Algebra, or Discrete Mathematics maybe suggested by program advisement to better meet students career choices.)

PHY 107 or PHY 111
PHY 108 or PHY 112
SPC 205

Total Required Credit Hours 120 cr

**Electrical Engineering Technology (Smart Grid) (B.S.)*

BS-SP ETS

**The Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org
Engineering Technology Department

Bachelor of Science (HEGIS 0925)

The Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org

Technology Building 126 (716) 878-6017

About the Program:
Graduates of the Smart Grid option in Electrical Engineering have found careers in the fields of electrical power generation, transmission, and distribution; industrial, commercial and residential electrical power distribution; as well as power systems protection, control, and monitoring.

*Evening study available.

Intellectual Foundations Requirements

<table>
<thead>
<tr>
<th>Major Requirements</th>
<th>54 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 104</td>
<td>Essentials of Electrical Engineering Technology</td>
</tr>
<tr>
<td>ENT 300</td>
<td>Analytical Methods for Technologists</td>
</tr>
<tr>
<td>ENT 301</td>
<td>Mechanics I</td>
</tr>
<tr>
<td>ENT 302</td>
<td>Mechanics II</td>
</tr>
<tr>
<td>ENT 331</td>
<td>Electrical Circuits and Devices I</td>
</tr>
<tr>
<td>ENT 332</td>
<td>Electrical Circuits and Devices II</td>
</tr>
<tr>
<td>ENT 341</td>
<td>Electronics</td>
</tr>
<tr>
<td>ENT 342</td>
<td>Networks</td>
</tr>
<tr>
<td>ENT 371</td>
<td>Electric Machines</td>
</tr>
<tr>
<td>ENT 345</td>
<td>Digital Systems</td>
</tr>
<tr>
<td>ENT 346</td>
<td>Microprocessors</td>
</tr>
<tr>
<td>ENT 445</td>
<td>Power Electronics</td>
</tr>
<tr>
<td>ENT 461</td>
<td>Control Systems I</td>
</tr>
<tr>
<td>ENT 462</td>
<td>Control Systems II</td>
</tr>
<tr>
<td>ENT 465</td>
<td>Electrical Design</td>
</tr>
<tr>
<td>ENT 471</td>
<td>Power Systems I</td>
</tr>
<tr>
<td>ENT 472</td>
<td>Power Systems II</td>
</tr>
<tr>
<td>TEC 101</td>
<td>Technical Drawing</td>
</tr>
</tbody>
</table>

Electives

The following accreditation requirements can be included in the Intellectual Foundations requirements and electives:

CHE 101 or CHE 111

CHE 102 or CHE 112 or BIO 211 or PHY 213/310 or PHY 308 or PHY 315, or other science course with a lab approved by faculty advisement.

CIS 151 or CIS 111 or equivalent.

Math Option 1:

MAT 126
MAT 127
MAT 311(Preferred for this option. Other mathematics courses such as Calculus III, Linear Algebra, or Discrete Mathematics may be suggested by program advisement to better meet students career choices.)

Math Option 2:

MAT 161/163
MAT 162/164
MAT 315 (Preferred for this option. Other mathematics courses such as Calculus III, Linear Algebra, or Discrete Mathematics may be suggested by program advisement to better meet students career choices.)

PHY 107 or PHY 111

PHY 108 or PHY 112

Total Required Credit Hours

120 cr

**The Electrical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org

ENGLISH PROGRAMS

See Individual Majors

- English
- English Education
- Television and Film Arts
- Writing

ENGLISH (B.A.)

BA-AH ENG

English Department
Bachelor of Arts (HEGIS 1501)

Ketchum Hall 326 (716) 878-5416

The English B.A. program in literature offers a liberal arts English major, the enhancement of writing skills, and electives to satisfy Intellectual Foundations 2014 requirements.

Intellectual Foundations Requirements

33–39 cr

Total Required Credits in English

42 cr

(27 credits must be upper-division)

A. Required Courses (12 cr)

ENG 190 Introduction to Literary Interpretation

(Must be taken immediately after completion of basic communication requirement or within first year of transfer to English Department.)

Major Figure Select one course from the following:

ENG 313 Milton
or ENG 314 or Chaucer
or ENG 315 or Shakespeare I
or ENG 316 or Shakespeare II
ENG 390 Literary Criticism and Theory
ENG 490 Senior Seminar

B. Area Courses in English (30 cr)

1. Two courses in British literature, at least one before 1850. Pre-1850 options: ENG 210, ENG 211, ENG 313, ENG 314, ENG 315, ENG 316, ENG 415, ENG 416, ENG 417, ENG 420. Other options: ENG 212, ENG 252, ENG 418, ENG 419, ENG 421 or 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-1850 requirement.

Two courses in American literature, at least one prior to 1900. Pre-1900 options: ENG 220, ENG 441, ENG 442, ENG 445. Other options: ENG 221, ENG 240, ENG 241, ENG 243, ENG 353, ENG 354, ENG 443, ENG 444.

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 330, ENG 331, ENG 332, ENG 335, ENG 337, ENG 350, ENG 351. The following courses from the Modern and Classical Languages Department and the Humanities Program CAN apply to these areas with approval of English Department chair. Non-Western option: FRE 341. Other options: FRE 331, GER 337, GER 338, HUM 320, HUM 328, ITA 336, MCL 337, MCL 338.

One course in minority literature. Options: ENG 231, ENG 240, ENG 241, ENG 243, 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.)

Three other English courses in linguistics, literature, theory or writing.
All College Electives 12–39 cr
Total Required Credit Hours 120 cr

ENGLISH EDUCATION (7–12, B.S.)

BS-AH ENS
English Department
Bachelor of Science (HEGIS 1501.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Ketchum Hall 326 (716) 878-5416

The English B.S. degree program in secondary education leads to a New York State Initial Certificate for teaching English in grades 7–12. Freshmen and transfers with fewer than 30 credits or a GPA below 2.5 are not admitted into the English major and may switch to English education upon meeting departmental requirements. Transfers with more than 30 credits and a GPA of 2.5 or above can be admitted directly into English education.

Admission Requirements: 30 credits of college coursework; mandatory meeting with the English education coordinator; a 2.5 GPA and/or a strong indication of the professional disposition required to be a successful teacher. Evidence of professional dispositions can be indicated in a variety of ways: faculty recommendations, completed professional disposition forms, interview with English Education Committee, and/or evidence of relevant extracurricular activities.

Intellectual Foundations Requirements 33–39 cr
Total Required Credits in English (Literature and Language) 39 cr

A. Required Courses (15 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 190</td>
<td>Introduction to Literary Analysis and Interpretation</td>
</tr>
<tr>
<td>ENG 317</td>
<td>Shakespeare for Future Teachers</td>
</tr>
<tr>
<td>ENG 354</td>
<td>American Literature</td>
</tr>
<tr>
<td>ENG 370</td>
<td>Foundations of Language</td>
</tr>
<tr>
<td>ENG 461</td>
<td>Young Adult Literature</td>
</tr>
</tbody>
</table>

B. Area Courses in Literature (24 credits)

1. Two courses in British Literature, at least one before 1850.
   Pre-1850 options: ENG 201, ENG 211, ENG 252, ENG 313, ENG 314, ENG 315, ENG 316, ENG 415, ENG 416, ENG 417.
   Other options: ENG 212, ENG 252, ENG 418, ENG 419, ENG 420, ENG 421, ENG 455. If students use ENG 315 or ENG 316 to satisfy their Shakespeare requirement (see above), they cannot use it to satisfy their pre-1850 requirement.

Two courses in American literature, at least one prior to 1900. Pre-1900 options: ENG 220, ENG 441, ENG 442, ENG 445.
   Other options: ENG 221, ENG 240, ENG 241, ENG 243, ENG 353, ENG 443, ENG 444.

One course in World literature. Options: ENG 130, ENG 131, ENG 230, ENG 310, ENG 330, ENG 331, ENG 332, ENG 335, ENG 345, ENG 346, ENG 350, ENG 351. The following courses from the Modern and Classical Languages Department and the Humanities Program can apply to these areas with approval of the English Department chair: FRE 331, FRE 341, GER 337, GER 338, HUM 320, HUM 328, ITA 336, MCL 337, MCL 338.

Three other English courses in linguistics, literature, theory or writing.

Note: Other courses, such as topics courses, when appropriate, can also fulfill major requirements. Discuss questions with adviser.

Total Required Credits in Professional Education 42 cr

A. General Education Courses (15 cr)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU/EXE 375</td>
<td>Integration of Technology in Education</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>SPF 303</td>
<td>Educational Psychology for Teachers of Adolescents</td>
</tr>
<tr>
<td>SPF 403</td>
<td>Historical and Philosophical Forces Influencing Secondary Education</td>
</tr>
<tr>
<td>EXE 100</td>
<td>Nature and Needs of Individuals with Special Needs</td>
</tr>
</tbody>
</table>

B. English Education (27 cr)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 200</td>
<td>Field Experience in Secondary English Education</td>
</tr>
<tr>
<td>ENG 309</td>
<td>Teaching and Evaluating Writing</td>
</tr>
<tr>
<td>ENG 311</td>
<td>Methods of Teaching Language</td>
</tr>
<tr>
<td>ENG 463</td>
<td>Methods, Materials, and Professional Development for Teachers of English (6)</td>
</tr>
<tr>
<td>ENG 464</td>
<td>Student Teaching in Middle/Junior High School English (6)</td>
</tr>
<tr>
<td>ENG 465</td>
<td>Student Teaching in Senior High School English (6)</td>
</tr>
</tbody>
</table>

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

Note: Other courses, such as topics courses, when appropriate, can also fulfill major requirements. Discuss questions with adviser.

Additional Requirements: To receive provisional teaching certification, students must pass the first two tests of the New York State Teacher Certification Examinations (NYSTCE). Students must have a 2.75 overall GPA and a 2.75 GPA in the major to student teach.

All College Electives 0-6 cr
Total Required Credit Hours 120 cr

ENGLISH EDUCATION (7–12, PTCP)

PBC-AH ENS
English Department
Postbaccalaureate Teacher Certification Program (HEGIS 1501.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Ketchum Hall 326 (716) 878-5416

The English secondary education post-baccalaureate 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 a concentration 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.

Note: Other courses, such as topics courses, when appropriate, can also fulfill major requirements. Discuss questions with adviser.

Total Required Credits in Professional Education 42 cr
Certification Exams, the Liberal Arts and Sciences Test, and the Assessment of Teaching Skills-Written. Registration bulletins for the exams can be obtained from the Teacher Certification Office, Caudell Hall 101. Students can obtain certifications in identifying child abuse by attending one of several workshops offered at Buffalo State.

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

<table>
<thead>
<tr>
<th>A. Undergraduate-level Coursework (15 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 403 Historical and Philosophical Forces Influencing Secondary Education</td>
</tr>
<tr>
<td>EDU 416 Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>ENG 311 Methods of Teaching Language</td>
</tr>
<tr>
<td>ENG 463 Methods, Materials, and Professional Development for Teachers of English (6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Graduate-level Coursework (9 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 500 Multicultural Education</td>
</tr>
<tr>
<td>SPF 503 Educational Psychology</td>
</tr>
<tr>
<td>or SPF 529 Adolescent Psychology</td>
</tr>
<tr>
<td>SPF 692 The Teaching of Writing</td>
</tr>
</tbody>
</table>

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

| ENG 464 Student Teaching (Middle/Junior High) |
| or ENG 465 Student Teaching (High School) |

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

**Total Required Credit Hours** 36 cr

---

**EXCEPTIONAL EDUCATION (B.S.Ed.)**

**BSED-ED EXE**

Dual Certification Program: Teachers of Childhood Special Education and Childhood Education

Exceptional Education Department

Bachelor of Science in Education (HEGIS 0808)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Ketchum Hall 204 (716) 878-3038

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 intellectual and developmental disabilities, physical/neurological disabilities, and learning and behavioral difficulties. Graduates of the program typically obtain positions as teachers in inclusive classrooms, resource rooms, self-contained classrooms, special schools, 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 and special education to be recommended for initial certifications as a teacher of childhood education (grades 1–6) and childhood special education (grades 1–6) in New York State. Candidates for initial certification in both childhood education and childhood 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) if they have not completed 60 or more credit hours prior to attending Buffalo State. They will be accepted as majors (0299) after (1) successfully completing 12 credit hours at Buffalo State; (2) waiving successfully completing CWP 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/quantitative reasoning requirement, unless waived; 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) provided they have not completed 60 or more credit hours prior to attending Buffalo State. They will be accepted as majors (0299) after (1) successfully completing 12 credit hours at Buffalo State; (2) waiving successfully completing CWP 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/quantitative reasoning requirement, unless waived; and (5) earning a minimum cumulative GPA of 2.6.*

**Intellectual Foundations Requirements** 33-39 cr*

**Total Required Credit Hours for Concentration** 30 cr

A concentration can be in one of the following subjects: English, French, Italian, math, science, social studies, Spanish, or American studies.

**Total Required Credit Hours for the Exceptional Education Major** 65 cr

| SPF 202 Child Development and Education | 
| SPF 203 School and Society |
| SPF 302 Educational Psychology: Elementary Education |
| EDU 211 Introduction to Literacy |
| EDU 310 Teaching Social Studies in the Elementary School |
| EDU 311 Teaching Reading and Language Arts (6) |
| EDU 312 Teaching Math and Science (6) |
| EDU 404 Practicum in Elementary School Teaching (6) |
| EXE 100 Nature and Needs of Individuals with Special Needs |
| EXE 360 Foundations of Teaching Individuals with Disabilities |
| EXE 361 Field Experience in Teaching Individuals with Disabilities (1) |
| EXE 362 Behavior and Classroom Management |
| EXE 363 Field Experience in Behavior Management (1) |
| EXE 364 Educating Students with Severe Disabilities |
| EXE 365 Evaluation and Assessment in Special Education |
| EXE 366 Field Experience Evaluation and Assessment in Special Education (1) |
| EXE 367 Curriculum for Children with Mild Disabilities |
| EXE 368 Field Experience Curriculum for Children with Mild Disabilities (2) |
| EXE 375 Integration of Technology in Education |
| EXE 420 Practicum in Special Education (6) |

**Distribution Courses** 24 cr

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

**Total Required Credit Hours** 152-158 cr

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 134-140 credit hours required. Advisement is strongly encouraged.*
The Bachelor of Science degree in Family and Consumer Sciences Education leads to initial K-12 certification to teach Family and Consumer Sciences. Graduates from the Family and Consumer Sciences Education program are prepared to teach Family and Consumer Sciences. The Bachelor of Science degree in Family and Consumer Sciences Education is necessary for certification in order to obtain a teaching position.

Program Requirements

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Family and Consumer Sciences 33 cr

Total Required Credit Hours in Professional Education 33 cr

Family and Consumer Sciences Requirements (33 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAF 310</td>
<td>Personal Safety and First Aid</td>
</tr>
<tr>
<td>NFS 105</td>
<td>Food and People</td>
</tr>
<tr>
<td>NFS 334</td>
<td>Contemporary Nutrition</td>
</tr>
<tr>
<td>FTT 100</td>
<td>Construction Elements</td>
</tr>
<tr>
<td>FTT 206</td>
<td>Introduction to Textiles</td>
</tr>
<tr>
<td>OR OR</td>
<td></td>
</tr>
<tr>
<td>FTT 349</td>
<td>History of Textiles</td>
</tr>
<tr>
<td>SPF 303</td>
<td>Educational Psychology: Middle and Secondary Education</td>
</tr>
<tr>
<td>IDE 101</td>
<td>Introduction to Interior Design</td>
</tr>
<tr>
<td>SPF 202</td>
<td>Child Development and Education</td>
</tr>
<tr>
<td>SPF 345</td>
<td>Parenting</td>
</tr>
<tr>
<td>SPF 353</td>
<td>Human Development During Early Adolescence and Adolescence</td>
</tr>
<tr>
<td>FIN 110</td>
<td>Personal Finance</td>
</tr>
<tr>
<td>OR OR</td>
<td></td>
</tr>
<tr>
<td>BUS 116</td>
<td>Introduction to Business</td>
</tr>
</tbody>
</table>

Professional Education Requirements (33 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 301/BME 301</td>
<td>Foundations of Career and Technology Education/Business and Marketing Education/Family and Consumer Sciences Education</td>
</tr>
<tr>
<td>CTE 302/BME 302</td>
<td>Curriculum and Evaluation in Career and Technology Education/Business and Marketing Education/Family and Consumer Sciences Education</td>
</tr>
<tr>
<td>CTE 303</td>
<td>Instructional Strategies in Career and Technology Education/Business and Marketing Education/Family and Consumer Sciences Education</td>
</tr>
<tr>
<td>BME 303/</td>
<td>Education/Business and Marketing Education/Family and Consumer Sciences Education</td>
</tr>
<tr>
<td>CTE 404/BME 404/</td>
<td>Methods of Teaching Career and Technology Education/Business and Marketing Education/Family and Consumer Sciences Education Subjects</td>
</tr>
<tr>
<td>FCS 404</td>
<td></td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Foundations of Teaching Adolescents With Disabilities</td>
</tr>
<tr>
<td>CTE 311</td>
<td>Career Mentoring Internship</td>
</tr>
<tr>
<td>OR OR</td>
<td></td>
</tr>
</tbody>
</table>

Scholarships and Financial Aid: Students may apply for departmental scholarships. Financial assistance through the college is also available. Buffalo State is one of a select group of institutions whose students compete for the annual YMA Fashion Scholarship Fund which offers competitive $5000 scholarships to approximately 125 students nationally every year.

Intellectual Foundations Requirements 33-39 cr
## Total Required Credit Hours in Fashion Technology 51 cr

### A. Required Core Courses (21 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTT 110</td>
<td>Survey of Fashion/Textile Industry</td>
</tr>
<tr>
<td>FTT 206</td>
<td>Introduction to Textiles</td>
</tr>
<tr>
<td>FTT 208</td>
<td>Introduction to Fashion Technologies</td>
</tr>
<tr>
<td>FTT 306</td>
<td>Textile Evaluation</td>
</tr>
<tr>
<td>FTT 310</td>
<td>Sewn Products Industry</td>
</tr>
<tr>
<td>FTT 358</td>
<td>Fashion Forecasting and Consumer Issues</td>
</tr>
<tr>
<td>FTT 450</td>
<td>Issues in Fashion/Textile Industry</td>
</tr>
</tbody>
</table>

### B. Concentration Courses (30 cr)

#### Select one concentration:

##### Fashion Merchandising Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 320</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>FTT 150</td>
<td>Introduction to Fashion Merchandising</td>
</tr>
<tr>
<td>FTT 250</td>
<td>Fashion Buying and Merchandising Principles</td>
</tr>
<tr>
<td>FTT 350</td>
<td>Fashion Merchandising Applications</td>
</tr>
<tr>
<td>FTT 455</td>
<td>Issues in Merchandising and Fashion Retailing</td>
</tr>
<tr>
<td>FTT 475</td>
<td>Sr. Seminar in Fashion Merchandising &amp; Marketing</td>
</tr>
<tr>
<td>FTT 488</td>
<td>Internship</td>
</tr>
</tbody>
</table>

Select three courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 325</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>BUS 212</td>
<td>Introduction to Accounting</td>
</tr>
<tr>
<td>BUS 360</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>COM 215</td>
<td>Introduction to Visual Communication</td>
</tr>
<tr>
<td>FTT 109**</td>
<td>Fundamentals of Apparel Construction</td>
</tr>
<tr>
<td>FTT 308</td>
<td>Fashion CAD (Computer Aided Design)</td>
</tr>
<tr>
<td>FTT 355</td>
<td>Research in Fashion Merchandising</td>
</tr>
<tr>
<td>FTT 359</td>
<td>Visual Merchandising</td>
</tr>
<tr>
<td>FTT 410</td>
<td>Advanced Product Development</td>
</tr>
</tbody>
</table>

##### Apparel Design Concentration¹

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTT 109</td>
<td>Fundamentals of Apparel Construction</td>
</tr>
<tr>
<td>FTT 224</td>
<td>Pattern Drafting and Grading For Industry</td>
</tr>
<tr>
<td>FTT/THA 303</td>
<td>Fashion Illustration</td>
</tr>
<tr>
<td>FTT 324</td>
<td>Industrial Apparel Assembly</td>
</tr>
<tr>
<td>FTT 326</td>
<td>Apparel Design I: Flat Pattern</td>
</tr>
<tr>
<td>FTT 327</td>
<td>Apparel Design II: Computerized Flat Pattern</td>
</tr>
<tr>
<td>FTT 328</td>
<td>Apparel Design III: Draping</td>
</tr>
<tr>
<td>FTT 451 or FTT 452</td>
<td>Senior Project or Internship</td>
</tr>
<tr>
<td>FTT 488</td>
<td>Internship</td>
</tr>
</tbody>
</table>

Select two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTT 304</td>
<td>Pattern Development for Industry</td>
</tr>
<tr>
<td>FTT 308</td>
<td>Fashion CAD (Computer Aided Design)</td>
</tr>
<tr>
<td>FTT 329</td>
<td>Designing Knit Apparel</td>
</tr>
<tr>
<td>FTT 410</td>
<td>Advanced Product Development</td>
</tr>
<tr>
<td>FTT 412</td>
<td>CAD: Apparel/Textile Design for Industry</td>
</tr>
<tr>
<td>FTT 413</td>
<td>CAD Weave for Industry</td>
</tr>
<tr>
<td>FTT 461</td>
<td>Sr. Seminar in Product Development</td>
</tr>
</tbody>
</table>

##### Apparel Product Development Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTT 109</td>
<td>Fundamentals of Apparel Construction</td>
</tr>
<tr>
<td>FTT 224</td>
<td>Pattern Drafting and Grading for Industry</td>
</tr>
<tr>
<td>FTT 324</td>
<td>Industrial Apparel Assembly</td>
</tr>
<tr>
<td>FTT 326</td>
<td>Apparel Design I: Flat Pattern</td>
</tr>
<tr>
<td>FTT 327</td>
<td>2D/3D Computer Pattern Making</td>
</tr>
<tr>
<td>FTT 410</td>
<td>Advanced Product Development</td>
</tr>
<tr>
<td>FTT 451 or FTT 452</td>
<td>Senior Project or Internship</td>
</tr>
<tr>
<td>FTT 488 or FTT 495</td>
<td>Internship</td>
</tr>
</tbody>
</table>

Select three courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTT 461</td>
<td>Sr. Seminar in Product Development</td>
</tr>
<tr>
<td>FTT 304</td>
<td>Pattern Development for Industry</td>
</tr>
<tr>
<td>FTT 308</td>
<td>Fashion CAD (Computer Aided Design)</td>
</tr>
<tr>
<td>FTT 309</td>
<td>Technical Fashion Specs</td>
</tr>
<tr>
<td>FTT 329*</td>
<td>Designing Knit Apparel</td>
</tr>
<tr>
<td>FTT 412</td>
<td>CAD: Apparel/Textile Design for Industry</td>
</tr>
<tr>
<td>FTT 413</td>
<td>CAD Weave for Industry</td>
</tr>
<tr>
<td>FTT 461</td>
<td>Sr. Seminar in Product Development</td>
</tr>
</tbody>
</table>

#### Fashion/Textile Design Technologies Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 242</td>
<td>Fibers I</td>
</tr>
<tr>
<td>FTT 303 or FTT 304</td>
<td>Fashion Illustration or Drawing I</td>
</tr>
<tr>
<td>FAR 101</td>
<td>Fashion Illustration or Drawing I</td>
</tr>
<tr>
<td>FTT 304</td>
<td>Pattern Development for Industry</td>
</tr>
<tr>
<td>FTT 308</td>
<td>Fashion CAD (Computer Aided Design)</td>
</tr>
<tr>
<td>FTT 412</td>
<td>CAD: Apparel/Textile Design for Industry</td>
</tr>
<tr>
<td>FTT 413</td>
<td>CAD Weave for Industry</td>
</tr>
<tr>
<td>FTT 451 or FTT 452</td>
<td>Senior Project or Internship or Special Project</td>
</tr>
<tr>
<td>FTT 488 or FTT 495</td>
<td>Internship</td>
</tr>
</tbody>
</table>

Select one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 215</td>
<td>Design History</td>
</tr>
<tr>
<td>FTT 348</td>
<td>History of Costume</td>
</tr>
<tr>
<td>FTT 349</td>
<td>History of Textiles</td>
</tr>
<tr>
<td>THA 332</td>
<td>Period Styles</td>
</tr>
</tbody>
</table>

Select two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AED 100</td>
<td>Essentials of Visual Arts</td>
</tr>
<tr>
<td>DES 307*</td>
<td>Color Theory</td>
</tr>
<tr>
<td>DES 342*</td>
<td>Fibers II</td>
</tr>
<tr>
<td>FAR 210*</td>
<td>Introduction to Painting</td>
</tr>
<tr>
<td>FTT 150</td>
<td>Introduction to Merchandising</td>
</tr>
<tr>
<td>FTT 200</td>
<td>Introduction to Hand Knitting</td>
</tr>
<tr>
<td>FTT 309</td>
<td>Technical Fashion Specs</td>
</tr>
<tr>
<td>FTT 410*</td>
<td>Advanced Product Development</td>
</tr>
</tbody>
</table>

### C. Recommended All College Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 101</td>
<td>Introduction to Design: Two Dimensional I</td>
</tr>
<tr>
<td>DES 102*</td>
<td>Introduction to Design: Two Dimensional II</td>
</tr>
<tr>
<td>DES 307*</td>
<td>Color Theory</td>
</tr>
<tr>
<td>FTT 109</td>
<td>Fundamentals of Apparel Construction</td>
</tr>
<tr>
<td>FTT 150</td>
<td>Introduction to Merchandising</td>
</tr>
<tr>
<td>FTT 200</td>
<td>Introduction to Hand Knitting</td>
</tr>
<tr>
<td>FTT 304</td>
<td>Pattern Development for Industry</td>
</tr>
<tr>
<td>FTT 308</td>
<td>Fashion CAD (Computer Aided Design)</td>
</tr>
<tr>
<td>FTT 309</td>
<td>Technical Fashion Drawing</td>
</tr>
<tr>
<td>FTT 329*</td>
<td>Technical Fashion Specs</td>
</tr>
<tr>
<td>FTT 348</td>
<td>History of Costume</td>
</tr>
<tr>
<td>FTT 349</td>
<td>History of Textiles</td>
</tr>
<tr>
<td>FTT 355*</td>
<td>Research in Fashion Merchandising</td>
</tr>
<tr>
<td>FTT 359</td>
<td>Visual Merchandising</td>
</tr>
<tr>
<td>FTT 410*</td>
<td>Advanced Product Development</td>
</tr>
<tr>
<td>FTT 412</td>
<td>CAD: Apparel/Textile Design for Industry</td>
</tr>
<tr>
<td>FTT 413</td>
<td>CAD Weave for Industry</td>
</tr>
<tr>
<td>FTT 452</td>
<td>Fashion Show Production</td>
</tr>
</tbody>
</table>

*Courses that may have additional prerequisites.
**Course is strongly recommended.
¹A minor in design is strongly recommended.

### All College Electives 30-36 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTT 461</td>
<td>Sr. Seminar in Product Development</td>
</tr>
</tbody>
</table>

### Total Required Credit Hours 120 cr
### Fibers (B.F.A.)

**BFA-AH FIB**  
Design Department  
Bachelor of Fine Arts (HEGIS 1009)

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

The B.F.A. degree in Fibers is a studio-intensive program of study focused on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identity as visual designers/artists. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, painting, art history, and design history, along with courses in ceramics, metals/jewelry, and wood. Major courses in fibers complete the requirements. Internship opportunities are available.

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

**Admission Requirements:** There is no entrance portfolio review for admission. All students will enter the fibers major with a bachelor of science (BS-AH FIB) intent, and must complete a selection of foundation and major course(s) before a commit-to-major portfolio review for admission into the bachelor of fine arts program (BFA-AH FIB). Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.F.A. degree program a 3.0 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information. As a condition of graduation, B.F.A. students will be required to mount an individual exhibition of their work.

The Design Department reserves the right to retain students’ work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

The Design Department may be of class for each credit granted for that class.

### Intellectual Foundations Requirements  
39–66 cr

### Total Required Credit Hours in Fibers  
79 cr

#### A. Foundation Courses (37 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 101</td>
<td>Introduction to Design 2D I</td>
</tr>
<tr>
<td>DES 103</td>
<td>Introduction to Design 3D I</td>
</tr>
<tr>
<td>DES 220</td>
<td>Ceramics I</td>
</tr>
<tr>
<td>DES 230</td>
<td>Introduction to Jewelry Making</td>
</tr>
<tr>
<td>DES 250</td>
<td>Wood Design I</td>
</tr>
<tr>
<td>DES 312W</td>
<td>History of Craft: Industrial Revolution to the Present</td>
</tr>
<tr>
<td>DES 414</td>
<td>Senior Seminar/Exhibition (4)</td>
</tr>
<tr>
<td>FAR 101</td>
<td>Drawing I</td>
</tr>
<tr>
<td>FAR 104</td>
<td>Themes and Issues in Contemporary Arts</td>
</tr>
<tr>
<td>FAR 210</td>
<td>Introductory Painting</td>
</tr>
<tr>
<td>FAR 250</td>
<td>Art History I</td>
</tr>
<tr>
<td>FAR 251</td>
<td>Art History II</td>
</tr>
</tbody>
</table>

#### B. Major Courses (30 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 242</td>
<td>Fibers I</td>
</tr>
<tr>
<td>DES 338</td>
<td>Computer 3D Modeling and Rendering</td>
</tr>
<tr>
<td>DES 342</td>
<td>Fibers II</td>
</tr>
<tr>
<td>DES 344</td>
<td>Fibers: Junior Studio (3, 3)</td>
</tr>
</tbody>
</table>

### C. Studio Electives Selected by Advisement (12 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 350</td>
<td>Wood Design II</td>
</tr>
<tr>
<td>DES XXX</td>
<td>(DES 321, DES 331, DES 351)</td>
</tr>
</tbody>
</table>

### All College Electives  
0–2 cr

### Total Required Credit Hours  
120-145 cr

---

### Fibers (B.S.)

**BS-AH FIB**  
Design Department  
Bachelor of Science (HEGIS 1009)

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

The B.S. degree in Fibers is a studio degree with a strong academic component. This degree offers students a broadly grounded educational experience as a basis for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, painting, and design history, along with courses in ceramics, metals/jewelry, and wood. Major courses in fibers focus on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identity as visual designers/artists. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student’s choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

**Admission Requirements:** There is no entrance portfolio review for admission. All students will enter the fibers major with a bachelor of science (BS-AH FIB) intent, and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for continuation in the B.S. degree program. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.S. degree program a 2.5 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students’ work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

### Intellectual Foundations Requirements  
33-39 cr

### Total Required Credit Hours in Fibers  
45 cr

#### A. Foundation Courses (24 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 101</td>
<td>Introduction to Design 2D I</td>
</tr>
<tr>
<td>DES 103</td>
<td>Introduction to Design 3D I</td>
</tr>
<tr>
<td>DES 220</td>
<td>Ceramics I</td>
</tr>
<tr>
<td>DES 230</td>
<td>Introduction to Jewelry Making</td>
</tr>
<tr>
<td>DES 250</td>
<td>Wood Design I</td>
</tr>
<tr>
<td>DES 312</td>
<td>History of Craft: Industrial Revolution to the Present</td>
</tr>
<tr>
<td>DES 320</td>
<td>Ceramics II</td>
</tr>
<tr>
<td>DES 330</td>
<td>Applied Jewelry Techniques</td>
</tr>
<tr>
<td>DES 340</td>
<td>Wood Design II</td>
</tr>
<tr>
<td>DES XXX</td>
<td>(DES 321, DES 331, DES 351)</td>
</tr>
</tbody>
</table>

#### All College Electives  
0–2 cr

### Total Required Credit Hours  
104-145 cr

---
See Individual Majors

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

**FORENSIC CHEMISTRY (B.S.)**

BS-NS FRC
Chemistry Department
Bachelor of Science (HEGIS 1999.20)

Forensic Science Education Programs Accreditation Commission (FEPAC) accredited

Science Building 267 (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. Graduates with this degree may also choose to go on to graduate-level forensic science programs or to pursue a career working in a scientific laboratory.

**Admission Requirements:** Prospective majors must complete CHE 111 and CHE 112 (or the equivalent) with minimum grades of C before applying to the program. Students who have not yet met this requirement will be formally admitted to the major upon completion of the previously stated requirement.

**Admission Recommendations:** Transfer students from two-year colleges should have earned credit for courses equivalent to CHE 111, CHE 112, CHE 201, CHE 202, CHE 203, CHE 204, FOR 122, MAT 161, MAT 162, and PHY 111 to avoid possible delays in the completion of the degree program. Transfer students must complete a minimum of 10 credit hours in chemistry at Buffalo State. Chemistry courses taken elsewhere may be substituted for similar courses at Buffalo State only if they have the same equivalent prerequisite. Chemistry courses not meeting this criterion may be transferred as elective credit. Important Note: Individuals seeking an internship or employment in a forensic science laboratory may be required to undergo an extensive background check including a lie detector test, fingerprinting, and drug testing.

**Intellectual Foundations Requirements**

- CHE 111 Fundamentals of Chemistry I (4)
- CHE 112 Fundamentals of Chemistry II (4)
- CHE 201 Organic Chemistry I
- CHE 202 Organic Chemistry II
- CHE 203 Organic Chemistry Laboratories I (1)
- CHE 204 Organic Chemistry Laboratory II (1)

**Total Required Credit Hours in Chemistry**

- 32 cr

**Total Required Credit Hours**

- 120 cr

---

**FRENCH EDUCATION (7–12, B.S.)**

BS-AH FRS
Modern and Classical Languages Department
Bachelor of Science (HEGIS 1102.01)

American Council on the Teaching of Foreign Languages-National Council for Accreditation of Teacher Education (ACTFL-NCATE http://www.ncate.org)
The French secondary education program enables students to earn provisional certification to teach French in New York State secondary schools. Students develop French language skills, study the structure and sound system of French, expand their knowledge of the literature and culture of French-speaking peoples, and explore the teaching and learning of foreign languages in school settings. The curriculum includes a series of field experiences. All students desiring this program may be admitted into the B.A. Language and Literature program, which functions as a pre-major for the B.S. program. Prospective students who apply for admission to the B.S. program must complete a Change of Major Form and complete two brief entrance essays – one in English and the other in French – in the Modern and Classical Languages Department office (Bishop 122) after they have successfully completed 6 credits beyond FRC302. No student will be admitted with less than a 2.5 overall GPA, or with less than a 2.5 GPA in French courses. Students must have a minimum GPA of 2.5 (overall and in French), to enroll in the teaching practicum. Also, students must complete an ACTFL-approved Oral Proficiency Interview (OPI) in order to demonstrate Advanced-Low Proficiency in French.

**Intellectual Foundations Requirements**

| Total Required Credit Hours in French | 33-39 cr |

**A. Required Courses (27 cr)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 301</td>
<td>French Conversation and Composition</td>
</tr>
<tr>
<td>FRE 302</td>
<td>French Conversation and Composition</td>
</tr>
<tr>
<td>FRE 305</td>
<td>Phonetics and Orthography</td>
</tr>
<tr>
<td>FRE 306</td>
<td>Literature and Culture of France from Pre-History to Renaissance</td>
</tr>
<tr>
<td>FRE 307</td>
<td>Literature and Culture of France from Renaissance to Revolution</td>
</tr>
<tr>
<td>FRE 308</td>
<td>Literature and Culture of France in the Nineteenth Century</td>
</tr>
<tr>
<td>FRE 309</td>
<td>Literature and Culture of France in the Twentieth Century</td>
</tr>
<tr>
<td>FRE 415</td>
<td>Advanced Grammar and Composition</td>
</tr>
<tr>
<td>FRE 416</td>
<td>Advanced Conversation and Composition</td>
</tr>
</tbody>
</table>

**B. Electives (9 cr)**

Select three courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 331</td>
<td>French Literature in Translation (if all assignments are completed in French)</td>
</tr>
<tr>
<td>FRE 341</td>
<td>Francophone Literature in Translation (if taken in French)</td>
</tr>
<tr>
<td>FRE 412</td>
<td>Studies in the French Novel</td>
</tr>
<tr>
<td>FRE 496</td>
<td>Seminar I</td>
</tr>
<tr>
<td>FRE 497</td>
<td>Seminar II</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Professional Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 303</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>SPF 403</td>
<td>Historical and Philosophical Forces Influencing Secondary Education</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Foundations of Teaching Secondary Students with Disabilities</td>
</tr>
<tr>
<td>FLE 240</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>FLE 300</td>
<td>Introduction to the Foreign Language Classroom</td>
</tr>
<tr>
<td>FLE 340</td>
<td>Second Language Acquisition and Literacy</td>
</tr>
<tr>
<td>FLE 401</td>
<td>Teaching Foreign Language in Middle and High Schools</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Student Teaching**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLE 407/</td>
<td>Student Teaching of Foreign Languages in the Middle/Junior High School (6)</td>
</tr>
<tr>
<td>SED 407</td>
<td>Student Teaching of Foreign Languages in the High School (6)</td>
</tr>
</tbody>
</table>

**All College Electives**

| Credit Hours | 9-15 cr |

**FRENCH EDUCATION (7-12, PTCP)**

**PBC-AH FRE**

Modern and Classical Languages Department Postbaccalaureate Teacher Certification Program (HEGIS 1102.01)

**Total Required Credit Hours**

| Credit Hours | 120 cr |

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

Bishop Hall 122 (716) 878-5414

The French (7-12) post-baccalaureate teacher certification program leads to eligibility for New York State initial certification to teach French in grades 7-12. This program is designed for students who have earned a baccalaureate degree in French or a related field from an accredited college or university and intend to complete the coursework required for New York State certification to teach French in middle or high schools. The program supplies the background knowledge necessary for teachers to implement the New York State Learning Standards for Languages Other Than English (LOTEN 7-12). It also meets the standards set by national professional organizations such as the American Council of Teachers of Foreign Languages (ACTFL) and the National Council for Accreditation of Teacher Education (NCATE).

Students are responsible for any additional certification requirements, including the Liberal Arts and Sciences Test (LAST), the Assessment of Teaching Skills--Written (ATS-W), Content Specialty Test (CST) in French, Oral Proficiency Interview (OPI), and all seminars required for initial certification. It takes three to four semesters of coursework, field experiences, and student teaching to complete certification requirements. To student teach, a student must have achieved a minimum GPA of 2.75 in French coursework and overall, and must have earned a minimum grade of C in FLE300, FLE340 and FLE401. Also, the student must complete an ACTFL-Approved Oral Proficiency Interview (OPI) in order to be eligible for New York State certification to teach French in middle or high schools. After successfully completing the teacher certification program and passing all required tests, students are eligible to apply for New York State Initial Certification through the Teacher Certification Office, Caudell Hall, 112 Buffalo State College. No degree or certificate is awarded by Buffalo State College.

Financial Assistance: For financial aid purposes, students who are fully admitted into the program are considered fifth-year undergraduates, eligible for undergraduate loans, when applicable.

Admission Requirements.*

1. A bachelor's degree from an accredited college or university with a minimum cumulative grade point average (GPA) of 2.75 (4.0 scale), a major in French language, literature, culture (or a closely related discipline with a minimum of 30 hours in French).
2. A minimum GPA of 2.75 in French coursework.
3. A completed application form submitted to the Graduate Office at Buffalo State College.
4. Official transcripts from all previous college/university work.**
5. A personal interview with the program coordinator, department chair, or other designated official.
6. Successful completion of two written essays (one English, one French), administered by the department as part of the interview process.

*Applicants who do not meet these minimum requirements should contact an Modern and Classical Languages advisor.
**Students who receive degrees from institutions outside the United States must have their transcripts evaluated by a recognized evaluation service.

**Program Requirements**

**Residency Requirements**

| Credit Hours | 6 cr |

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 305</td>
<td>Phonetics and Orthography</td>
</tr>
<tr>
<td>FRE 306</td>
<td>Literature &amp; Culture of France from Prehistory to the Renaissance</td>
</tr>
</tbody>
</table>
The Department of Modern and Classical Languages offers a French B.A. program with two program tracks: (1) Francophone Studies, (2) Professional French. These two tracks provide students with the intellectual foundations and the linguistic and cultural proficiency required for a variety of career and academic paths. The Francophone Studies track is recommended for students interested in pursuing a career, such as translation or interpreting, which requires a graduate degree and a more in-depth knowledge of the culture, society, and history of the French-speaking world. The Professional French track is recommended for students wanting to use their French skills in the work place immediately upon graduation with the B.A. degree.

### Intellectual Foundations Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 307</td>
<td>Literature &amp; Culture of France from Renaissance to Revolution</td>
</tr>
<tr>
<td>FRE 308</td>
<td>Literature &amp; Culture of France in the Nineteenth Century</td>
</tr>
<tr>
<td>FRE 309</td>
<td>Literature and Culture of France in the Twentieth Century</td>
</tr>
<tr>
<td>FRE 410</td>
<td>French Poetry from Baudelaire to Present</td>
</tr>
<tr>
<td>FRE 411</td>
<td>Studies in French Poetry</td>
</tr>
<tr>
<td>FRE 412</td>
<td>Studies in the French Novel</td>
</tr>
<tr>
<td>FRE 413</td>
<td>Studies in French Theater</td>
</tr>
<tr>
<td>FRE 415</td>
<td>Advanced Grammar and Composition</td>
</tr>
<tr>
<td>FRE 416</td>
<td>Advanced Conversation and Composition</td>
</tr>
<tr>
<td>FRE 417</td>
<td>Business French</td>
</tr>
<tr>
<td>FRE 496</td>
<td>Seminar I</td>
</tr>
<tr>
<td>FRE 497</td>
<td>Seminar II</td>
</tr>
</tbody>
</table>

*All students required to take a minimum of 6 credit hours above the 302 level*

**Students with undergraduate degrees are eligible, with instructor permission, to enroll in graduate level language and literature courses at Buffalo State College**

### Required Courses - Both Tracks (6 cr)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 301</td>
<td>French Conversation and Composition</td>
</tr>
<tr>
<td>FRE 302</td>
<td>French Conversation and Composition</td>
</tr>
</tbody>
</table>

### Track 1: Francophone Studies

#### A. Required Courses (24 cr)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 306</td>
<td>Survey France Prehistory-Renaissance</td>
</tr>
<tr>
<td>FRE 307</td>
<td>Survey France Renaissance-Revolution</td>
</tr>
<tr>
<td>FRE 308</td>
<td>Survey France Revolution-Belle Epoque</td>
</tr>
<tr>
<td>FRE 309</td>
<td>Survey France Belle Epoque-Algerian War</td>
</tr>
<tr>
<td>FRE 420</td>
<td>Francophone North America</td>
</tr>
<tr>
<td>FRE 435</td>
<td>Francophone Africa</td>
</tr>
<tr>
<td>FRE 440</td>
<td>Origins of Modern France</td>
</tr>
<tr>
<td>FRE 460</td>
<td>Francophone Caribbean</td>
</tr>
</tbody>
</table>

#### B. Electives Selected by Advisement (12 cr)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 310</td>
<td>Issues in Professional Communication</td>
</tr>
<tr>
<td>FRE 321</td>
<td>Issues in Francophone Culture</td>
</tr>
<tr>
<td>FRE 389</td>
<td>Topics</td>
</tr>
<tr>
<td>FRE 399</td>
<td>Francophone Study Abroad Experience</td>
</tr>
<tr>
<td>FRE 450</td>
<td>Moliere and the Sun King</td>
</tr>
<tr>
<td>FRE 496</td>
<td>Seminar I</td>
</tr>
<tr>
<td>FRE 497</td>
<td>Seminar II</td>
</tr>
</tbody>
</table>

### Track 2: Professional French

#### A. Required French Courses (15 cr)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 203</td>
<td>Workplace French I</td>
</tr>
<tr>
<td>FRE 204</td>
<td>Workplace French II</td>
</tr>
<tr>
<td>FRE 308</td>
<td>Survey France Revolution-Belle Epoque</td>
</tr>
<tr>
<td>FRE 309</td>
<td>Survey France Belle Epoque-Algerian War</td>
</tr>
<tr>
<td>FRE 310</td>
<td>Issues in Professional Communication</td>
</tr>
</tbody>
</table>

#### B. Required Concentration Courses (12 cr)

*Choice of one of the following concentrations, or 4 courses in a single discipline (by advisement):*

##### Business (choose 4)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 201</td>
<td>Foundations of Leadership</td>
</tr>
<tr>
<td>BUS 212</td>
<td>Introduction to Accounting</td>
</tr>
<tr>
<td>BUS 324</td>
<td>Business Communication</td>
</tr>
<tr>
<td>BUS 334</td>
<td>Business Law I</td>
</tr>
<tr>
<td>BUS 360</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>BUS 424</td>
<td>International Business Communication</td>
</tr>
<tr>
<td>BUS 425</td>
<td>International &amp; Cross-Cultural Training</td>
</tr>
</tbody>
</table>

##### Hospitality and Tourism (required)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR 110</td>
<td>Translation</td>
</tr>
<tr>
<td>HTR 418</td>
<td>Tourism Management</td>
</tr>
</tbody>
</table>

(choose 2)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR 100</td>
<td>Multicultural Food</td>
</tr>
<tr>
<td>HTR 368</td>
<td>Hotel Operations</td>
</tr>
<tr>
<td>HTR 375</td>
<td>Events Management</td>
</tr>
<tr>
<td>HTR 390</td>
<td>Strategic Marketing in Hospitality</td>
</tr>
</tbody>
</table>

### C. Electives in French Selected by Advisement (9 cr)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 306</td>
<td>Survey France Prehistory-Renaissance</td>
</tr>
<tr>
<td>FRE 307</td>
<td>Survey France Renaissance-Revolution</td>
</tr>
<tr>
<td>FRE 321</td>
<td>Issues in Francophone Culture</td>
</tr>
<tr>
<td>FRE 389</td>
<td>Topics</td>
</tr>
<tr>
<td>FRE 399</td>
<td>Francophone Study Abroad Experience</td>
</tr>
<tr>
<td>FRE 420</td>
<td>Francophone North America</td>
</tr>
<tr>
<td>FRE 435</td>
<td>Francophone Africa</td>
</tr>
</tbody>
</table>
Bachelor of Arts (HEGIS 2206)

Geography and Planning Department

BA

BA-NS GEG

Geography and Planning Department

Bachelor of Arts (HEGIS 2206)

Classroom Building A213 (716) 878-6216

The Geography major provides students with a basic foundation of the discipline while allowing them to focus on one major geographic subject area in the following concentrations: meteorology & climatology, watershed & ecosystems, economic geography & development, or Geographic Information Systems (GIS).

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Geography 39 cr

A. Required Courses (21 cr)

GEG 101 World Natural Environments
GEG 102 Human Geography
GEG 325 Maps and Mapmaking Using GIS
GEG 390 Quantitative Methods in Geography and Planning
GEG 396 Research Methods
GEG 430 Senior Thesis

Select one course from the following:

GEG 300 World Regional Geography
GEG 359 Arctic Geography
GEG 360 Geography of Asia
GEG 362 Geography of the United States and Canada
GEG 364 Geography of Europe

B. Concentration Courses (12 cr)

Selected by advisement

Meteorology and Climatology Concentration
GEG/GES 241 Meteorology
GEG 303 Global Climatology
GEG 382 Weather Forecasting
GEG 383 Severe & Unusual Weather
GEG 384 Atmospheric Science
GEG 385 Paleoclimatology
GEG 386 Applied Climatology
GEG 478 Global Change
GEG 480 Air Pollution Applications

Watershed & Ecosystems Concentration
GEG 307 Conservation and Environmental Management
GEG 316 Watershed Pollution
GEG 365 Soil Science and Management
GEG 375 Principles of Hydrology
GEG 421 Watershed Analysis
GEG 423 Biogeography
GEG 478 Global Change
PLN 360 Environmental Impact Assessment

Economic Geography & Development Concentration
GGR 305 Principles of Economic Geography
GGR 309 Introduction to Urban Geography
GGR 310 Urban Transportation Planning
GGR 409 Industrial Geography
GGR 416 Geographies of Development
GGR 419 Globalization, Technology, Competition & Service Economies
GGR 461 Issues in Southeast Asia Environment and Sustainable Development

GIS Concentration
GGR 405 Urban Analysis Using GIS
GGR 418 Remote Sensing
GGR 425 Fundamentals of GIS
GGR 427 Corporate Applications Using GIS
GGR 428 Environmental Assessment and Planning Applications Using GIS
GGR 429 Advanced Topics in GIS
GGR 485 Interactive & Web-based Mapping

B. Electives (6 cr)

Selected by advisement

Any two upper-division Geography courses

Total Required Credit Hours 120 cr

All College Electives 45-51 cr

Total Required Credit Hours 120 cr

Bachelor of Arts (HEGIS 1914)

Earth Sciences and Science Education Department

Bachelor of Arts (HEGIS 1914)

Science Building 271 (716) 878-6731

The geology program offers students a variety of opportunities to investigate the materials that constitute and the processes that shape the earth. Classroom, laboratory, and field work provide a base for careers related to energy, the environment, and the exploration for and production of petroleum and mineral resources. Graduates of the program are prepared to enter these fields and/or pursue advanced study in the geosciences.

Coursework in calculus and physics is strongly recommended, particularly for students contemplating graduate study. The recommended courses are MAT 126, MAT 127, PHY 111, PHY 112, and upper-division courses in chemistry, mathematics and physics. Each student should choose the appropriate courses by advisement, beginning with entry into the major.

Student majors are strongly encouraged to pursue independent research under faculty supervision or an internship experience. Students may find additional information about undergraduate research possibilities from faculty and by visiting the Office of Undergraduate Research Web site at www.buffalostate.edu/undergraduateresearch. A departmental honors program also is available. Students should contact the department for additional information.

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Geology 42 cr

A. Required Courses (33 cr)

GES 101 Introductory Geology
GES 102 Historical Geology
GES 103 Introductory Geology Laboratory (1)
GES 300 Sedimentology
GES 301 Stratigraphy
GES 302 Invertebrate Paleontology (4)
GES 303 Mineralogy and Petrology (4)
GES 408 Structural Geology (4)
### HEALTH AND WELLNESS (B.S.)

**BS-NS HEW**  
Health and Wellness Department  
Bachelor of Science (HEGIS 0837)

Buckham Hall A100  (716) 878-6501

The health and wellness program prepares undergraduate students to assume roles as health/wellness professionals in private business and industry, community organizations, and healthcare environments. Students will be able to administer effective health/wellness programs in organizations that advance preventive medicine and positive lifestyle habits. Students also may participate in the Health and Wellness Student Association; which educates students through lectures, guest speakers, attending conferences, and field trips on ways to achieve a healthier lifestyle.

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

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Required Credit Hours in Health and Wellness</strong></td>
<td>42 cr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A. Required Courses (33 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEW 204 Personal Health</td>
</tr>
<tr>
<td>HEW 225 Introduction to Disease Prevention</td>
</tr>
<tr>
<td>HEW 279 Physical Adaptation to Exercise ¹</td>
</tr>
<tr>
<td>HEW 302 Exercise Principles and Techniques</td>
</tr>
<tr>
<td>HEW 305 Community Health and Wellness</td>
</tr>
<tr>
<td>HEW 307 Exercise, Fitness, and Nutrition</td>
</tr>
<tr>
<td>HEW 310 Health Standards and Emergency Care ¹</td>
</tr>
<tr>
<td>HEW 312 Methods and Materials in Health and Wellness</td>
</tr>
<tr>
<td>HEW 401 Assessment and Evaluation in Health and Wellness</td>
</tr>
<tr>
<td>HEW 411 Critical Issues in Health and Wellness</td>
</tr>
<tr>
<td>HEW 412 Health and Wellness Programs</td>
</tr>
</tbody>
</table>

¹ BIO 100 is a prerequisite for HEW 279 and HEW 310.

<table>
<thead>
<tr>
<th>B. Electives (9 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPR 301 Kinesiology</td>
</tr>
<tr>
<td>HEW 308 Women’s Health Issues</td>
</tr>
<tr>
<td>HEW 320 Psychoactive Drugs and Health</td>
</tr>
<tr>
<td>HEW 345 Wellness, Fitness, and Aging</td>
</tr>
<tr>
<td>HEW 425 Alcohol Problems</td>
</tr>
<tr>
<td>HEW 488 Internship (6 cr or 9 cr)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All College Electives</th>
<th>39-45 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Required Credit Hours</strong></td>
<td>120 cr</td>
</tr>
</tbody>
</table>

### HOSPITALITY ADMINISTRATION (B.S.)

**BS-SP HTR**  
Hospitality and Tourism Department  
Bachelor of Science (HEGIS 1307)

Accreditation Commission for Programs in Hospitality Administration (ACPHA)  
Accredited

Caudell Hall 207  (716) 878-5913

The hospitality and tourism curriculum prepares graduates for management positions in various aspects of the hospitality industry. Career opportunities exist for managers in restaurants, hotels, clubs, casino and gaming, resorts, catering operations, residential and health care, school and university food service, sales, production, travel and tourism, and other components of industry/business.

The department’s mission is to educate and develop proven hospitality professionals by integrating a strong core curriculum with a deliberate emphasis on experiential learning. The department is defined by its extraordinary focus on student development, and is firmly grounded in producing graduates that excel in communication, teamwork, professionalism, and problem solving.

**Admission Requirements:** Transfer or undeclared students desiring to major in this program must have a minimum GPA of 2.0 in previous college credits.

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Required Credit Hours</strong></td>
<td>120 cr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor of Arts (HEGIS 2205)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Building C205  (716) 878-5412</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Required Credit Hours in History</strong></td>
<td>39 cr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>American History (6 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 106 History of American Life I</td>
</tr>
<tr>
<td>HIS 107 History of American Life II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>European History (6 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select two courses from the following:</td>
</tr>
<tr>
<td>HIS 115 Foundations of Western Civilization</td>
</tr>
<tr>
<td>HIS 116 Europe Since 1500</td>
</tr>
<tr>
<td>HIS 117 Twentieth-Century Europe</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>World History (6 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two electives in Asian, African, Middle Eastern, or Latin American history.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research and Writing Seminar (3 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 300 Research and Writing Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Historiography Seminar (3 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 400 Senior Seminar in History or</td>
</tr>
<tr>
<td>HIS 490 Senior Seminar in Historiography</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper-Division History Electives (15 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three 300-level history courses.</td>
</tr>
<tr>
<td>Two 400-level history courses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All College Electives</th>
<th>42-48 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>120 cr</td>
</tr>
</tbody>
</table>

### HISTORY (B.A.)

**BA-NS HIS**  
History and Social Studies Education Department

Two semesters of chemistry: CHE 111 and CHE 112 or equivalent (8)

<table>
<thead>
<tr>
<th>B. Electives Selected by Advisement (9 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit will be allowed for any course in geology (GES prefix).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All College Electives</th>
<th>39-45 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Required Credit Hours</strong></td>
<td>120 cr</td>
</tr>
</tbody>
</table>
### Total Required Credit Hours in Hospitality Administration 42 cr

#### A. Required Courses (30 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR 110</td>
<td>Introduction to Hospitality and Tourism</td>
</tr>
<tr>
<td>HTR 300</td>
<td>Food and Beverage Management (4)</td>
</tr>
<tr>
<td>HTR 350</td>
<td>Computer Applications for Hospitality</td>
</tr>
<tr>
<td>HTR 370</td>
<td>Cost Controls in Hospitality</td>
</tr>
<tr>
<td>HTR 380</td>
<td>Advanced Training in Hospitality</td>
</tr>
<tr>
<td>HTR 390</td>
<td>Strategic Marketing in Hospitality</td>
</tr>
<tr>
<td>HTR 455</td>
<td>Advanced Human Resource Management in Hospitality</td>
</tr>
<tr>
<td>HTR 470</td>
<td>Legal Issues in Hospitality</td>
</tr>
<tr>
<td>HTR 480</td>
<td>Practicum in Hospitality Operations (4)</td>
</tr>
<tr>
<td>HTR 485</td>
<td>Seminar in Hospitality (1)</td>
</tr>
</tbody>
</table>

#### B. Concentration Courses (12 cr)

##### Restaurant and Institutional Management Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR 100</td>
<td>Multicultural Foods</td>
</tr>
<tr>
<td>HTR 200</td>
<td>Sanitation and Safety in Food Service</td>
</tr>
<tr>
<td>HTR 361</td>
<td>Principles of Management in Food Service</td>
</tr>
<tr>
<td>HTR 400</td>
<td>Catering Management</td>
</tr>
</tbody>
</table>

Required: 400 hours of hospitality-related industry experience.

##### Culinary Arts Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR 305</td>
<td>Applied Culinary Arts</td>
</tr>
<tr>
<td>HTR 330</td>
<td>Fundamentals of Bakeshop Production</td>
</tr>
<tr>
<td>HTR 365</td>
<td>Menu Design &amp; Development</td>
</tr>
<tr>
<td>HTR 400</td>
<td>Catering Management</td>
</tr>
</tbody>
</table>

Required: 400 hours of hospitality-related industry experience.

##### Hotel Tourism Management Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR 368</td>
<td>Hotel Operations</td>
</tr>
<tr>
<td>HTR 408</td>
<td>Conventions, Meetings, and Expositions</td>
</tr>
<tr>
<td>HTR 418</td>
<td>Tourism Management</td>
</tr>
<tr>
<td>HTR 468</td>
<td>Hotel Management</td>
</tr>
</tbody>
</table>

Required: 400 hours of hospitality-related industry experience.

##### Electives in Hospitality Administration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR 100</td>
<td>Multicultural Foods</td>
</tr>
<tr>
<td>HTR 200</td>
<td>Sanitation and Safety in Food Service</td>
</tr>
<tr>
<td>HTR 305</td>
<td>Applied Culinary Arts</td>
</tr>
<tr>
<td>HTR 318</td>
<td>Cultural Tourism</td>
</tr>
<tr>
<td>HTR 330</td>
<td>Fundamentals of Bakeshop Production</td>
</tr>
<tr>
<td>HTR 335</td>
<td>Wine Essentials</td>
</tr>
<tr>
<td>HTR 340</td>
<td>Industry Experience</td>
</tr>
<tr>
<td>HTR 348</td>
<td>Tourism and World Travel</td>
</tr>
<tr>
<td>HTR 361</td>
<td>Principles of Management in Food Service</td>
</tr>
<tr>
<td>HTR 365</td>
<td>Menu Design &amp; Development</td>
</tr>
<tr>
<td>HTR 368</td>
<td>Hotel Operations</td>
</tr>
<tr>
<td>HTR 375</td>
<td>Events Management</td>
</tr>
<tr>
<td>HTR 385</td>
<td>Private Club Management</td>
</tr>
<tr>
<td>HTR 400</td>
<td>Catering Management</td>
</tr>
<tr>
<td>HTR 408</td>
<td>Conventions, Meetings and Expositions</td>
</tr>
<tr>
<td>HTR 418</td>
<td>Tourism Management</td>
</tr>
<tr>
<td>HTR 468</td>
<td>Hotel Management</td>
</tr>
</tbody>
</table>

### INDIVIDUALIZED STUDIES (B.S.)*

**BS-UC INS**
Continuing Professional Studies
University College
Bachelor of Science (HEGIS 4901)
Cleveland Hall 210 (716) 878-5907
South Wing 310 (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 Requirements 39–66 cr

**Total Required Credit Hours in Individualized Studies 39–45 cr**

- **Track I:** Two minors
- **OR**
  - **Track II:** Two to four academic fields, maximum of six courses per discipline
  - **Culminating Project 495 (3 cr)**

**All College Electives 9–42 cr**

**Total Required Credit Hours 120 cr**

### INDUSTRIAL TECHNOLOGY (B.S.)*

**BS-SP TEC**
Engineering Technology Department
Bachelor of Science (HEGIS 0925)

**Accreditation:** Association of Technology Management and Applied Engineering (ATMAE.org http://www.ATMAE.org)
Technology Building 126 (716) 878-6017

The industrial technology program, through its two concentrations, provides students with the opportunity to develop a specialty within a broader framework of technical operations knowledge. By selecting the manufacturing concentration, the student specializes in direct manufacturing support of a technical or managerial nature. Knowledge of management principles, physical sciences, technology of industry, and liberal arts is employed to optimize manufacturing processes, materials, and personnel. The quality concentration allows the student to develop the ability to assist the product or service organization in obtaining the maximum level of quality performance in a lean environment. This concentration requires a professional internship that places the student in a specialty position in a local organization as a culminating activity.

Program graduates have filled positions as industrial engineers, manufacturing engineers, quality-assurance specialists, directors of technology, production/lean operations managers, corporate trainers, cost estimators, purchasing managers, first line supervisors, supply chain managers, distribution supervisors, safety engineers, drafting specialists,
technical writers, web masters, and technical sales and marketing specialists.

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

*Evening study available.

### Intellectual Foundations Requirements 33-39 cr

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Technology/Core Courses</th>
<th>24 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC 101 Technical Drawing</td>
<td></td>
</tr>
<tr>
<td>TEC 201 Materials Processing</td>
<td></td>
</tr>
<tr>
<td>TEC 311 Materials Science and Testing</td>
<td></td>
</tr>
<tr>
<td>TEC 312 Materials Management</td>
<td></td>
</tr>
<tr>
<td>TEC 313 Statistical Quality Control</td>
<td></td>
</tr>
<tr>
<td>TEC 314 Electromechanics</td>
<td></td>
</tr>
<tr>
<td>TEC 402 Ergonomics</td>
<td></td>
</tr>
<tr>
<td>TEC 403 Systems Analysis</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Concentration</th>
<th>18 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Manufacturing Concentration¹</td>
<td></td>
</tr>
<tr>
<td>TEC 400/BUS Marketing</td>
<td></td>
</tr>
<tr>
<td>TEC 302 CAD/CAM</td>
<td></td>
</tr>
<tr>
<td>TEC 351 Energy Systems</td>
<td></td>
</tr>
<tr>
<td>TEC 404 Industrial Systems Applications</td>
<td></td>
</tr>
<tr>
<td>TEC 405 Manufacturing Technology</td>
<td></td>
</tr>
<tr>
<td>TEC 465 Safety Management</td>
<td></td>
</tr>
<tr>
<td>B. Quality Concentration¹</td>
<td></td>
</tr>
<tr>
<td>MAT 311 Introductory Probability and Statistics</td>
<td></td>
</tr>
<tr>
<td>TEC 200W Total Quality Management</td>
<td></td>
</tr>
<tr>
<td>TEC 321 Measurement Systems</td>
<td></td>
</tr>
<tr>
<td>TEC 323 Quality Improvement Through Design of Experiments</td>
<td></td>
</tr>
<tr>
<td>TEC 488 Quality Internship</td>
<td></td>
</tr>
</tbody>
</table>

¹Student selects either the manufacturing or quality concentration.

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Other Fields for Accreditation</th>
<th>12 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Math (3)</td>
<td></td>
</tr>
<tr>
<td>Core Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>MAT 124 Pre-Calculus Mathematics</td>
<td></td>
</tr>
<tr>
<td>PHY 107 General Physics I</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All College Electives</th>
<th>27-33 cr</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours</th>
<th>120 cr</th>
</tr>
</thead>
</table>

---

**Interior Design (B.F.A.)**

BFA-AH INT
Interior Design Department
Bachelor of Fine Arts (HEGIS 1009)

Council for Interior Design Accreditation (CIDA) Accredited
National Association of Schools of Art and Design (NASAD) Accredited
Upton Hall 212 (716) 878-5252

The Interior Design B.F.A. degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional interior designers. Students gain a thorough knowledge of design processes and technical skills, including computer-aided design and traditional drafting and rendering. Construction methods, lighting design, materials specification, and color use are emphasized to support specializations within the major. Studios offer design exploration in spatial experimentation, residential design, retail design, public buildings, office planning, and industry standards for sustainable design principles, and culminates in the Undergraduate Thesis Project. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

Interior design graduates are prepared for careers in independent practice and employment in interior design and architectural firms, institutions, corporations, and other settings. Following completion of this program, plus two years interior design work experience, students are eligible to apply and sit for the professional, nationally recognized NCIDQ (National Council for Interior Design Qualification) licensing exam. They may then apply for a “Certified Interior Designer” designation and the right to practice in New York State.

The Interior Design Department is committed to the intellectual, personal, and professional growth of the students. Through varied and increasingly complex coursework, coupled with a strong community-based project component, the students and faculty have and will continue to enhance the region in terms of residential, health care, and commercial designs, as well as culturally sensitive and public-interest projects. These projects connect the students, faculty, and community in a dynamic relationship, inspire students to expand their horizons, and create life-long learners.

The program is rigorous and comprehensive, resulting in professional and innovative designers actively sought after by regional and national employers.

### Requirements for Acceptance to Major:

1. Successful completion of the Skills Competency Exam following IDE 151, IDE 152, and IDE 153. The one-day exam evaluates entry-level ability to visualize, design, and communicate spatial solutions to a simple problem through scaled drafting, rendering, and model-building.

A minimum cumulative GPA of 2.6 after the freshman year.

Transfer Students: Acceptance to the major is determined after reviewing a portfolio of work during an interview with the chair of the Interior Design Department; transcripts are evaluated on a case-by-case basis.

### Intellectual Foundations Requirements 33-39 cr

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Interior Design</th>
<th>81 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Common Foundations Courses</td>
<td></td>
</tr>
<tr>
<td>DES 101 Introduction to Design 2D I</td>
<td></td>
</tr>
<tr>
<td>FAR 101 Drawing I</td>
<td></td>
</tr>
<tr>
<td>FAR 104 Themes and Issues in the Contemporary Arts</td>
<td></td>
</tr>
<tr>
<td>B. Interior Design Major Courses</td>
<td></td>
</tr>
<tr>
<td>DES 312 History of Craft: Industrial Revolution to the Present</td>
<td></td>
</tr>
<tr>
<td>FAR 250 Art History I</td>
<td></td>
</tr>
<tr>
<td>FAR 251 Art History II</td>
<td></td>
</tr>
<tr>
<td>FTT 206 Introduction to Textiles or DES 242 Fibers I</td>
<td></td>
</tr>
<tr>
<td>IDE 101 Introduction to Interior Design</td>
<td></td>
</tr>
<tr>
<td>IDE 151 Mechanical and Perspective Drawing</td>
<td></td>
</tr>
<tr>
<td>IDE 152 Introduction to Color Rendering</td>
<td></td>
</tr>
<tr>
<td>IDE 153 Spatial Explorations and Model Building</td>
<td></td>
</tr>
<tr>
<td>IDE 201 Interior Design I</td>
<td></td>
</tr>
<tr>
<td>IDE 202 Construction Fundamentals I</td>
<td></td>
</tr>
<tr>
<td>IDE 203 Furniture Theory and Application</td>
<td></td>
</tr>
<tr>
<td>IDE 204 Materials and Color</td>
<td></td>
</tr>
<tr>
<td>IDE 251 Interior Design II</td>
<td></td>
</tr>
<tr>
<td>IDE 252 Construction Fundamentals II</td>
<td></td>
</tr>
<tr>
<td>IDE 301 Interior Design III</td>
<td></td>
</tr>
<tr>
<td>IDE 302 Computer Applications for Interior Design</td>
<td></td>
</tr>
<tr>
<td>IDE 303 Interior Detailing</td>
<td></td>
</tr>
<tr>
<td>IDE 351 Interior Design IV</td>
<td></td>
</tr>
<tr>
<td>IDE 352 AutoCAD for Interior Designers</td>
<td></td>
</tr>
<tr>
<td>IDE 353 Interior Design Professional Practice and Specifications</td>
<td></td>
</tr>
<tr>
<td>IDE 401 Interior Design V</td>
<td></td>
</tr>
<tr>
<td>IDE 402 Lighting Design</td>
<td></td>
</tr>
<tr>
<td>IDE 451 Interior Design VI</td>
<td></td>
</tr>
</tbody>
</table>
**JOURNALISM (B.A.)**

BA-AH JBS  
Communication Department  
Bachelor of Arts (HEGIS 0602)  

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

Bishop Hall 210 (716) 878-6008  

This major allows students who enjoy writing the flexibility to tailor a program based on reporting and presentation of news, and other journalistic writing through print, broadcast and online media. It meets the needs of students preparing for a career in which research and interviewing abilities, accurate and objective reporting, legal and ethical insight, and competence in editing are central to professional practice. Compare this major with communication studies, media production, and public communication.  

**Academic Standards:** Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors, and requires evidence of an academic concentration or area of expertise outside the Communication Department.  

**Intellectual Foundations Requirements**  

| Total Required Credit Hours | 120 cr |

**A. Communication Core (12 cr)**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 100</td>
<td>Media Literacy</td>
</tr>
<tr>
<td>COM 210</td>
<td>Converged Media Writing</td>
</tr>
<tr>
<td>COM 215</td>
<td>Introduction to Visual Communication</td>
</tr>
<tr>
<td>SPC 205</td>
<td>Introduction to Oral Communication</td>
</tr>
</tbody>
</table>

**Note:** Students must have a minimum GPA of 2.6 in the major to register for certain upper-division courses (300- and 400-level).  

**B. Major Requirements (21 cr)**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 302</td>
<td>Principles of Journalism</td>
</tr>
<tr>
<td>COM 303</td>
<td>Print News I: Reporting</td>
</tr>
<tr>
<td>COM 312</td>
<td>Basic Media Production</td>
</tr>
<tr>
<td>COM 337</td>
<td>Electronic News I: Producing</td>
</tr>
<tr>
<td>COM 325</td>
<td>Feature Writing</td>
</tr>
</tbody>
</table>

**Total Required Journalism Courses**  

| 42 cr |

**D. Senior Seminar (3 cr)**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 488</td>
<td>Internship</td>
</tr>
</tbody>
</table>

**E. Communication Electives (6 cr)**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 495</td>
<td>or Independent Project</td>
</tr>
<tr>
<td>COM 499</td>
<td>or Independent Study</td>
</tr>
</tbody>
</table>

300/400-level elective by advisement  

**All College Electives**  

| 36-48 cr |

**Total Required Credit Hours**  

| 120 cr |

**MATHEMATICS (B.A.)**

BA-NS MAT  
Mathematics Department  
Bachelor of Arts (HEGIS 1701)  

Bishop Hall 317 (716) 878-5621  

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

**Intellectual Foundations Requirements**  

| 33-39 cr |

**Total Required Credit Hours in Mathematics**  

| 50 cr |

**A. Required Courses (38 cr)**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 161</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>MAT 162</td>
<td>Calculus II (4)</td>
</tr>
<tr>
<td>MAT 163</td>
<td>Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164</td>
<td>Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 202</td>
<td>Introduction to Linear Algebra</td>
</tr>
<tr>
<td>MAT 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MAT 264</td>
<td>Using Technology to Explore Calculus III (1)</td>
</tr>
<tr>
<td>MAT 270</td>
<td>Discrete Mathematics I</td>
</tr>
<tr>
<td>MAT 300</td>
<td>Techniques of Proof</td>
</tr>
<tr>
<td>MAT 301</td>
<td>Fundamentals of Abstract Algebra</td>
</tr>
<tr>
<td>MAT 381</td>
<td>Probability Theory</td>
</tr>
<tr>
<td>MAT 411</td>
<td>Complex Variables</td>
</tr>
<tr>
<td>MAT 417</td>
<td>Introduction to Real Analysis I</td>
</tr>
<tr>
<td>MAT 491</td>
<td>Capstone Research in Mathematics</td>
</tr>
</tbody>
</table>

**B. Electives Selected by Advisement (12 cr)**  

Select four courses from the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 300</td>
<td>Techniques of Proof</td>
</tr>
<tr>
<td>MAT 302</td>
<td>Abstract Algebra II</td>
</tr>
<tr>
<td>MAT 309</td>
<td>Discrete Mathematics II</td>
</tr>
<tr>
<td>MAT 315</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>MAT 316</td>
<td>Intermediate Differential Equations</td>
</tr>
<tr>
<td>MAT 322W</td>
<td>Modern Geometry</td>
</tr>
<tr>
<td>MAT 351</td>
<td>Elementary Theory of Numbers</td>
</tr>
<tr>
<td>MAT 366</td>
<td>Computational Tools for Applied Mathematicians II</td>
</tr>
<tr>
<td>MAT 370</td>
<td>Applied Networks</td>
</tr>
<tr>
<td>MAT 382</td>
<td>Mathematical Statistics</td>
</tr>
<tr>
<td>MAT 383</td>
<td>Applied Statistics I</td>
</tr>
<tr>
<td>MAT 401</td>
<td>Introduction to Computability</td>
</tr>
<tr>
<td>MAT 404</td>
<td>Applications of Linear Algebra</td>
</tr>
<tr>
<td>MAT 411</td>
<td>Complex Variables</td>
</tr>
<tr>
<td>MAT 418</td>
<td>Introduction to Real Analysis II</td>
</tr>
</tbody>
</table>
The applied mathematics B.S. program is directed toward a career goal for computer- and mathematics-related government, industrial, or business employment. It may also provide a basis for entry into graduate school in mathematics, applied mathematics, computer science, or other related disciplines.

**Admission Requirements:** Four years of college preparatory mathematics is recommended.

### Intellectual Foundations Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 161</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>MAT 162</td>
<td>Calculus II (4)</td>
</tr>
<tr>
<td>MAT 163</td>
<td>Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164</td>
<td>Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 202</td>
<td>Introduction to Linear Algebra</td>
</tr>
<tr>
<td>MAT 241</td>
<td>Computational Tools for Applied Mathematicians I</td>
</tr>
<tr>
<td>MAT 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MAT 264</td>
<td>Using Technology to Explore Calculus III (1)</td>
</tr>
<tr>
<td>MAT 270</td>
<td>Discrete Mathematics I</td>
</tr>
<tr>
<td>MAT 366</td>
<td>Computational Tools for Applied Mathematicians II</td>
</tr>
<tr>
<td>MAT 381</td>
<td>Probability Theory</td>
</tr>
<tr>
<td>MAT 382</td>
<td>Mathematical Statistics</td>
</tr>
<tr>
<td>MAT 495</td>
<td>Special Project</td>
</tr>
</tbody>
</table>

### Total Required Credit Hours in Mathematics: 53 cr

#### A. Required Courses (35 cr)

- MAT 161 Calculus I (4)
- MAT 162 Calculus II (4)
- MAT 163 Using Technology to Explore Calculus I (1)
- MAT 164 Using Technology to Explore Calculus II (1)
- MAT 202 Introduction to Linear Algebra
- MAT 241 Computational Tools for Applied Mathematicians I
- MAT 263 Calculus III
- MAT 264 Using Technology to Explore Calculus III (1)
- MAT 270 Discrete Mathematics I
- MAT 366 Computational Tools for Applied Mathematicians II
- MAT 381 Probability Theory
- MAT 382 Mathematical Statistics
- MAT 495 Special Project

#### B. Concentration Courses Selected by Advisement (18 cr)

Students must choose one of three concentrations:

#### Concentration in Statistics

**Required Courses (6 cr)**

- MAT 383 Applied Statistics I
- MAT 484 Applied Statistics II

**Select four courses from the following (18 cr):**

- MAT 315 Differential Equations
- MAT 316 Intermediate Differential Equations
- MAT 319 Mathematical Biology
- MAT 370 Applied Networks
- MAT 390 Introduction to Operations Research

#### Concentration in Numeric Computation

**Required Courses (6 cr)**

- MAT 390 Introduction to Operations Research
- MAT 461 Numerical Analysis

**Select four courses from the following (18 cr):**

- MAT 315 Differential Equations
- MAT 316 Intermediate Differential Equations
- MAT 319 Mathematical Biology
- MAT 370 Applied Networks
- MAT 383 Applied Statistics I
- MAT 404 Applications of Linear Algebra
- MAT 411 Complex Variables
- MAT 417 Introduction to Real Analysis I
- MAT 471 Introduction to Topology
- MAT 481 Stochastic Processes
- MAT 490 Seminar
- MAT 499 Independent Study

#### Concentration in Computational Discrete Mathematics

**Required Courses (6 cr)**

- MAT 318 Mathematical Modeling
- MAT 390 Introduction to Operations Research

**Select four courses from the following (18 cr):**

- MAT 315 Differential Equations
- MAT 316 Intermediate Differential Equations
- MAT 319 Mathematical Biology
- MAT 370 Applied Networks
- MAT 383 Applied Statistics I
- MAT 401 Introduction to Computability
- MAT 404 Applications of Linear Algebra
- MAT 411 Complex Variables
- MAT 417 Introduction to Real Analysis I
- MAT 461 Numerical Analysis
- MAT 481 Stochastic Processes
- MAT 490 Seminar
- MAT 499 Independent Study

### All College Electives: 31-37 cr

### Total Required Credit Hours: 120 cr
The B.S. in mathematics with adolescent certification is directed to a career goal of teaching. This program includes the course requirements leading to New York State certification to teach mathematics in grades 7–12.

**Admission Requirements:** Four years of college preparatory mathematics is recommended.

### Intellectual Foundations Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 161</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>MAT 162</td>
<td>Calculus II (4)</td>
</tr>
<tr>
<td>MAT 163</td>
<td>Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164</td>
<td>Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 202</td>
<td>Introduction to Linear Algebra</td>
</tr>
<tr>
<td>MAT 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MAT 264</td>
<td>Using Technology to Explore Calculus III (1)</td>
</tr>
<tr>
<td>MAT 270</td>
<td>Discrete Mathematics I</td>
</tr>
<tr>
<td>MAT 300</td>
<td>Techniques in Proof</td>
</tr>
<tr>
<td>MAT 301</td>
<td>Fundamentals of Abstract Algebra</td>
</tr>
<tr>
<td>MAT 322</td>
<td>Modern Geometry</td>
</tr>
<tr>
<td>MAT 325</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>MAT 417</td>
<td>Introduction to Real Analysis I</td>
</tr>
</tbody>
</table>

### Total Required Credit Hours in Mathematics

44 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 308W</td>
<td>Methods in the Teaching of Secondary School Mathematics</td>
</tr>
<tr>
<td>MED 383W</td>
<td>Learning and Teaching Problem Solving</td>
</tr>
</tbody>
</table>

*EXE 100 fulfills an Intellectual Foundations requirement.*

### Total Required Credit Hours in Student Teaching

12 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED 407</td>
<td>Student Teaching of Mathematics in Junior High/Middle School (6)</td>
</tr>
<tr>
<td>MED 408</td>
<td>Student Teaching of Mathematics in High School (6)</td>
</tr>
</tbody>
</table>

### All College Electives

0–3 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED 308W</td>
<td>Methods in the Teaching of Secondary School Mathematics</td>
</tr>
<tr>
<td>MED 383W</td>
<td>Learning and Teaching Problem Solving</td>
</tr>
</tbody>
</table>

**BS-NS MTX**

Mathematics Department

Bachelor of Science (HEGIS 1701.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited

Bishop Hall 317 (716) 878-5621

The B.S. program in mathematics with adolescent certification (5–6 extension) is directed to a career goal of teaching. This program includes the course requirements leading to New York State initial certification to teach mathematics in grades 5–12.

**Admission Requirements:** Four years of college preparatory mathematics is recommended.

### Intellectual Foundations Requirements

33-39 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 161</td>
<td>Calculus I (4)</td>
</tr>
<tr>
<td>MAT 162</td>
<td>Calculus II (4)</td>
</tr>
<tr>
<td>MAT 163</td>
<td>Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164</td>
<td>Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 202</td>
<td>Introduction to Linear Algebra</td>
</tr>
<tr>
<td>MAT 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MAT 264</td>
<td>Using Technology to Explore Calculus III (1)</td>
</tr>
<tr>
<td>MAT 270</td>
<td>Discrete Mathematics I</td>
</tr>
<tr>
<td>MAT 300</td>
<td>Techniques in Proof</td>
</tr>
<tr>
<td>MAT 301</td>
<td>Fundamentals of Abstract Algebra</td>
</tr>
<tr>
<td>MAT 322</td>
<td>Modern Geometry</td>
</tr>
<tr>
<td>MAT 325</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>MAT 417</td>
<td>Introduction to Real Analysis I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 302</td>
<td>Abstract Algebra II</td>
</tr>
<tr>
<td>MAT 309</td>
<td>Discrete Mathematics II</td>
</tr>
<tr>
<td>MAT 315</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>MAT 316</td>
<td>Intermediate Differential Equations</td>
</tr>
<tr>
<td>MAT 318</td>
<td>Elementary Theory of Numbers</td>
</tr>
<tr>
<td>MAT 351</td>
<td>Computational Tools for Applied Mathematicians II</td>
</tr>
<tr>
<td>MAT 352</td>
<td>Applied Networks</td>
</tr>
<tr>
<td>MAT 366</td>
<td>Mathematical Statistics</td>
</tr>
<tr>
<td>MAT 367</td>
<td>Mathematical Logic</td>
</tr>
<tr>
<td>MAT 368</td>
<td>Numerical Analysis</td>
</tr>
<tr>
<td>MAT 370</td>
<td>Seminar</td>
</tr>
<tr>
<td>MAT 371</td>
<td>Special Project</td>
</tr>
<tr>
<td>MAT 372</td>
<td>Independent Study</td>
</tr>
</tbody>
</table>

### Total Required Credit Hours in Professional Education

30 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 303</td>
<td>Educational Psychology: Middle and Secondary Education</td>
</tr>
<tr>
<td>SPF 403</td>
<td>Historical and Philosophical Forces Influencing Secondary Education</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>EDU 417</td>
<td>Adolescent Literacy</td>
</tr>
<tr>
<td>EXE 100</td>
<td>Nature and Needs of Individuals with Special Needs*</td>
</tr>
<tr>
<td>MED 200</td>
<td>Field Experience in Secondary Education Mathematics</td>
</tr>
<tr>
<td>MED 300</td>
<td>Field Experience: Methods in the Teaching of Secondary School Mathematics (1)</td>
</tr>
<tr>
<td>MED 307</td>
<td>Uses of Technology in the Teaching of Mathematics</td>
</tr>
</tbody>
</table>
For information about this program, see the Graduate Catalog.

MAT 431 Mathematical Logic
MAT 461 Numerical Analysis
MAT 471 Introduction to Topology
MAT 490 Seminar
MAT 495 Special Project
MAT 499 Independent Study

Total Required Credit Hours in Professional Education 31 cr

SPF 303 Educational Psychology: Middle and Secondary Education
SPF 353 Human Development During Early Adolescence and Adolescence
SPF 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 in Secondary Education Mathematics
MED 300 Field Experience: Methods in the Teaching of Secondary School Mathematics (1)
MED 307 Uses of Technology in the Teaching of Mathematics
MED 308W Methods in the Teaching of Secondary School Mathematics
MED 309 Field Experience: Methods in 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 Teaching 12 cr

MED 406 Student Teaching of Mathematics in the Lower Middle Grades 5-6 (6)
MED 408 Student Teaching of Mathematics in High School (6)

All College Electives 0-3 cr

Total Required Credit Hours 120-123 cr

**EXE 100 fulfills an Intellectual Foundations requirement.

MATHEMATICS EDUCATION (7–12, PTCP)

PBC-NS MTS Mathematics Department Postbaccalaureate Teacher Certification Program (HEGIS 1701.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bishop Hall 317 (716) 878-5621

For information about this program, see the Graduate Catalog.

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

PBC-NS MTX Mathematics Department Postbaccalaureate Teacher Certification Program (HEGIS 1701.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited
Bishop Hall 317 (716) 878-5621

For information about this program, see the Graduate Catalog.

MECHANICAL ENGINEERING TECHNOLOGY (B.S.)*

BS-SP MET Engineering Technology Department Bachelor of Science (HEGIS 0925)

Technology Accreditation Commission/Accreditation Board for Engineering and Technology (TAC/ABET) Accredited*
Technology Building 126 (716) 878-6017

The bachelor's degree in the mechanical engineering technology program is designed to give the student a broad education in the areas of mechanical design, mechanics, stress analysis, thermosciences, and manufacturing. Graduates are in high demand and are employed by manufacturing companies, consulting firms, government agencies, testing laboratories, and other enterprises that require people with strong mechanically oriented backgrounds. Graduates work as mechanical designers developing new products, manufacturing supervisors solving problems of producing these products for performance or quality, as plant engineers improving or maintaining factories, and in technical sales selling these products. The duties of technologists may involve overseeing installation, operation, maintenance, and repair to ensure that machines and equipment are installed and functioning according to specifications; specifying system components; supervising drafters in developing the design of products; testing and evaluating products; and/or developing cost estimates.

*Evening study available.

Intellectual Foundations Requirements 63-75 cr

Major Requirements 51 cr

ENT 102 Intro. Equat. Solve
ENT 202 Intro. Engineering Econ.
ENT 301 Mechanics I
ENT 302 Mechanics II
ENT 303 Kinematics
ENT 311 Thermodynamics
ENT 312 Fluid Mechanics
ENT 314 Solid Modeling
ENT 331 Electrical Circuits and Devices I
ENT 335 or Industrial Electronics
ENT 371 Electric Machines
ENT 371 Electric Machines
ENT 401 Stress Analysis
ENT 402 Shock and Vibration Analysis
ENT 420 Prof. Exp. in MET
ENT 411 Heat Transfer
ENT 421 Machine Design I
ENT 422 Machine Design II
TEC 101 Technical Drawing
TEC 201 Materials Processing
TEC 311 Materials Science and Testing

Electives 0-10 cr

The following accreditation requirements can be included in the Intellectual Foundations requirements and electives:
CHE 101 or CHE 111
CHE 102 or CHE 111
CIS 151
MAT 311 or other math course by advisement
MAT 126 or MAT 161
MAT 127 or MAT 162
MAT 315 or ENT 300
PHY 107 or PHY 111
PHY 108 or PHY 112
SPC 205

Total Required Credit Hours 124 cr
**Technology Accreditation Commission/Accreditation Board for Engineering and Technology Inc. (TAC/ABET), 111 Market Place, Suite 1030, Baltimore, MD 21202, (410) 347-7700.**

## MEDIA PRODUCTION (B.A.)

**BA-AH MDP**  
Communication Department  
Bachelor of Arts (HEGIS 0603)

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

Bishop Hall 210 (716) 878-6008

This major (formerly called broadcasting) allows students flexibility to tailor a program based on production of audio and/or visual messages using various electronic media. It meets the needs of students preparing for a career integrating many elements: research, planning, writing and other aspects of preproduction; studio and field experience in technical production; post-production activities, such as editing; and media management areas. Compare this major with communication studies, journalism, and public communication.

This is the only program in broadcasting and production at any SUNY school that is affiliated with the Accrediting Council on Education in Journalism and Mass Communications. Only four other undergraduate programs in New York State are accredited.

**Career Opportunities:** Students in media production prepare for careers in radio or audio production, television or video production, Web design, music production, media sales and management, related technical areas, and other fields that require a liberal arts education enhanced with production skills. Specific job titles associated with this major include writer, producer, director, videographer, editor, Web designer, and production manager.

The profile of a successful media production graduate is a person with strong skills in using computers, cameras, and other technical equipment, writing and speaking proficiency, keen ethical insight, analytical and creative competence, and management abilities.

**Admission Requirements:** Incoming freshmen and transfer students can declare the major. A 2.6 GPA in the major is required to register for required upper-division courses (300- and 400-level). See www.buffalostate.edu/communication for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits. Students generally require four semesters of study after completing communication core courses.

**Academic Standards:** Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors, and requires evidence of an academic concentration or area of expertise outside the Communication Department.

### Intellectual Foundations Requirements 33-39 cr

### Total Required Credit Hours in Media Production 42 cr

#### A. Communication Core (12 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 100</td>
<td>Media Literacy</td>
</tr>
<tr>
<td>COM 210</td>
<td>Converged Media Writing</td>
</tr>
<tr>
<td>COM 215</td>
<td>Introduction to Visual Communication</td>
</tr>
<tr>
<td>SPC 205</td>
<td>Introduction to Oral Communication</td>
</tr>
</tbody>
</table>

*Note: Students must have a minimum GPA of 2.6 in the major to register for certain upper-division courses (300- and 400-level).*

#### B. Major Requirements (21 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 304</td>
<td>Writing for Broadcast</td>
</tr>
<tr>
<td>COM 312</td>
<td>Basic Media Production</td>
</tr>
<tr>
<td>COM 317</td>
<td>Media Management</td>
</tr>
<tr>
<td>or COM 400</td>
<td>or Communication Law</td>
</tr>
<tr>
<td>COM 328</td>
<td>Intermediate Audio Production</td>
</tr>
</tbody>
</table>

#### C. Senior Seminar (3 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 488</td>
<td>Communication and Society</td>
</tr>
</tbody>
</table>

#### D. Communication Electives (6 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 488</td>
<td>Internship</td>
</tr>
<tr>
<td>or COM 495</td>
<td>or Independent Project</td>
</tr>
<tr>
<td>or COM 499</td>
<td>or Independent Study</td>
</tr>
</tbody>
</table>

*All College Electives 39-45 cr*

**Total Required Credit Hours 120 cr**

## METALS/JEWELRY (B.F.A.)

**BFA-AH MJD**  
Design Department  
Bachelor of Fine Arts (HEGIS 1009)

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

The B.F.A. degree in metals/jewelry design is a studio-intensive program of study focused on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies, or for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, art history, and design history along with courses in ceramics, fibers, and wood. Major courses in metals/jewelry design and sculpture complete the requirements. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

**Admission Requirements:** There is no entrance portfolio review for admission. All students will enter the metals/jewelry design major as a bachelor of science (BS-AH MJD) and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for admission into the bachelor of fine arts program (BFA-AH MJD).

Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.F.A. degree program a 3.0 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information. As a condition for graduation, each B.F.A. student will be required to mount an individual exhibition of his/her work.

The Design Department reserves the right to retain students’ work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

The Design Department may be in the process of curricular revision. Please refer to the college Web site or the department for updated information.

### Intellectual Foundations Requirements 33-39 cr

### Total Required Credit Hours in Metal/Jewelry Design 79 cr
reviews are conducted by faculty and generally take place during the continuation in the B.S. degree program. Commit and major course(s) before a commitment to the major. This degree offers students a broadly grounded intellectual foundation in the major field of study, as well as knowledge in other disciplines related to the major. The remaining credit hours are completed in required Intellectual Foundations Requirements.

A. Foundation Courses (37 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 101</td>
<td>Introduction to Design: 2D I</td>
</tr>
<tr>
<td>DES 103</td>
<td>Introduction to Design: 3D I</td>
</tr>
<tr>
<td>DES 104</td>
<td>Introduction to Design: 3D II</td>
</tr>
<tr>
<td>DES 220</td>
<td>Ceramics I</td>
</tr>
<tr>
<td>DES 242</td>
<td>Fibers I</td>
</tr>
<tr>
<td>DES 250</td>
<td>Wood Design I</td>
</tr>
<tr>
<td>DES 312</td>
<td>History of Craft</td>
</tr>
<tr>
<td>DES 414</td>
<td>Senior Seminar (4)</td>
</tr>
<tr>
<td>FAR 101</td>
<td>Drawing I</td>
</tr>
<tr>
<td>FAR 104</td>
<td>Themes and Issues in Contemporary Arts</td>
</tr>
<tr>
<td>FAR 250</td>
<td>Art History I</td>
</tr>
<tr>
<td>FAR 251</td>
<td>Art History II</td>
</tr>
</tbody>
</table>

B. Major Courses (30 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 230</td>
<td>Introduction to Jewelry Making</td>
</tr>
<tr>
<td>DES 330</td>
<td>Applied Jewelry Techniques</td>
</tr>
<tr>
<td>DES 331</td>
<td>Jewelry: Junior Studio</td>
</tr>
<tr>
<td>DES 336</td>
<td>Metalsmithing</td>
</tr>
<tr>
<td>DES 331</td>
<td>Jewelry: Junior Studio</td>
</tr>
<tr>
<td>or DES 337</td>
<td>or Metalsmithing: Junior Studio</td>
</tr>
<tr>
<td>DES 338</td>
<td>Computer 3D Modeling and Rendering</td>
</tr>
<tr>
<td>DES 431</td>
<td>Jewelry: Senior Studio (3, 3, 3)</td>
</tr>
</tbody>
</table>

C. Studio Electives Selected by Advisement (12 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 320</td>
<td>Ceramics II</td>
</tr>
<tr>
<td>DES 342</td>
<td>Fibers II</td>
</tr>
<tr>
<td>DES 350</td>
<td>Technical Processes in Wood</td>
</tr>
<tr>
<td>DES 321</td>
<td>Ceramics: Junior Studio</td>
</tr>
<tr>
<td>or DES 344</td>
<td>or Fibers: Junior Studio</td>
</tr>
<tr>
<td>or DES 351</td>
<td>or Jewelry: Senior Studio</td>
</tr>
<tr>
<td>FAR 240</td>
<td>Introduction to Sculpture</td>
</tr>
<tr>
<td>FAR 341</td>
<td>Intermediate Sculpture I</td>
</tr>
</tbody>
</table>

All College Electives 2-8 cr

Total Required Credit Hours 120-145 cr

METALS/JEWELRY (B.S.)
BS-AH MJD

Design Department
Bachelor of Science (HEGIS 1009)

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

The Bachelor of Arts in Music degree is a liberal arts program that provides students with the broad knowledge and skills to prepare for graduate study and careers in a variety of fields including performance, composition, music instruction, arts entrepreneurship and management, and sound design/recording arts. Students complete a 32-credit musical core requirement in aural skills, theory/composition, and history; a 10-credit performance requirement comprised of applied lessons and ensembles; 10 credits of music electives; and a capstone experience selected from recital, senior thesis, internship, or special project options. Multiple enrichment programs throughout the academic year--such as the Music Forum guest lecture series on career issues in the arts--enhance student engagement and experience across the discipline. For current information regarding policies and procedures for music program acceptance, continuance, and completion, visit http://music.buffalostate.edu/programs/ba

The B.S. degree in metals/jewelry design is a studio degree with a strong academic component. This degree offers students a broadly grounded educational experience as a basis for beginning careers as professional designers or artists. Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, and design history, along with courses in ceramics, fibers, and wood. Major courses in metal/jewelry design focus on developing the aesthetic, conceptual, and technical skills necessary to foster creativity as students work toward developing their individual identities as visual designers/artists. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student’s choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the metals/jewelry design major as a bachelor of science (BS-AH MJD) and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for continuation in the B.S. degree program. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.S. degree program a 2.5 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students’ work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections, and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Metal/Jewelry Design 45 cr

A. Foundation Courses (24 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 101</td>
<td>Introduction to Design: 2D I</td>
</tr>
<tr>
<td>DES 103</td>
<td>Introduction to Design: 3D I</td>
</tr>
<tr>
<td>DES 220</td>
<td>Ceramics I</td>
</tr>
<tr>
<td>DES 242</td>
<td>Fibers I</td>
</tr>
<tr>
<td>DES 250</td>
<td>Wood Design I</td>
</tr>
<tr>
<td>DES 312</td>
<td>History of Craft</td>
</tr>
<tr>
<td>DES 414</td>
<td>Senior Seminar (4)</td>
</tr>
<tr>
<td>FAR 101</td>
<td>Drawing I</td>
</tr>
<tr>
<td>FAR 104</td>
<td>Themes and Issues in Contemporary Arts</td>
</tr>
<tr>
<td>FAR 250</td>
<td>Art History I</td>
</tr>
<tr>
<td>FAR 251</td>
<td>Art History II</td>
</tr>
</tbody>
</table>

B. Major Concentrations (21 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 230</td>
<td>Introduction to Jewelry Making</td>
</tr>
<tr>
<td>DES 330</td>
<td>Applied Jewelry Techniques</td>
</tr>
<tr>
<td>DES 331</td>
<td>Jewelry: Junior Studio</td>
</tr>
<tr>
<td>DES 336</td>
<td>Metalsmithing</td>
</tr>
<tr>
<td>DES 331</td>
<td>Jewelry: Junior Studio</td>
</tr>
<tr>
<td>or DES 337</td>
<td>or Metalsmithing: Junior Studio</td>
</tr>
<tr>
<td>DES 338</td>
<td>Computer 3D Modeling and Rendering</td>
</tr>
<tr>
<td>DES 431</td>
<td>Jewelry: Senior Studio (3, 3, 3)</td>
</tr>
</tbody>
</table>

All College Electives 36-42 cr

Total Required Credit Hours 120 cr

MUSIC (B.A.)
BA-AH MUS
Music Department
Bachelor of Arts (HEGIS 1005)

National Association of Schools of Music (Accredited)
Rockwell Hall 203 (716) 878-6401

The Bachelor of Arts in Music degree is a liberal arts program that provides students with the broad knowledge and skills to prepare for graduate study and careers in a variety of fields including performance, composition, music instruction, arts entrepreneurship and management, and sound design/recording arts. Students complete a 32-credit musical core requirement in aural skills, theory/composition, and history; a 10-credit performance requirement comprised of applied lessons and ensembles; 10 credits of music electives; and a capstone experience selected from recital, senior thesis, internship, or special project options. Multiple enrichment programs throughout the academic year--such as the Music Forum guest lecture series on career issues in the arts--enhance student engagement and experience across the discipline. For current information regarding policies and procedures for music program acceptance, continuance, and completion, visit http://music.buffalostate.edu/programs/ba

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Musicianship 43 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 122</td>
<td>Introduction to Music Studies (2)</td>
</tr>
<tr>
<td>MUS 206</td>
<td>Foundations of American Popular Music</td>
</tr>
<tr>
<td>MUS 218</td>
<td>Aural Perception I (1)</td>
</tr>
<tr>
<td>MUS 219</td>
<td>Aural Perception II (1)</td>
</tr>
</tbody>
</table>
Performance

Total Required Credit Hours in Basic Musicianship and Intellectual

For current information regarding policies and procedures for music education majors, the class piano sequence is strongly recommended in the freshman and sophomore years of study.

Music Electives

Total Required Credit Hours in Musical Performance 10 cr

All College Electives (Not Music) 18-24 cr

Total Required Credit Hours 120 cr

Music Education (Pre-K–12, B.Mus.)

MUSB-AH MUE
Music Education in Music Department
Bachelor of Music (HEGIS 1005)

National Association of Schools of Music (Accredited)

Rockwell Hall 203 (716) 878-6401

The Music Education program leads to a New York State Initial Certificate for teaching general, vocal, and instrumental music in New York State schools at the pre-kindergarten through grade 12 levels. The program requires intensive study in music performance, music history, music theory, and methodology of teaching, with an emphasis on world music and urban culture.

For current information regarding policies and procedures for music program acceptance, continuance, and completion, visit www.buffalostate.edu/music/documents/handbook.pdf.

Intellectual Foundations Requirements 33-39 cr*

Total Required Credit Hours in Basic Musicianship and Performance 70 cr

Aural Perception I (1)
Aural Perception II (1)

Music Theory I (1)
Technology Applications for Music Education (2)

Music History: Antiquity–Baroque
Music History: Classic–Modern

Aural Perception III (1)
Aural Perception IV (1)

Composition, Improvisation, and Arranging (2)

Music Theory III
Music Theory IV

Ethnomusicology
Capstone Project (1)

Total Required Credit Hours in Professional Education 30 cr

BFA-AH PTG
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.

Painting (B.F.A.)
The application for a major is the most critical evaluation in the program. Eligibility will be determined by a two-member faculty committee on the basis of an interview with the student and a review of his or her portfolio. Each B.F.A. student will be required to mount an individual exhibition of his or her work. It will be planned and installed with the advice of the student’s faculty adviser, but no grade will be assigned. The Fine Arts Department reserves the right to retain students’ artwork for official purposes, such as exhibits, catalogs, or teaching aids.

Admission Requirements: Admission to the B.F.A. program is based on an interview and portfolio examination by the Fine Arts Department. The portfolio is to be presented in person or mailed along with a statement of intent as stipulated by the department and should contain examples of work that the candidate believes best display his or her abilities. Students are expected to assume the costs of materials they use in their courses. All studio courses may have an additional instructional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Fine Arts 78 cr

A. Required Courses (45 cr)
- DES 101 Two-Dimensional Design
- FAR 101 Drawing I
- FAR 102 Drawing II
- FAR 103 Modeling
- FAR 104 Themes and Issues in Contemporary Arts
- FAR 210 Introductory Painting
- FAR 220 Introductory Photography
- FAR 230 Introductory Printmaking
- FAR 240 Introductory Sculpture
- FAR 250 Art History I
- FAR 251 Art History II
- FAR 363 Twentieth-Century Art
- FAR 470 Senior Seminar in Fine Arts

Two art history electives.

B. Painting Courses (21 cr)
- FAR 311 Intermediate Painting I
- FAR 312 Intermediate Painting II
- FAR 313 Advanced Painting (three courses) (9)
- FAR 410 Senior Studio in Painting (6)

C. Art Electives (12 cr)

All College Electives 3-9 cr

Total Required Credit Hours 120 cr

PHOTOGRAPHY (B.F.A.)

BFA-AH PHO
Fine Arts Department
Bachelor of Fine Arts (HEGIS 1011)

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

The discipline emphasized in our B.F.A. program is art photography - specifically the creation of art to be displayed in museums, sold in galleries, or published in books. Graduates of our program may also find receptive employers in advertising, and editorial illustration. A major is required to mount an individual exhibition of his or her work in their senior year. It will be planned and installed with the advice of the student’s Senior Studio adviser, but no grade will be assigned. Students are expected to assume the costs of certain materials and cameras (film and digital) needed to make photographs. Cameras and other photography equipment are not provided to do course work by the college. However, we do provide a well-equipped computer/digital-printing lab for color, a black-and-white film developing lab, and a print-enlarging lab to make traditional monochromatic silver prints. All photography courses have a materials fee. This fee covers chemistry, ink jet inks, certain ink jet papers, and some other materials. The fee does not cover film, cameras, flash equipment, and other equipment and supplies.
needed by all majors. Students enrolled in a studio course are expected to
work a minimum of two additional hours each week outside of class for
each credit granted for that class.
The study of photography in the Fine Arts emphasizes creativity, craft,
and making memorable pictures. Our courses teach film and digital
camera craft, traditional film developing and print enlarging, the use
of electronic flash, the use of computers and ink jet printers, color
management, and Photoshop as used by photographers. some of our
students go on to do graduate degrees and to teach. Our graduates include
self-employed artists, freelance photographers, and teachers. The art
world, advertising, photojournalism, education, and industry are some
fields in which our graduates have found employment.
Admission Requirements: High school students applying for admission to
the B.F.A. photography major need only state his/her intent to major in
photography to be accepted to the major, assuming required G.P.A. and
other college admissions standards are met. A portfolio is not required.
A transfer student who has studied photography elsewhere seeking
advanced placement may be accepted directly into the major, but must
show a portfolio of photographs to be evaluated at the Area Coordinator's
discretion, for appropriate placement here. The portfolio must contain 10,
silver black-and-white, 8"x10" prints enlarged from film, and 10,
8.5"x11" color ink jet prints. These prints should represent the applicant's
strongest pictures.
The Fine Arts Department reserves the right to retain students' artwork for
use in exhibits, catalogs, or as teaching aids.

### Intellectual Foundations Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Foundations Requirements</td>
<td>33-39 cr</td>
</tr>
</tbody>
</table>

### Total Required Credit Hours in Fine Arts

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours in Fine Arts</td>
<td>78 cr</td>
</tr>
<tr>
<td>A. Required Courses (45 cr)</td>
<td></td>
</tr>
<tr>
<td>DES 101 Two-Dimensional Design</td>
<td></td>
</tr>
<tr>
<td>FAR 101 Drawing I</td>
<td></td>
</tr>
<tr>
<td>FAR 102 Drawing II</td>
<td></td>
</tr>
<tr>
<td>FAR 103 Modeling</td>
<td></td>
</tr>
<tr>
<td>FAR 104 Themes and Issues in Contemporary Arts</td>
<td></td>
</tr>
<tr>
<td>FAR 210 Introductory Painting</td>
<td></td>
</tr>
<tr>
<td>FAR 220 Introductory Photography</td>
<td></td>
</tr>
<tr>
<td>FAR 230 Introductory Printmaking</td>
<td></td>
</tr>
<tr>
<td>FAR 240 Introductory Sculpture</td>
<td></td>
</tr>
<tr>
<td>FAR 250 Art History I</td>
<td></td>
</tr>
<tr>
<td>FAR 251 Art History II</td>
<td></td>
</tr>
<tr>
<td>FAR 363 Twentieth-Century Art</td>
<td></td>
</tr>
<tr>
<td>FAR 470 Senior Seminar in Fine Arts</td>
<td></td>
</tr>
<tr>
<td>Two art history electives.</td>
<td></td>
</tr>
<tr>
<td>B. Photography Courses (21 cr)</td>
<td></td>
</tr>
<tr>
<td>FAR 321 Intermediate Photography I</td>
<td></td>
</tr>
<tr>
<td>FAR 322 Intermediate Photography II</td>
<td></td>
</tr>
<tr>
<td>FAR 323 Advanced Photography (three courses) (9)</td>
<td></td>
</tr>
<tr>
<td>FAR 420 Senior Studio in Photography (6)</td>
<td></td>
</tr>
<tr>
<td>C. Art Electives (12 cr)</td>
<td></td>
</tr>
<tr>
<td>All College Electives</td>
<td>3-9 cr</td>
</tr>
<tr>
<td>Total Required Credit Hours</td>
<td>120-145 cr</td>
</tr>
</tbody>
</table>

### Total Required Credit Hours Outside the Major

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours Outside the Major</td>
<td>120 cr</td>
</tr>
<tr>
<td>A. Required Core Courses (18 cr)</td>
<td></td>
</tr>
<tr>
<td>MAT 161 Calculus I</td>
<td></td>
</tr>
<tr>
<td>MAT 162 Calculus II</td>
<td></td>
</tr>
<tr>
<td>MAT 163 Using Technology to Explore Calculus I (1)</td>
<td></td>
</tr>
<tr>
<td>MAT 164 Using Technology to Explore Calculus II (1)</td>
<td></td>
</tr>
<tr>
<td>MAT 263 Calculus III</td>
<td></td>
</tr>
<tr>
<td>MAT 264 Using Technology to Explore Calculus III (1)</td>
<td></td>
</tr>
<tr>
<td>All College Electives</td>
<td>36-42 cr</td>
</tr>
</tbody>
</table>

### Total Required Credit Hours in Physics

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours in Physics</td>
<td>33 cr</td>
</tr>
<tr>
<td>A. Required Core Courses (18 cr)</td>
<td></td>
</tr>
<tr>
<td>PHY 111 University Physics I (or equivalent) (5)</td>
<td></td>
</tr>
<tr>
<td>PHY 112 University Physics II (or equivalent) (5)</td>
<td></td>
</tr>
<tr>
<td>PHY 213 University Physics III</td>
<td></td>
</tr>
<tr>
<td>PHY 305 Modern Atomic Physics I</td>
<td></td>
</tr>
<tr>
<td>PHY 320 Introduction to Theoretical Physics (4)</td>
<td></td>
</tr>
<tr>
<td>B. Electives in Physics (13 cr)</td>
<td></td>
</tr>
<tr>
<td>PHY 306 Modern Physics II</td>
<td></td>
</tr>
<tr>
<td>PHY 310 Computational Physics Laboratory (2)</td>
<td></td>
</tr>
<tr>
<td>PHY 315 Heat and Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>PHY 323 Statics</td>
<td></td>
</tr>
<tr>
<td>PHY 324 Electric Circuits</td>
<td></td>
</tr>
<tr>
<td>PHY 410 Advanced Physics Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHY 425 Classical Mechanics (4)</td>
<td></td>
</tr>
<tr>
<td>PHY 435 Introduction to Quantum Mechanics</td>
<td></td>
</tr>
<tr>
<td>PHY 440 Electricity and Magnetism I</td>
<td></td>
</tr>
<tr>
<td>PHY 441 Electricity and Magnetism II</td>
<td></td>
</tr>
</tbody>
</table>

### Total Required Credit Hours in Physics (B.S.)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours in Physics (B.S.)</td>
<td>120 cr</td>
</tr>
<tr>
<td>BS-NS PHY</td>
<td></td>
</tr>
</tbody>
</table>
| BS-NS PHY
| Physics Department
| Bachelor of Science (HEGIS 1902)                                           |         |
| Science Building 262 (716) 878-6726                                        |         |
| The physics B.S. program gives a broad backgound 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 Program for 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.
| Admission Requirements: Mathematics preparation through Algebra II/
| Trigonometry (or precalculus) is required.

### Intellectual Foundations Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Foundations Requirements</td>
<td>33-39 cr</td>
</tr>
</tbody>
</table>

### Total Required Credit Hours in Physics (B.A.)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours in Physics (B.A.)</td>
<td>44 cr</td>
</tr>
<tr>
<td>A. Required Core Courses (22 cr)</td>
<td></td>
</tr>
<tr>
<td>PHY 111 University Physics I (5)</td>
<td></td>
</tr>
<tr>
<td>PHY 112 University Physics II (5)</td>
<td></td>
</tr>
</tbody>
</table>
### Total Required Credit Hours in Physics Education (7–12, B.S.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 213</td>
<td>University Physics III</td>
</tr>
<tr>
<td>PHY 305</td>
<td>Modern Physics I</td>
</tr>
<tr>
<td>PHY 310</td>
<td>Computational Physics Laboratory (2)</td>
</tr>
<tr>
<td>PHY 320</td>
<td>Introduction to Theoretical Physics (4)</td>
</tr>
</tbody>
</table>

**B. Additional Required Courses for the "Three-Two" Option (22 cr)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 306</td>
<td>Modern Physics II</td>
</tr>
<tr>
<td>PHY 324</td>
<td>Statics</td>
</tr>
<tr>
<td>PHY 324</td>
<td>Electric Circuits</td>
</tr>
<tr>
<td>PHY 340</td>
<td>Electricity and Magnetism I</td>
</tr>
</tbody>
</table>

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)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 306</td>
<td>Modern Physics II</td>
</tr>
<tr>
<td>PHY 324</td>
<td>Electric Circuits</td>
</tr>
<tr>
<td>PHY 410</td>
<td>Advanced Physics Laboratory</td>
</tr>
<tr>
<td>PHY 425</td>
<td>Classical Mechanics (4)</td>
</tr>
<tr>
<td>PHY 435</td>
<td>Introduction to Quantum Mechanics</td>
</tr>
<tr>
<td>PHY 440</td>
<td>Electricity and Magnetism I</td>
</tr>
<tr>
<td>PHY 441</td>
<td>Electricity and Magnetism II</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours Outside the Major**  15 cr

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 161</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MAT 162</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MAT 163</td>
<td>Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164</td>
<td>Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MAT 264</td>
<td>Using Technology to Explore Calculus III (1)</td>
</tr>
<tr>
<td>MAT 315</td>
<td>Differential Equations</td>
</tr>
</tbody>
</table>

**All College Electives**  22-28 cr

**Total Required Credit Hours**  120 cr

---

### Physics Education (7–12, 5–6 Extension, B.S.)

`BS-NS PGX
Physics Department
Bachelor of Science (HEGIS 1902.01)`

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 410</td>
<td>Advanced Physics Laboratory</td>
</tr>
<tr>
<td>PHY 440</td>
<td>Electricity and Magnetism I</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 303</td>
<td>Educational Psychology: Middle and Secondary Education</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>EDU 417</td>
<td>Adolescent Literacy</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Foundations of Teaching Adolescents with Disabilities</td>
</tr>
<tr>
<td>SED 200</td>
<td>Field Experience in Secondary Science Education</td>
</tr>
<tr>
<td>SED 401</td>
<td>Techniques for Teaching Laboratory Activities in the Secondary Science Classroom</td>
</tr>
<tr>
<td>SED 405</td>
<td>Methods and Materials in Teaching Secondary School Science</td>
</tr>
<tr>
<td>SED 409</td>
<td>Seminar in Secondary Science Education</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Other Fields for Certification**  41-47 cr

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

**B. Cognate Sciences (26 cr)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 111</td>
<td>Fundamentals of Chemistry I (4)</td>
</tr>
<tr>
<td>CHE 112</td>
<td>Fundamentals of Chemistry II (4)</td>
</tr>
<tr>
<td>GES 101</td>
<td>Introductory Geology</td>
</tr>
<tr>
<td>GES 102</td>
<td>Historical Geology</td>
</tr>
<tr>
<td>GES 103</td>
<td>Introductory Geology Laboratory (1)</td>
</tr>
</tbody>
</table>

Select one course from the following:

- GES 111 General Oceanography
- GES 131 Introduction to Astronomy
- GES 232 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)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 161</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MAT 162</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MAT 163</td>
<td>Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164</td>
<td>Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MAT 264</td>
<td>Using Technology to Explore Calculus III (1)</td>
</tr>
<tr>
<td>MAT 315</td>
<td>Differential Equations</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours**  144-156 cr

---

**National Council for Accreditation of Teacher Education (NCATE) Accredited Science Building 262 (716) 878-6726**

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

**Intellectual Foundations Requirements**  33-39 cr*

**Total Required Credit Hours in Physics**  34 cr

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 111</td>
<td>University Physics I (5)</td>
</tr>
<tr>
<td>PHY 112</td>
<td>University Physics II (5)</td>
</tr>
<tr>
<td>PHY 213</td>
<td>University Physics III</td>
</tr>
<tr>
<td>PHY 305</td>
<td>Modern Physics I</td>
</tr>
<tr>
<td>PHY 306</td>
<td>Modern Physics II</td>
</tr>
<tr>
<td>PHY 310</td>
<td>Computational Physics Laboratory (2)</td>
</tr>
<tr>
<td>PHY 320</td>
<td>Introduction to Theoretical Physics (4)</td>
</tr>
<tr>
<td>PHY 324</td>
<td>Electric Circuits</td>
</tr>
</tbody>
</table>

---

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 minimum GPA of 2.75 in physics courses is required for admission to SED 405, SED 407, and SED 408.

**Intellectual Foundations Requirements**  33-39 cr*

**Total Required Credit Hours in Physics**  34 cr

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 111</td>
<td>University Physics I (5)</td>
</tr>
<tr>
<td>PHY 112</td>
<td>University Physics II (5)</td>
</tr>
<tr>
<td>PHY 213</td>
<td>University Physics III</td>
</tr>
<tr>
<td>PHY 305</td>
<td>Modern Physics I</td>
</tr>
<tr>
<td>PHY 306</td>
<td>Modern Physics II</td>
</tr>
<tr>
<td>PHY 310</td>
<td>Computational Physics Laboratory (2)</td>
</tr>
<tr>
<td>PHY 320</td>
<td>Introduction to Theoretical Physics (4)</td>
</tr>
<tr>
<td>PHY 324</td>
<td>Electric Circuits</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours in Physics</td>
<td>34 cr</td>
</tr>
<tr>
<td>MAT 161</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MAT 162</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MAT 163</td>
<td>Using Technology to Explore Calculus I (1)</td>
</tr>
<tr>
<td>MAT 164</td>
<td>Using Technology to Explore Calculus II (1)</td>
</tr>
<tr>
<td>MAT 263</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MAT 264</td>
<td>Using Technology to Explore Calculus III (1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Professional Education</th>
<th>30 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 303</td>
<td>Educational Psychology: Middle and Secondary Education</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools</td>
</tr>
<tr>
<td>EDU 417</td>
<td>Adolescent Literacy</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Foundations of Teaching Adolescents with Disabilities</td>
</tr>
<tr>
<td>SED 200</td>
<td>Field Experience in Secondary Science Education</td>
</tr>
<tr>
<td>SED 310</td>
<td>Teaching Science in the Middle School</td>
</tr>
<tr>
<td>SED 401</td>
<td>Techniques for Teaching Laboratory Activities in the Secondary Science Classroom</td>
</tr>
<tr>
<td>SED 405</td>
<td>Methods and Materials in Teaching Secondary School Science</td>
</tr>
<tr>
<td>SED 409</td>
<td>Seminar in Secondary Science Education</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Student Teaching</th>
<th>12 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>SED 407</td>
<td>Practice Teaching Science in the Middle School (6)</td>
</tr>
<tr>
<td>SED 408</td>
<td>Practice Teaching Science in the High School (6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Other Fields for Certification</th>
<th>38-44 cr</th>
</tr>
</thead>
</table>

### MAT 315 | Differential Equations |

<table>
<thead>
<tr>
<th>Total Required Credit Hours</th>
<th>147-159 cr</th>
</tr>
</thead>
</table>

*Up to 6 general education (IF 14) courses (math/quantitative reasoning, American Civilization, Western Civilization, Non-western Civilization, Global and Diversity) may overlap with required courses in the major which could significantly reduce the total number to 129-141 credit hours required. Advisement is strongly encouraged.

## POLITICAL SCIENCE (B.A.)

### General Political Science Concentration

BA-NS PSC  Political Science Department  Bachelor of Arts (HEGIS 2207)

Classroom Building B218 (716) 878-6116

Political science is the study of government and politics. The major is divided into four areas: American politics, international politics, comparative politics, and political theory. A variety of courses is offered in each of these areas. Minors are offered in public administration, political science, legal studies and international relations.

Students gain an understanding of government and politics through a combination of theoretical analysis and practical experience; interning in national, state, or local government; or participating in the Washington Program. Students are prepared for an array of career options in the public and private sectors. The department offers special advisement for graduate study, pre-law, and public administration.

The Bachelor of Arts program enables students to concentrate in international relations or public administration and policy, or to develop a more individualized program under the general political science concentration.

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
</table>

### Total Required Credit Hours in Political Science 37 cr

<table>
<thead>
<tr>
<th>A. Required Courses (16 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSC 101</td>
</tr>
<tr>
<td>PSC 102</td>
</tr>
<tr>
<td>PSC 203</td>
</tr>
<tr>
<td>PSC 204</td>
</tr>
<tr>
<td>PSC 399</td>
</tr>
<tr>
<td>PSC 470</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>PSC 488</td>
</tr>
</tbody>
</table>

Students will choose one of the following concentrations:

### General Political Science Concentration

<table>
<thead>
<tr>
<th>B. Political Science Distribution Requirements (12 cr)</th>
</tr>
</thead>
</table>

#### 1. American Government and Politics (3 cr)

**Must take one of the following courses:**

- PSC 210 | The American Presidency |
- PSC 215 | Urban Government |
- PSC 218 | African American Political Culture |
- PSC 225 | Women in American Politics |
- PSC 310 | American Political Parties |
- PSC 311 | Interest Groups |
- PSC 312 | Legislative Process |
- PSC 315 | State and Local Government and Politics |
- PSC 316 | Urban Ethnic Politics |
- PSC 317 | U.S. Constitutional Law |
- PSC 319 | Gay, Lesbian, Bisexual, Transgender, Questioning Politics |
- PSC 320 | U.S. Civil Liberties |
- PSC 326 | Politics and Media |
- PSC 327 | Practical Politics |
2. International Relations (3 cr)
   Must take one of the following courses:
   - PSC 230 International Relations
   - PSC 305 Environmental Policy
   - PSC 308 International Organizations and International Law
   - PSC 309 International Political Economy
   - PSC 330 American Foreign Policy
   - PSC 333 African International Relations
   - PSC 335 International Relations of the Middle East
   - PSC 336 Latin America in World Politics
   - PSC 337 The Politics of Globalization

3. Comparative Government (3 cr)
   Must take one of the following courses:
   - PSC 240 European Political Systems
   - PSC 340 Politics of Developing Countries
   - PSC 341 Government, Politics, and Policies of the European Union
   - PSC 342 Russian Politics
   - PSC 345/HIS 313 Politics and History of the Middle East
   - PSC 368 Comparative Public Administration
   - PSC 370 Canadian Public Administration

4. Political Theory and Philosophy (3 cr)
   Must take one of the following courses:
   - PSC 250 Introduction to Law
   - PSC 318 Democracy and Peace: Principles and Practices in the Urban Experience
   - PSC 351 History of Political Thought I
   - PSC 352 History of Political Thought II
   - PSC 355 American Political Thought
   - PSC 375 Race/Sex/Politics of Myth and Story
   - PSC 450 Contemporary Political Thought

C. General Electives in Political Science (9 cr)
   NOTE: Courses NOT used to fulfill Section B may also be used as Political Science electives.
   - PSC 103 Great Political Issues
   - PSC 306 Politics of Energy
   - PSC 389 Topics in Political Science
   - PSC 390 Italian American Experience
   - PSC 495 Special Project
   - PSC 497 Washington Semester
   - PSC 499 Independent Study

INTERNATIONAL RELATIONS CONCENTRATION

B. Political Science Distribution Requirements (9 cr)
1. American Government and Politics (3 cr)
   - PSC 360 Public Administration

2. International Relations (3 cr)
   Must take one of the following courses:
   - PSC 305 Environmental Policy
   - PSC 308 International Organizations and International Law
   - PSC 309 International Political Economy
   - PSC 330 American Foreign Policy
   - PSC 333 African International Relations
   - PSC 335 International Relations of the Middle East
   - PSC 336 Latin America in World Politics
   - PSC 337 The Politics of Globalization

3. Comparative Government (3 cr)
   Must take one of the following courses:
   - PSC 368 Comparative Public Administration
   - PSC 370 Canadian Public Administration

C. Electives - International Relations (12 cr)
   Choose two (2) courses from International Relations and two (2) from Comparative Government:

International Relations (6 cr)
   - PSC 305 Environmental Policy
   - PSC 308 International Organizations and International Law
   - PSC 309 International Political Economy
   - PSC 330 American Foreign Policy
   - PSC 333 African International Relations
   - PSC 335 International Relations of the Middle East
   - PSC 336 Latin America in World Politics
   - PSC 337 The Politics of Globalization

Comparative Government (6 cr)
   - PSC 340 Politics of Developing Countries
   - PSC 341 Government, Politics, and Policies of the European Union
   - PSC 342 Russian Politics
   - PSC 345/HIS 313 Politics and History of the Middle East
   - PSC 368 Comparative Public Administration
   - PSC 370 Canadian Public Administration

PUBLIC ADMINISTRATION AND POLICY CONCENTRATION

B. Political Science Distribution Requirements (12 cr)
1. American Government and Politics (3 cr)
   - PSC 360 Public Administration

2. International Relations (3 cr)
   Must take one of the following courses:
   - PSC 305 Environmental Policy
   - PSC 308 International Organizations and International Law
   - PSC 309 International Political Economy
   - PSC 330 American Foreign Policy
   - PSC 333 African International Relations
   - PSC 335 International Relations of the Middle East
   - PSC 336 Latin America in World Politics
   - PSC 337 The Politics of Globalization

3. Comparative Government (3 cr)
   Must take one of the following courses:
   - PSC 368 Comparative Public Administration
   - PSC 370 Canadian Public Administration

4. Political Theory and Philosophy (3 cr)
   Must take one of the following courses:
   - PSC 250 Introduction to Law

C. Electives - Public Administration and Policy (9 cr)
   - PSC 215 Urban Government
   - PSC 315 State & Local Government and Politics
   - PSC 364 American Public Policy
   - PSC 415 Urban Public Policy

NOTE: IR/Comp/Theory courses NOT used to fulfill Section B may also be used as electives.

ADDITIONAL REQUIREMENT:
Out of 37 political science credits, 19 credits must be in the upper division.

All College Electives 44-50 cr
Total Required Credit Hours 120 cr

PRINTMAKING (B.F.A.)
BFA-AH PRT
Psychology (B.A.)

BA-NS PSY
Psychology Department
Bachelor of Arts (HEGIS 2001)

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 research, and requires that students conduct a comprehensive original research project under the supervision of a faculty mentor. To be considered, students must have at least 24 credit hours in psychology from Buffalo State with a minimum GPA of 3.5, and a minimum GPA of 3.25 in all courses taken at Buffalo State. In addition to the required courses in the B.A. degree program, honors students must take PSY 496 and PSY 498. A 39-credit-hour sequence of psychology courses is required for a B.A. honors degree. This requirement is identical to that of the B.A. degree except that PSY 496 is used as a psychology elective and PSY 498 is an additional required course. Students should see their adviser no later than the junior year for more information about the honors option.

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Psychology 36 cr

A. Required Courses (15 cr)

- PSY 101 Introduction to Psychology
- PSY 306 Statistics in Psychological Research
- PSY 450 Research Methods in Psychology I: Introduction to Research Methods
- PSY 471 History and Systems of Psychology
- PSY 472 Seminar on Psychology

B. Electives Selected by Advisement: 300-level (12 cr)

1. Select one course from each of the following three concentrations (9 cr):

   - Bio/Cognitive Psychology Concentration
   - PSY 304 Learning: Theory and Research
   - PSY 308 Sensation and Perception
   - PSY 321 Comparative Animal Behavior
   - PSY 330 The Psychological Power of Language
   - PSY 340 Cognitive Psychology

   - Social/Developmental Psychology Concentration
   - PSY 325 Social Behavior
   - PSY 327 Adult Development and Aging I
   - PSY 335 Lifespan Developmental Psychology
   - PSY 356 Child Development
   - PSY 357 Adolescent and Young Adult Development
   - PSY 370 Environmental Psychology I

   - Clinical/Applied Psychology Concentration
   - PSY 311 Personality: Theory and Research
   - PSY 365 Psychology in the Workplace
   - PSY 367 Organizational Behavior
   - PSY 375 Forensic Psychology
   - PSY 376 Health Psychology

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

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

1. Select one course from two of the following three concentrations (6 cr):

   - Bio/Cognitive Psychology Concentration
   - PSY 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 460 Advanced Legal Psychology
2. Any additional 3 credit hours of psychology at the 400-level; can include PSY 488, PSY 495, or PSY 499.

<table>
<thead>
<tr>
<th>All College Electives</th>
<th>45-51 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours</td>
<td>120 cr</td>
</tr>
</tbody>
</table>

### PSYCHOLOGY (B.S.)

**BS-NS PSY**  
Psychology Department  
Bachelor of Science (HEGIS 2001)  
Classroom Building C312 (716) 878-6215

A specialized B.S. degree in psychology is offered in the following concentrations: biological psychology, clinical psychology, environmental psychology, industrial/organizational psychology, psychology of aging, and psychology of infancy. The B.S. program is designed for a very limited number of students who seek an intensive preparation in one of the above areas. Emphasis is placed upon intensive practicum work and independent study. Students have the opportunity to work closely with a faculty mentor.

**Admission Requirements:**

1. The student must be enrolled in the B.A. program and be in good academic standing at the college before he or she can apply to the B.S. program.

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.

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.

A psychology department faculty member must formally sponsor the student.

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.

Final acceptance into the B.S. program requires approval of the candidate by the psychology department.

**B.S. Honors in Psychology:** Departmental honors are for students who are performing exceptionally well in their courses. The honors designation is an adjunct to the B.S. degree with an added emphasis on independent work, and requires that students conduct a comprehensive original research project under the supervision of a faculty mentor. To be considered, students must have at least 24 credit hours in psychology from Buffalo State with a minimum GPA of 3.5, and a minimum GPA of 3.25 in all courses taken at Buffalo State. In addition to the required courses in the B.S. degree program, honors students must take PSY 496 and PSY 498. A 42-credit-hour sequence of psychology courses is required for a B.S. honors degree. PSY 496 and PSY 498 may be used, where applicable, as elective courses in these programs. Students should see their adviser no later than the junior year for more information about the honors option.

**Intellectual Foundations Requirements**  
33-39 cr

**Total Required Credit Hours in Psychology**  
39–42 cr

<table>
<thead>
<tr>
<th>A. Required Courses (18 cr)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>PSY 306</td>
<td>Statistics in Psychological Research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Concentration Courses (21–24 cr)</th>
</tr>
</thead>
</table>

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)**

(Take 5 of the following courses by advisement)

| 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 (9 cr).

<table>
<thead>
<tr>
<th>Clinical Psychology Concentration (24 cr)</th>
</tr>
</thead>
</table>

| PSY 311 | Personality: Theory and Research |
| PSY 411 | Abnormal Psychology |
| PSY 480 | Psychotherapy: Theory, Research, and Procedures |
| PSY 481 | Psychological Tests and Measurements |

Elective courses selected by advisement (12 cr).

<table>
<thead>
<tr>
<th>Environmental Psychology Concentration (24 cr)</th>
</tr>
</thead>
</table>

| PSY 370 | Environmental Psychology I |
| PSY 470 | Environmental Psychology II |

Elective courses selected by advisement (18 cr).

<table>
<thead>
<tr>
<th>Industrial/Organizational Psychology Concentration (24 cr)</th>
</tr>
</thead>
</table>

| PSY 365 | Psychology in the Workplace |
| PSY 367 | Organizational Behavior |
| PSY 466 | Personnel Psychology |

Elective courses selected by advisement (15 cr).

<table>
<thead>
<tr>
<th>Psychology of Aging Concentration (21 cr)</th>
</tr>
</thead>
</table>

| PSY 327 | Adult Development and Aging I |
| PSY 355 | Lifespan Developmental Psychology |
| PSY 427 | Adult Development and Aging II |

Elective courses selected by advisement (12 cr).

<table>
<thead>
<tr>
<th>Psychology of Infancy Concentration (21 cr)</th>
</tr>
</thead>
</table>

| PSY 355 OR | Lifespan Developmental Psychology OR Child |
| PSY 356 | Development |
| PSY 415 | The Competent Infant |
| PSY 417 | The Atypical Infant |

Elective courses selected by advisement (12 cr).

<table>
<thead>
<tr>
<th>All College Electives</th>
<th>39–48 cr</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Biological Psychology (18–36 cr)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Clinical Psychology (18–36 cr)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Environmental Psychology (24–36 cr)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Industrial/Organizational Psychology (18–36 cr)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Psychology of Aging (21–39 cr)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Psychology of Infancy (21–39 cr)</th>
</tr>
</thead>
</table>
This major allows students flexibility to tailor a program based on strategic communication through the disciplines of public relations, advertising, and related fields. It meets the needs of students preparing for a career in which research, strategic planning, implementation of creative tactics, and evaluation are central, whether to advance an organization, promote a product, or advocate a cause. Compare this major with communication studies, journalism, and media production.

This is the only program in public relations and advertising at any SUNY school that is affiliated with the Accrediting Council on Education in Journalism and Mass Communications. Only four other undergraduate programs in New York State are accredited.

Career Opportunities: Students in public communication prepare for careers in public relations and advertising, as well as fundraising, organizational communication, research, lobbying, marketing communication, and other fields that require a liberal arts education enhanced with communication expertise.

The profile of a successful public communication graduate is a person with strong writing and speaking proficiency, keen ethical insight, competence in research and planning, and skill in working effectively both independently and in teams.

Admission Requirements:Incoming freshmen and transfer students can declare the major. A 2.6 GPA in the major is needed to register for required upper-division courses (300- and 400-level). See www.buffalostate.edu/communication for application forms and additional information, including a list of equivalent core courses at community colleges. Transfer students from two-year schools may apply only core courses toward this major for a maximum of 12 credits.

Academic Standards: Only grades of C or higher may be applied toward requirements for any communication degree; courses with lower grades must be repeated. Consistent with standards of the Accrediting Council for Education in Journalism and Mass Communication, the number of communication courses that students may take is capped, encouraging a broad-based liberal arts education. The department encourages students to take minors or second majors and requires evidence of an academic concentration or area of expertise outside the Communication Department.

Intellectual Foundations Requirements 33-39 cr

Total Requirements 42 cr

A. Communication Core (12 cr)
- COM 100 Media Literacy
- COM 210 Converged Media Writing
- COM 215 Introduction to Visual Communication
- SPC 205 Introduction to Oral Communication

Note: Students must have a minimum GPA of 2.6 in the major to register for certain upper-division courses (300- and 400-level).

B. Major Requirements (18 cr)
- COM 301 Principles of Public Relations and Advertising
- SPC 307 Group Communication
- COM 308 Public Relations Writing
- COM 322 Communication Graphics
- or COM 336 or Web and Social Media Production
- COM 401 Applied Communication Research
- COM 418 Campaigns in Public Relations and Advertising

C. Senior Seminar (3 cr)

D. Communication Electives (9 cr)
- COM 488 or COM 495 or COM 499
- or 300/400-level elective by advisement

All College Electives 39-45 cr

Total Required Credit Hours 120 cr
The social studies B.S. degree program in secondary education prepares students to meet the educational requirements leading to New York State Initial Certification in Adolescence Education required to teach social studies in grades 7–12. The program supplies a knowledge base that provides the background knowledge necessary for teachers to implement the NYS Learning Standards for students in grades 7–12. Admission Requirements: Applicants must have a minimum cumulative GPA of 2.75, a minimum GPA of 2.75 in all history and social science courses.

Prerequisites for Student Teaching: See prerequisites for SSE 409 and SSE 410.

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

The social studies content core constitutes a 42-credit major in social studies that consists of study in economics, government, and a minimum of 30 clock hours of field experience related to coursework prior to student teaching. These field experiences consist of observations, individual tutoring, and the teaching of small groups of students under the supervision of certified teachers. These experiences are an integral component of the pedagogical core courses specified in the previous section, with learning outcomes specified and their achievement evaluated by course instructors. Students complete a minimum of 30–35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. Another course, SSE/HIS 488, is available and will be used by transfer students and others who may have a deficiency in field experience. The department has established relationships with several “high-need” urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

To student teach, students are required to have a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in the social studies major, as well as an established relationship with a school in the Buffalo metropolitan area. Students who have been referred by the departmental honors program to student teach must enroll in the program and complete the requirements as described above. Students who have deficiencies in their social studies coursework must enroll in two practicum courses following completion of all other coursework and satisfaction of English language requirements.

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 clock hours of field experience related to coursework prior to student teaching. These field experiences consist of observations, individual tutoring, and the teaching of small groups of students under the supervision of certified teachers. These experiences are an integral component of the pedagogical core courses specified in the previous section, with learning outcomes specified and their achievement evaluated by course instructors. Students complete a minimum of 30–35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. Another course, SSE/HIS 488, is available and will be used by transfer students and others who may have a deficiency in field experience. The department has established relationships with several “high-need” urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

Total Required Credit Hours in Social Sciences  42 cr

A. History of the Western Hemisphere (12 cr)
   - Basic U.S. History
   - History of American Life I
   - History of American Life II
   - 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)
   - World Civilizations
   - Foundations of Western Civilization
   - Europe Since 1500
   - Twentieth-Century Europe
   - One world history elective (any Asian, African, or Middle-Eastern world history course).

C. Geography (6 cr)
   - World Regional Geography
   - Human Geography
   - Geography of New York State
   - Historical Geography of the United States
   - Geography of Asia
   - Geography of the United States and Canada
   - Geography of Europe

D. Political Science (3 cr)
   - Introduction to American Government
   - The Development of American Constitutional Law
   - U.S. Civil Liberties

E. Economics (3 cr)
   - The Economic System
   - Principles of Macroeconomics
   - Principles of Microeconomics

F. Upper-Division Social Science Elective (3 cr)

G. Seminar (3 cr)
   - Research and Writing Seminar

Total Required Credit Hours in Professional Education  30 cr

- Educational Psychology: Middle and Secondary Education
- Teaching Literacy in Middle and Secondary Schools
- Teaching and Evaluating Writing
- Nature and Needs of Individuals with Special Needs
- Foundations of Teaching Adolescents with Disabilities
- Adolescent and Young-Adult Development
- Introduction to Secondary Teaching
- Methods and Materials in Teaching Middle School Social Studies
- Methods and Materials in Teaching High School Social Studies
- Computer Technology in the Social Studies Classroom
- Historical and Philosophical Foundations of Social Education
Total Required Credit Hours in Student Teaching | 12 cr
---|---
SSE 409 | Student Teaching of Social Studies in the Middle School (6)
SSE 410 | Student Teaching of Social Studies in Senior High School (6)
One Year (or Equivalent) of a Foreign Language | 0-6 cr
Total Required Credit Hours | 123 cr

**SOCIAL STUDIES EDUCATION (7–12, 5–6 EXTENSION, B.S.)**

BS-NS SSX  
History and Social Studies Education Department  
Bachelor of Science (HEGIS 2201.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited  
Classroom Building C205  
(716) 878-5412

The social studies secondary education program prepares students to meet the educational requirements leading to New York State Initial Certification in Adolescence Education required to teach social studies in grades 7–12, with an extension for middle childhood that qualifies the holder to teach social studies in grades 5–9. The program supplies a knowledge base that provides the background knowledge necessary for teachers to implement the NYS Learning Standards for students in grades 5–12.

**Admission Requirements:** Applicants must have a minimum cumulative GPA of 2.75, a minimum GPA of 2.75 in all history and social science courses.

**Prerequisites for Student Teaching:** See prerequisites for SSE 409 and SSE 410.

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

The social studies content core constitutes a 42-credit major in social studies that consists of study in economics, government, and a minimum of 33 credit hours of study in the history and geography of the United States and the world (see "Total Required Credit Hours in Social Studies," below).

All program majors are required to complete a minimum of 150 clock hours of field experience related to coursework prior to student teaching. These field experiences consist of observations, individual tutoring, and the teaching of small groups of students under the supervision of certified teachers. These experiences are an integral component of the pedagogical core courses specified in the previous section, with learning outcomes specified and their achievement evaluated by course instructors.

Students complete a minimum of 30-35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. Another course, SSE/HIS 488, will be used by students to complete the additional 50 clock hours in field experience required for the grades 5–6 extension. The department has established relationships with several "high-need" urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

To student teach, students are required to have a minimum cumulative GPA of 2.75 and a minimum GPA of 2.75 in the social studies major, as well as obtain a minimum grade of C in SSE 303 and SSE 309. All majors meeting these requirements must enroll in two practicum courses following successful completion of all other coursework, and satisfaction of English and math competency requirements. Placements for these practica include urban and suburban settings. The urban placements may be in high-need districts that provide opportunities for student teachers to work with students from diverse backgrounds, including socially and economically disadvantaged students, students with disabilities, and students who are English-language learners. Experiences include individual and group instruction, daily and long-view planning, unit teaching, classroom management and routine procedures, use of audiovisual aids, community resources, record-keeping, evaluation procedures, and participation in the total school program.

**Intellectual Foundations Requirements**  
Program majors should enroll in an introductory psychology course, such as PSY 101, to satisfy their Intellectual Foundations requirements. It is recommended that majors take history courses to meet their civilizations requirements.

**Total Required Credit Hours in Social Sciences** | 42 cr
---|---

| A. History of the Western Hemisphere (15 cr) |  |
| HIS 106 | History of American Life I |
| HIS 107 | History of American Life II |
| HIS 308 | History of Early Canada |
| OR | |
| HIS 316 | History of Modern Canada |
| OR | |
| HIS 326 | History of the Great Lakes Region |
| HIS 314 | Modern Latin America |
| HIS 415 | History and Government of New York State |

| B. History of the Eastern Hemisphere (15 cr) |  |
| HIS 230 | World Civilizations |
| Select two courses from the following: |  |
| HIS 115 | Foundations of Western Civilization |
| HIS 116 | Europe Since 1500 |
| HIS 117 | Twentieth-Century Europe |
| Two upper-division electives (any Asian, African, or Middle-Eastern world history courses). |  |

| C. Geography (3 cr) |  |
| GEG 300 | World Regional Geography |

| 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 Education** | 30 cr
---|---

| SPF 303 | Educational Psychology: Middle and Secondary Education |
| 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 |
### Social Studies Education (7–12, PTCP)

PBC-NS SSX  
History and Social Studies Education Department  
Postbaccalaureate Teacher Certification Program (HEGIS 2201.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited Classroom Building C205 (716) 878-5412

The social studies education (7–12) postbaccalaureate certification-only program prepares persons with undergraduate degrees in history or social science, or with a 36-credit concentration in history and/or social science courses, to meet the disciplinary content and educational requirements leading to New York’s Initial Certificate in adolescence education, required to teach social studies in grades 5–12. The program supplies the background knowledge necessary for teachers to implement the NYS Learning Standards for social studies in grades 5–12. It also meets the standards set by national professional organizations such as the National Council for the Social Studies and the National Council for the Accreditation of Teacher Education.

**Admission Requirements:** Applicants must have an existing undergraduate degree with a 36-credit concentration in history and/or social science courses, as well as a minimum 2.75 cumulative GPA; a minimum 2.75 GPA in all history and social science courses.

Students complete a minimum of 30–35 clock hours of field experience in each of three courses: SSE 200, SSE 303, and SSE 309. The department has established relationships with several high-need urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

To meet NCATE certification requirements, the total social studies subject matter coursework must include no less than 40 percent of a total four-year program, with an area of concentration of at least 18 semester hours in one academic discipline. The program of study must include economics, government, and a minimum of 30 semester hours of study in the history and geography of the United States and the world. All students’ history/social science coursework must include the following or the equivalent of the following:

**Total Required Credit Hours**  
126 cr

<table>
<thead>
<tr>
<th>A. Basic U.S. History (9 cr)</th>
<th>B. Basic World History (9 cr)</th>
<th>C. Other World History (6 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 106 American Life I</td>
<td>HIS 230 World Civilizations</td>
<td>Two Asian, Middle-Eastern, or African history courses</td>
</tr>
<tr>
<td>HIS 107 American Life II</td>
<td>HIS 115 Foundations of Western Civilization</td>
<td></td>
</tr>
<tr>
<td>HIS 415 History and Government of New York State</td>
<td>HIS 116 Europe Since 1500</td>
<td></td>
</tr>
<tr>
<td>HIS 117 Twentieth-Century Europe</td>
<td>HIS 117</td>
<td></td>
</tr>
</tbody>
</table>

**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/HIS 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 Education**  
30 cr

| SPF 303 Educational Psychology: Middle and Secondary Education |
| EDU 416 Teaching Literacy in Middle and Secondary Schools |
| ENG 309 Teaching and Evaluating Writing |
| EXE 100 Nature and Needs of Individuals with Special Needs |
| OR |
| EXE 372 Foundations of Teaching Secondary Students with Disabilities |
| PSY 357 Adolescent and Young Adult Development |
| SSE 200 Introduction to Secondary Teaching |
| SSE 303 Methods and Materials in Teaching Middle School Social Studies |
| SSE 309 Methods and Materials in Teaching High School Social Studies |
| SSE 370 Computer Technology in the Social Studies Classroom |
| SSE 402 Historical and Philosophical Foundations of Social Education |
| OR |
| SSE/HIS 407 The Teaching of History |

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

To student teach, a student must have achieved a cumulative GPA of 2.75 or higher and a minimum 2.75 GPA in the social studies major, as well as obtain a grade of C or higher in SSE 303 and SSE 309.  
SSE 409 Student Teaching of Social Studies in the Middle School (6)  
SSE 410 Student Teaching of Social Studies in Senior High School (6)

**Total Required Credit Hours**  
92 cr

<table>
<thead>
<tr>
<th>Total Required Credit Hours</th>
<th>15 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSE 409 Student Teaching of Social Studies in the Middle School (6)</td>
<td></td>
</tr>
<tr>
<td>SSE 410 Student Teaching of Social Studies in Senior High School (6)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours</th>
<th>0-6 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Year (or Equivalent) of a Foreign Language</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours</th>
<th>126 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Studies Education (7–12, PTCP)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Required Credit Hours in Content Area Courses</th>
<th>50 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Basic U.S. History (9 cr)</td>
<td></td>
</tr>
<tr>
<td>HIS 106 American Life I</td>
<td></td>
</tr>
<tr>
<td>HIS 107 American Life II</td>
<td></td>
</tr>
<tr>
<td>HIS 415 History and Government of New York State</td>
<td></td>
</tr>
<tr>
<td>B. Basic World History (9 cr)</td>
<td></td>
</tr>
<tr>
<td>HIS 230 World Civilizations</td>
<td></td>
</tr>
<tr>
<td>Select two courses from the following:</td>
<td></td>
</tr>
<tr>
<td>HIS 115 Foundations of Western Civilization</td>
<td></td>
</tr>
<tr>
<td>HIS 116 Europe Since 1500</td>
<td></td>
</tr>
<tr>
<td>HIS 117 Twentieth-Century Europe</td>
<td></td>
</tr>
<tr>
<td>C. Other World History (6 cr)</td>
<td></td>
</tr>
<tr>
<td>Two Asian, Middle-Eastern, or African history courses</td>
<td></td>
</tr>
</tbody>
</table>
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. Students complete a minimum of 30–35 clock hours of field experience in each of three courses: SSE/HIS 300, SSE/HIS 303, and SSE/HIS 309. Another course, SSE/HIS 488, will be used by students to complete the additional 50 clock hours in field experience required for the 5-6 extension. The department has established relationships with several high-need urban and suburban school districts where field experiences are held. All majors will have study and experiences that together provide a solid foundation for teaching in high-need schools.

Total Required Credit Hours in Content Area Courses 50 cr

A. History of the Western Hemisphere (15 cr)
HIS 106    American Life I
HIS 107    American Life II
HIS 308    History of Canada
HIS 314    Modern Latin America
HIS 415    History and Government of New York State

B. History of the Eastern Hemisphere (9 cr)
HIS 230    World Civilizations
Select two courses from the following:
HIS 115    Foundations of Western Civilization
HIS 116    Europe Since 1500
HIS 117    Twentieth-Century Europe

C. Geography (6 cr)
GEG 300    World Regional Geography
Select one course from the following:
GEG 102    Human Geography
GEG 206    Geography of New York State
GEG 309    Introduction to Urban Geography
GEG 320    Historical Geography of the United States
GEG 360    Geography of Asia
GEG 362    Geography of the United States and Canada
GEG 364    Geography of Europe

D. Political Science (3 cr)
Select one course from the following:
PSC 102    Introduction to American Government
PSC 220    Development of American Constitutional Law
PSC 320    U.S. Constitution/Civil Liberties

E. Economics (3 cr)
Select one course from the following:
ECO 101    The Economic System
ECO 201    Principles of Macroeconomics
ECO 202    Principles of Microeconomics

F. Cultural Diversity (3 cr)
SSE/HIS 363    American Identity in Transition: Diversity and Pluralism in the United States

G. History/Social Science Electives (11 cr)

A. History of the Western Hemisphere (15 cr)
HIS 106    American Life I
HIS 107    American Life II
HIS 308    History of Canada
HIS 314    Modern Latin America
HIS 415    History and Government of New York State

B. History of the Eastern Hemisphere (9 cr)
HIS 230    World Civilizations
Select two courses from the following:
HIS 115    Foundations of Western Civilization
HIS 116    Europe Since 1500
HIS 117    Twentieth-Century Europe

C. Geography (6 cr)
GEG 300    World Regional Geography
Select one course from the following:
GEG 102    Human Geography
GEG 206    Geography of New York State
GEG 309    Introduction to Urban Geography
GEG 320    Historical Geography of the United States
GEG 360    Geography of Asia
GEG 362    Geography of the United States and Canada
GEG 364    Geography of Europe

D. Political Science (3 cr)
Select one course from the following:
PSC 102    Introduction to American Government
PSC 220    Development of American Constitutional Law
PSC 320    U.S. Constitution/Civil Liberties

E. Economics (3 cr)
Select one course from the following:
ECO 101    The Economic System
ECO 201    Principles of Macroeconomics
ECO 202    Principles of Microeconomics

F. Cultural Diversity (3 cr)
SSE/HIS 363    American Identity in Transition: Diversity and Pluralism in the United States

G. History/Social Science Electives (11 cr)

Total Required Credit Hours in Professional Education 30 cr

SpP 303    Educational Psychology: Middle and Secondary Education
EDU 416    Teaching Literacy in Middle and Secondary Schools
ENG 309    Teaching and Evaluating Writing
EXE 100    Nature and Needs of Individuals with Special Needs
OR
EXE 372    Foundations of Teaching Secondary Students with Disabilities
PSY 357    Adolescent and Young Adult Development
SSE 200    Introduction to Secondary Teaching
SSE 303    Methods and Materials in Teaching Middle School Social Studies
SSE 309    Methods and Materials in Teaching High School Social Studies
SSE 370    Computer Technology in the Social Studies Classroom
SSE 402    Historical and Philosophical Foundations of Social Education
OR
SSE/HIS 407    The Teaching of History

Total Required Credit Hours in Student Teaching 15 cr

To complete the program, a student must have achieved a cumulative GPA of 2.75 or higher and a minimum 2.75 GPA in the major.

SSE 409    Student Teaching of Social Studies in the Middle School (6)
SSE 410    Student Teaching of Social Studies in Senior High School (6)
SSE/HIS 488    Internship: Middle Childhood and Adolescence Education (3 cr)

Total Required Credit Hours 95 cr

BS-SP SWK
Social Work Department
Bachelor of Science (HEGIS 2104)

Council on Social Work Education Accredited
Classroom Building C115 (716) 878-5705

The social work program prepares students for social work practice at the first professional level. Consistent with accreditation standards, the social work courses cover the following areas: human behavior and the social environment, social welfare policy and services, intervention methods, research, values and ethics, diversity, social and economic justice, populations at risk, and field instruction. Social work is an upper-division major that builds on a liberal arts base. Academic evaluation includes GPA, class performance, and conduct that is ethical and professional. Interested students should contact the department for specific information on these academic standards.

Admission Requirements: At the time of application, students are required to have:

- Completed 45 credit hours
- Attained a minimum GPA of 2.5.
### Sociology (B.A.)

**BA-NS SOC**  
Sociology Department  
Bachelor of Arts (HEGIS 2208)

Classroom Building B307 (716) 878-5411

The B.A. degree in sociology presents a general program to prepare students for a wide variety of positions in business, industry, government, health-related services, or social services. It is also designed to prepare undergraduate students for graduate work in the study of sociology, law, public administration, media studies, demography, crime/deviance, or other social science disciplines. Its emphasis upon scholarly research culminates in either Internship in Sociology (SOC 488) or Senior Seminar (SOC 490). The freedom of choice in selection of courses permits students to develop a particular specialty within sociology, either to meet special career interests or to meet graduate program requirements.

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours in Sociology</td>
<td>42 cr</td>
</tr>
<tr>
<td>SWK 220</td>
<td>Introduction to Social Work</td>
</tr>
<tr>
<td>SWK 301</td>
<td>Poverty and Public Policy</td>
</tr>
<tr>
<td>SWK 307</td>
<td>Human Behavior and Social Environment I</td>
</tr>
<tr>
<td>SWK 308</td>
<td>Human Behavior and Social Environment II</td>
</tr>
<tr>
<td>SWK 317</td>
<td>Research Methods in Social Work</td>
</tr>
<tr>
<td>SWK 320</td>
<td>Social Services Organizations</td>
</tr>
<tr>
<td>SWK 419</td>
<td>Social Welfare Policy</td>
</tr>
<tr>
<td>SWK 422</td>
<td>Assessment and Engagement</td>
</tr>
<tr>
<td>SWK 423</td>
<td>Intervention Methods</td>
</tr>
<tr>
<td>SWK 424</td>
<td>Groups</td>
</tr>
<tr>
<td>SWK 429</td>
<td>Policy Practice</td>
</tr>
<tr>
<td>SWK 493-494</td>
<td>Practicum I and II (12 cr)</td>
</tr>
<tr>
<td>SWK 496</td>
<td>Integrative Seminar I</td>
</tr>
<tr>
<td>SWK 497</td>
<td>Integrative Seminar II</td>
</tr>
<tr>
<td>All College Electives</td>
<td>30-36 cr</td>
</tr>
<tr>
<td>Total Required Credit Hours</td>
<td>120 cr</td>
</tr>
</tbody>
</table>

### Spanish (B.A.)

**BA-AH SPA**  
Modern and Classical Languages Department  
Bachelor of Arts (HEGIS 1105)

Bishop Hall 122 (716) 878-5414

This program develops the ability to communicate in Spanish and introduces students to the masterpieces of the literature of Spanish-speaking countries and the most significant aspects of Hispanic culture. Students are encouraged to study in Spain or Latin America in an approved program. This program also serves as a pre-major for students who wish to enter the Bachelor of Science in Spanish Education (7–12).

<table>
<thead>
<tr>
<th>Intellectual Foundations Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credit Hours in Spanish</td>
<td>36 cr</td>
</tr>
<tr>
<td>A. Required Courses (15 cr)</td>
<td></td>
</tr>
<tr>
<td><strong>Majors may select either sequence of courses:</strong></td>
<td></td>
</tr>
<tr>
<td>SOC 301, SPA</td>
<td>Spanish Conversation and Composition 302</td>
</tr>
<tr>
<td>Students take 9 cr in one of the following sequence areas</td>
<td></td>
</tr>
<tr>
<td>SPA 306</td>
<td>The Civilization of Spain</td>
</tr>
<tr>
<td>SPA 307</td>
<td>Survey of Spanish Literature</td>
</tr>
<tr>
<td>SPA 308</td>
<td>Spanish Conversation and Composition</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>SPA 309</td>
<td>The Civilization of Latin America</td>
</tr>
<tr>
<td>SPA 310,</td>
<td>Survey of Spanish American Literature</td>
</tr>
<tr>
<td>SPA 311</td>
<td></td>
</tr>
</tbody>
</table>

| 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 |
### SPANISH EDUCATION (7–12, B.S.)

**BS-AH SPS**  
Modern and Classical Languages Department  
Bachelor of Science (HEGIS 1105.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited  
Bishop Hall 122 (716) 878-5414

The Spanish secondary education program leads to eligibility for New York State initial certification to teach Spanish in grades 7-12. Students develop Spanish language skills and study the structure and sound system of Spanish, the literature and culture of Spanish-speaking peoples, and explore the teaching and learning of foreign languages in school settings. The curriculum includes a series of field experiences. All students desiring this program may be admitted into the B.A. language and literature program, which functions as a pre-major for the B.S. program. Prospective students who apply for admission to the B.S. program must fill out a Change of Major Form and complete two brief entrance essays—one in English and the other in Spanish—in the Modern and Classical Languages Department office (Bishop 122) after they have successfully completed 6 credits beyond SPA302. No student will be admitted with less than a 2.5 overall GPA, or with less than a 2.5 GPA in Spanish courses. Students must have a minimum GPA of 2.5 (overall and in Spanish), to enroll in the teaching practicum. Also, the student must complete an ACTFL-approved Oral Proficiency Interview (OPI) in order to demonstrate Advanced-Low Proficiency in Spanish. If Advanced-Low is not achieved, an additional upper-level Spanish course, chosen in consultation with the student’s advisor, must be successfully completed.

**Intellectual Foundations Requirements**

**Total Required Credit Hours in Spanish**

**A. Required Courses (27 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 389</td>
<td>Topics Course</td>
</tr>
<tr>
<td>SPA 404</td>
<td>Cervantes</td>
</tr>
<tr>
<td>SPA 408</td>
<td>Twentieth-Century Spanish Literature</td>
</tr>
<tr>
<td>SPA 411</td>
<td>Spanish-American Literature of the Nineteenth and Twentieth Centuries: Novel, Short Story, and Essay</td>
</tr>
<tr>
<td>SPA 415</td>
<td>Advanced Grammar and Composition</td>
</tr>
<tr>
<td>SPA 416</td>
<td>Advanced Conversation</td>
</tr>
<tr>
<td>SPA 421</td>
<td>Structure of Modern Spanish</td>
</tr>
<tr>
<td>SPA 495</td>
<td>Special Project</td>
</tr>
<tr>
<td>SPA 496</td>
<td>Seminar I</td>
</tr>
<tr>
<td>SPA 497</td>
<td>Seminar II</td>
</tr>
</tbody>
</table>

**All College Electives**

**Total Required Credit Hours**

### SPANISH EDUCATION (7–12, PTCP)

**PBC-AH SPS**  
Modern and Classical Languages Department  
Postbaccalaureate Teacher Certification Program (HEGIS 1105.01)

National Council for Accreditation of Teacher Education (NCATE) Accredited  
Bishop Hall 122 (716) 878-5414

The Spanish (7-12) postbaccalaureate teacher certification program leads to eligibility for New York State initial certification to teach Spanish in grades 7-12. This program is designed for students who have earned a baccalaureate degree in Spanish or a related field from an accredited college or university and intend to complete the coursework required for New York State certification to teach Spanish in middle or high schools. The program supplies the background knowledge necessary for teachers to implement the New York State Learning Standards for Languages Other Than English (LOTE) 7-12. It also meets the standards set by national professional organizations such as the American Council of Teachers of Foreign Languages (ACTFL) and the National Council for Accreditation of Teacher Education (NCATE). Students are responsible for any additional certification requirements, including the Liberal Arts and Sciences Test (LAST), the Assessment of Teaching Skills--Written (ATS-W), Content Specialty Test (CST) in Spanish, Oral Proficiency Interview (OPI), and all seminars required for initial certification. It takes three to four semesters of coursework, field experiences, and student teaching to complete certification requirements. To student teach, a student must have achieved a minimum GPA of 2.75 in Spanish coursework and overall, and must have earned a minimum grade of C in FLE300, FLE340 and FLE401. Also, the student must complete an ACTFL-Approved Oral Proficiency Interview (OPI) in order to demonstrate Advanced-Low Proficiency in Spanish. If Advanced-Low is not achieved, an additional upper-level Spanish course, chosen in consultation with the student’s advisor, must be successfully completed. After successfully completing the teacher certification program and passing all required tests, students are eligible to apply for New York State Initial Certification through the Teacher Certification Office,

**Total Required Credit Hours in Student Teaching**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 311</td>
<td>Survey of Spanish American Literature*</td>
</tr>
<tr>
<td>SPA 317</td>
<td>Business Spanish</td>
</tr>
<tr>
<td>SPA 408</td>
<td>Twentieth-Century Spanish Literature</td>
</tr>
<tr>
<td>SPA 411</td>
<td>Spanish American Literature of the Nineteenth and Twentieth Centuries: Novel, Short Story, and Essay</td>
</tr>
<tr>
<td>SPA 421</td>
<td>Structure of Modern Spanish</td>
</tr>
<tr>
<td>SPA 496</td>
<td>Seminar I</td>
</tr>
<tr>
<td>SPA 497</td>
<td>Seminar II</td>
</tr>
</tbody>
</table>

**Total Required Credit Hours in Professional Education**

**Total Required Credit Hours in Student Teaching**

**Total Required Credit Hours**

**All College Electives**

**Total Required Credit Hours**

* May be taken as an elective if not taken as a required course.
A bachelor's degree from an accredited college or university with a minimum cumulative grade point average (GPA) of 2.75 (4.0 scale), a major in Spanish language, literature, culture (or a closely related discipline with a minimum of 30 hours in Spanish).
2. A minimum GPA of 2.75 in Spanish coursework.
3. A completed application form submitted to the Graduate Office at Buffalo State College.
4. Official transcripts from all previous college/university work.**
5. A personal interview with the program coordinator, department chair, or other designated official.
6. Successful completion of two written essays (one English, one Spanish), administered by the department as part of the interview process.

*Applicants who do not meet these minimum requirements should contact an Modern and Classical Languages advisor.

**Students who received degrees from institutions outside the United States must have their transcripts evaluated by a recognized evaluation service.

Program Requirements

Required Residency Requirement ** 6 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 303</td>
<td>Introduction to Spanish Literature</td>
</tr>
<tr>
<td>SPA 305</td>
<td>Spanish Phonetics</td>
</tr>
<tr>
<td>SPA 306</td>
<td>The Civilization of Spain</td>
</tr>
<tr>
<td>SPA 307, SPA 308</td>
<td>Survey of Spanish Language</td>
</tr>
<tr>
<td>SPA 309</td>
<td>The Civilization of Latin America</td>
</tr>
<tr>
<td>SPA 310, SPA 311</td>
<td>Survey of Spanish American Literature</td>
</tr>
<tr>
<td>SPA 405</td>
<td>Old Spanish</td>
</tr>
<tr>
<td>SPA 415</td>
<td>Advanced Grammar and Composition</td>
</tr>
<tr>
<td>SPA 416</td>
<td>Advanced Conversation</td>
</tr>
<tr>
<td>SPA 495</td>
<td>Special Project</td>
</tr>
<tr>
<td>SPA 496</td>
<td>Seminar I</td>
</tr>
</tbody>
</table>

* All students required to take a minimum of 6 credit hours above the 302 level
** Students with undergraduate degrees are eligible, with instructor permission, to enroll in graduate level language and literature courses at Buffalo State College.

Professional Education Courses 24 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF 303</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>SPF 403</td>
<td>Historical and Philosophical Forces Influencing Secondary Education</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Literacy in Middle and Secondary Schools Foundations of Teaching Adolescents with Disabilities</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Teaching Literacy in Middle and Secondary Schools Foundations of Teaching Adolescents with Disabilities</td>
</tr>
<tr>
<td>FLE 240</td>
<td>Introduction to Linguistics</td>
</tr>
<tr>
<td>FLE 300</td>
<td>Introduction to the Foreign Language Classroom</td>
</tr>
<tr>
<td>FLE 340</td>
<td>Second Language Acquisition and Literacy</td>
</tr>
<tr>
<td>FLE 401</td>
<td>Teaching Foreign Language in Middle and High Schools</td>
</tr>
</tbody>
</table>

Student Teaching Courses 12 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLE 407/ SED 407</td>
<td>Student Teaching of Foreign Languages in the Middle/Junior High School (6)</td>
</tr>
<tr>
<td>FLE 408/ SED 408</td>
<td>Student Teaching of Foreign Languages in the High School (6)</td>
</tr>
</tbody>
</table>

Total Required Credit Hours 42 cr

SPEECH-LANGUAGE PATHOLOGY (B.S.)

BS-SP SLP
Speech-Language Pathology Department
Bachelor of Science (HEGIS 1220)
Ketchum Hall 208 (716) 878-4412

The undergraduate program in speech-language pathology prepares students with a strong foundation in normal acquisition of speech, language, and hearing, and provides an introduction to the field of communication sciences and disorders. The undergraduate curriculum provides students with necessary prerequisite courses for graduate study. The master's degree is required for the initial teaching certificate, the license to practice speech-language pathology, and for the Certificate of Clinical Competence (CCC) awarded by the American Speech-Language Hearing Association, www.asha.org. The master’s degree program in speech-language pathology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language Hearing Association (ASHA).

Admission Requirements: Undeclared, change of major and transfer students are eligible to apply for admission to the department as a junior. A minimum GPA of 3.0 is required for admission, no exceptions.

Academic Performance Policy: Students who have a GPA of less than 3.0 in SLP-preixed courses required for the major at the end of a semester will be placed on departmental probation. The student will then have one semester to raise their GPA to a 3.0 or greater in SLP-preixed courses or they will be dismissed from the department.

Intellectual Foundations Requirements 33-39 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXE 100</td>
<td>Nature and Needs of Individuals with Special Needs</td>
</tr>
<tr>
<td>EXE 245</td>
<td>Community Service with Individuals with Special Needs</td>
</tr>
<tr>
<td>SPF 202</td>
<td>Child Development and Education</td>
</tr>
<tr>
<td>SPF 302</td>
<td>Educational Psychology: Elementary Education</td>
</tr>
<tr>
<td>SLP 302</td>
<td>Clinical Phonetics</td>
</tr>
<tr>
<td>SLP 303</td>
<td>Language Acquisition</td>
</tr>
<tr>
<td>SLP 304</td>
<td>Anatomy and Physiology of Speech and Hearing Mechanisms</td>
</tr>
<tr>
<td>SLP 305</td>
<td>Communication Disorders I</td>
</tr>
<tr>
<td>SLP 314</td>
<td>Audiology</td>
</tr>
<tr>
<td>SLP 328</td>
<td>Audiology Lab</td>
</tr>
<tr>
<td>SLP 329</td>
<td>Language Acquisition Lab</td>
</tr>
<tr>
<td>SLP 401</td>
<td>Aural Rehabilitation</td>
</tr>
<tr>
<td>SLP 405</td>
<td>Communication Disorders II</td>
</tr>
<tr>
<td>SLP 411</td>
<td>Language Diagnosis and Remediation</td>
</tr>
<tr>
<td>SLP 412</td>
<td>Speech Acoustics and Perception</td>
</tr>
<tr>
<td>SLP 424</td>
<td>Organization and Administration of School Speech and Language Programs</td>
</tr>
<tr>
<td>SLP 428</td>
<td>Acoustics Lab</td>
</tr>
<tr>
<td>SLP 429</td>
<td>Clinical Observation</td>
</tr>
</tbody>
</table>

All College Electives 35-41 cr

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 306</td>
<td>Statistics in Psychological Research</td>
</tr>
<tr>
<td>OR</td>
<td>Recommended speech-language pathology electives:</td>
</tr>
<tr>
<td>MAT 311</td>
<td>Introductory Probability and Statistics</td>
</tr>
<tr>
<td>SLP 400</td>
<td>Language and Literacy for Speech-Language Pathologists</td>
</tr>
</tbody>
</table>

Total Required Credit Hours 120 cr
## TECHNOLOGY EDUCATION (B.S.)

### BS-SP TED
**Engineering Technology Department**  
Bachelor of Science (HEGIS 0839.01)

The technology education program prepares students to teach technology and the technological systems utilized in problem solving. The four systems emphasized are construction, manufacturing, communication, and transportation. The program is laboratory oriented, teaching the important role of engineering a product or service through selecting and systemizing knowledge for the solution of a problem. Graduates are recommended for an initial certificate to teach technology education in grades K–12.

### Intellectual Foundations Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

33-39 cr

### Total Required Credit Hours in Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC 101</td>
<td>Technical Drawing</td>
</tr>
<tr>
<td>TEC 123</td>
<td>Principles of Manufacturing</td>
</tr>
<tr>
<td>TEC 201</td>
<td>Materials Processing</td>
</tr>
<tr>
<td>TEC 300</td>
<td>Construction Systems</td>
</tr>
<tr>
<td>TEC 302</td>
<td>CAD/CAM</td>
</tr>
<tr>
<td>TEC 311</td>
<td>Materials Science and Testing</td>
</tr>
<tr>
<td>TEC 314</td>
<td>Electro Mechanicals</td>
</tr>
<tr>
<td>TEC 319</td>
<td>Technology and Values</td>
</tr>
<tr>
<td>TED 100</td>
<td>Introduction to Technology Education</td>
</tr>
<tr>
<td>TED 349</td>
<td>Communication Systems</td>
</tr>
<tr>
<td>TED 361</td>
<td>Transportation Systems</td>
</tr>
</tbody>
</table>

33 cr

### Total Required Credit Hours in Professional Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE 301/BME 301</td>
<td>Principles of Occupational Education</td>
</tr>
<tr>
<td>CTE 302/BME 302</td>
<td>Curriculum and Evaluation in Occupational Education</td>
</tr>
<tr>
<td>SPF 303</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Reading in the Secondary School</td>
</tr>
<tr>
<td>TED 360</td>
<td>Technology Education Methods and Evaluation</td>
</tr>
<tr>
<td>TED 450</td>
<td>Professional Semester (6)</td>
</tr>
<tr>
<td>TED 451</td>
<td>Professional Semester (6)</td>
</tr>
</tbody>
</table>

27 cr

### Total Required Credit Hours in Other Fields for Certification

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE XXX</td>
<td>Core Chemistry (3)</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Foundations of Teaching Adolescents with Disabilities</td>
</tr>
<tr>
<td>MAT XXX</td>
<td>Core Math (3)</td>
</tr>
<tr>
<td>MAT 124</td>
<td>Precalculus Mathematics</td>
</tr>
<tr>
<td>PHY 107</td>
<td>General Physics I</td>
</tr>
</tbody>
</table>

15 cr

### Total Required Credit Hours

120 cr

---

### TECHNOLOGY EDUCATION (PTCP)

**PBC-SP TED**  
**Engineering Technology Department**  
Postbaccalaureate Teacher Certification Program (HEGIS 0839.01)

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, Chase Hall 222.
2. Seminars:
   - a. S.A.V.E. (School Anti-Violence Education) workshop
   - b. Child abuse identification workshops
   - c. Drug and alcohol awareness seminar
   - d. Fire and arson safety seminar

### Total Required Credit Hours in Technology Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TED 100</td>
<td>Introduction to Technology Education</td>
</tr>
<tr>
<td>TED 360</td>
<td>Technology Education Methods and Evaluation</td>
</tr>
</tbody>
</table>

6 cr

### Total Required Credit Hours in Other Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 301</td>
<td>Principles of Occupational Education</td>
</tr>
<tr>
<td>BME 302</td>
<td>Curriculum and Evaluation in Business/Marketing Education</td>
</tr>
<tr>
<td>SPF 303</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>EDU 416</td>
<td>Teaching Reading in the Secondary School</td>
</tr>
<tr>
<td>EXE 372</td>
<td>Teaching Adolescents with Disabilities</td>
</tr>
</tbody>
</table>

15 cr

### Professional Semesters

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TED 450</td>
<td>Professional Semester (6)</td>
</tr>
<tr>
<td>TED 451</td>
<td>Professional Semester (6)</td>
</tr>
</tbody>
</table>

12 cr

### Total Required Credit Hours

33 cr

---

### TELEVISION AND FILM ARTS (B.A.)

**BA-AH TFA**  
Television and Film Arts  
Bachelor of Arts (HEGIS: 0603)

The Television and Film Arts major (TFA) at Buffalo State—an interdepartmental program encompassing the Communication, English, and Theater departments—prepares students for a variety of careers in the entertainment industry. The goal of the major is to teach the TFA student to hone his/her vision and storytelling skills, thus facilitating pursuits in such dynamic fields as screenwriting, producing, and directing.

The TFA program recognizes that creative content is paramount in today’s age of multi-media and to that end, encourages its students to tell stories across all media. The program is dedicated to excellence in teaching and scholarship, cultural enrichment, and service, providing TFA majors with an appropriate mix of criticism, theory, practical application, and real-life internship opportunities passionately designed to help them succeed.
Required TFA Courses: This series of eight courses provides students with the foundational skills needed for success in the TFA major. The lower-division courses emphasize the history of storytelling, writing fundamentals, film as a vehicle for literature, and basic television production. The upper-division courses emphasize film criticism; collaboration across production roles; working independently as an "auteur"; and writing, producing, directing, and editing professionally produced stories exhibited in a public forum.

In addition to required courses, TFA offers electives related to two professional tracks: (1) writing and storytelling, and (2) directing and producing. Students may take all their major electives from a single track, or they can blend courses from both tracks.

Writing and Storytelling Track: This track is designed for the TFA major who wishes to pursue a career as a screenwriter. Students will write a full-length feature screenplay, and immerse themselves in the history of motion pictures and theater.

Directing and Producing Track: This track is designed for the TFA major who wishes to pursue a career as a director or producer. Students will write, produce, direct, and edit advanced video projects, and be introduced to set design and the business of performing arts.

Admission Requirements: Admission to the television and film arts program is very competitive (15 students admitted each year) and based upon an application, letter of recommendation, and submission of creative work (including screenplays, short stories, poetry, and/or videos/films). All submitted materials are reviewed by the Television and Film Arts Advisory Committee.

<table>
<thead>
<tr>
<th>Intellectual Foundations General Education Requirements</th>
<th>33-39 cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credits Hours in TFA</td>
<td>42 cr</td>
</tr>
</tbody>
</table>

A. Required Courses (24 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 312</td>
<td>Basic Media Production</td>
</tr>
<tr>
<td>ENG 303</td>
<td>Literature in Film</td>
</tr>
<tr>
<td>TFA 201</td>
<td>Introduction to Television and Film Arts</td>
</tr>
<tr>
<td>TFA 301</td>
<td>Story I: Analyzing Great Stories</td>
</tr>
<tr>
<td>TFA 304</td>
<td>Writing for Television and Film Arts</td>
</tr>
<tr>
<td>TFA 401</td>
<td>Story II: Producing Great Stories</td>
</tr>
<tr>
<td>TFA 420</td>
<td>Senior Project I</td>
</tr>
<tr>
<td>TFA 450</td>
<td>Senior Project II</td>
</tr>
</tbody>
</table>

B. Elective Courses (18 cr)†

The elective requirement can be satisfied by completing 18 credits in any of the courses below.

Writing and Storytelling Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 205</td>
<td>History of Cinema I</td>
</tr>
<tr>
<td>ENG 206</td>
<td>History of Cinema II</td>
</tr>
<tr>
<td>ENG 305</td>
<td>Creative Writing: Narrative*</td>
</tr>
<tr>
<td>ENG 350</td>
<td>Twentieth-Century Drama I</td>
</tr>
<tr>
<td>ENG 351</td>
<td>Twentieth-Century Drama II</td>
</tr>
<tr>
<td>ENG 402</td>
<td>Advanced Creative Writing*</td>
</tr>
<tr>
<td>TFA 460</td>
<td>Adaptation</td>
</tr>
<tr>
<td>THA 340</td>
<td>Playwriting</td>
</tr>
</tbody>
</table>

Directing and Producing Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 432</td>
<td>Advanced Postproduction</td>
</tr>
<tr>
<td>COM 329</td>
<td>Intermediate Video Production</td>
</tr>
<tr>
<td>TFA 480</td>
<td>Advanced Directing/Producing I</td>
</tr>
<tr>
<td>TFA 481</td>
<td>Advanced Directing/Producing II</td>
</tr>
<tr>
<td>THA 200</td>
<td>Voice and Diction</td>
</tr>
<tr>
<td>THA 226</td>
<td>Acting I</td>
</tr>
<tr>
<td>THA 325</td>
<td>Business of Performing Arts</td>
</tr>
<tr>
<td>THA 337</td>
<td>Set Design**</td>
</tr>
</tbody>
</table>

All College Electives 39-45 cr

Total Required Credits 120 cr
GEG 307 Conservation and Environmental Management
PLN 315 Principles of Urban and Regional Planning
PLN 325 Maps and Mapmaking Using GIS
PLN 390 Quantitative Methods in Geography and Planning
PLN 396 Research Methods
PLN 412 Community Planning Agencies and Issues
PLN 430 Senior Thesis

B. Concentration Electives (18 cr)

Select one of two concentrations:

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

Specialized required course (3 cr)
GEG 309 Urban Geography

Select six courses from the following by advisement:

ECO 412 Urban Economics
ECO 424 Econometrics
GEG 305 Principles of Economic Geography
GEG 425 Fundamentals of GIS
GEG 427 Corporate Applications in GIS
GEG 485 Interactive and Web-Based Mapping
PLN 310 Urban Transportation Planning
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 biology. These courses are taken outside of the major.

Select one course from the following:

BIO 212 Introduction to Organismal Biology and Diversity
BIO 213 Introduction to Ecology, Evolution and Behavior

Select one course from the following:

CHE 101 General Chemistry I
CHE 102 General Chemistry II

Electives selected by advisement (9–11 cr):

BIO 315 Ecology (4)
BIO 418 Limnology (4)
GEG 365 Soil Science and Management
GEG 375 Principles of Hydrology
GEG 386 Applied Climatology
GEG 421 Watershed Analysis
GEG 425 Fundamentals of GIS
GEG 428 Environmental Assessment and Planning Applications in GIS
GES 452 Hydrogeology
PLN 360 Environmental Impact Assessment
PLN 488 Internship (3 cr maximum)
PLN 370 Water Resource Planning

All College Electives: Urban-Regional Planning Concentration 39-45 cr

All College Electives: Environmental Planning Concentration 21-41 cr

B. Concentration Electives (18 cr)

Select one of two concentrations:

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

Specialized required course (3 cr)
GEG 309 Urban Geography

Select six courses from the following by advisement:

ECO 412 Urban Economics
ECO 424 Econometrics
GEG 305 Principles of Economic Geography
GEG 425 Fundamentals of GIS
GEG 427 Corporate Applications in GIS
GEG 485 Interactive and Web-Based Mapping
PLN 310 Urban Transportation Planning
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 biology. These courses are taken outside of the major.

Select one course from the following:

BIO 212 Introduction to Organismal Biology and Diversity
BIO 213 Introduction to Ecology, Evolution and Behavior

Select one course from the following:

CHE 101 General Chemistry I
CHE 102 General Chemistry II

Electives selected by advisement (9–11 cr):

BIO 315 Ecology (4)
BIO 418 Limnology (4)
GEG 365 Soil Science and Management
GEG 375 Principles of Hydrology
GEG 386 Applied Climatology
GEG 421 Watershed Analysis
GEG 425 Fundamentals of GIS
GEG 428 Environmental Assessment and Planning Applications in GIS
GES 452 Hydrogeology
PLN 360 Environmental Impact Assessment
PLN 488 Internship (3 cr maximum)
PLN 370 Water Resource Planning

All College Electives: Urban-Regional Planning Concentration 39-45 cr

All College Electives: Environmental Planning Concentration 21-41 cr

Concentration

Total Required Credit Hours (Either Concentration) 120 cr

Wood/Furniture (B.F.A.)

BFA-AH WFD
Design Department
Bachelor of Fine Arts (HEGIS 1009)

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

The B.F.A. degree in wood/furniture design is a studio-intensive program of study focused on developing the aesthetic, conceptual and technical skills necessary to foster creativity as the student works toward developing their individual identity as a visual designer/artist. This degree offers students a specialized studio-oriented education in preparation for advanced or graduate studies or for beginning careers as professional designers or artists.

Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing, art history and design history along with courses in ceramics, fibers and metal/jewelry. Major courses in wood/furniture design complete the requirements. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other chosen studio courses.

Admission Requirements: There is no entrance portfolio review for admission. All students will enter the wood/furniture design major as a bachelor of science (BS-AH WFD) and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for admission into the bachelor of fine arts program (BFA-AH WFD). Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, to continue in the B.F.A. degree program a 3.0 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information. As a condition for graduation each B.F.A student will be required to mount an individual exhibition of his/her work.

The Design Department reserves the right to retain students’ work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in class. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

The Design Department may be in the process of curricular revision. Please refer to the college Web site or the department for updated information.

Intellectual Foundations Requirements 33-39 cr

Total Required Credit Hours in Wood/Furniture Design 79 cr

A. Foundation Courses (37 cr)

DES 101 Introduction to Design: 2D I
DES 103 Introduction to Design: 3D I
FAR 101 Drawing I
FAR 104 Themes and Issues in Contemporary Arts
DES 104 Introduction to Design: 3D II
DES 220 Ceramics I
DES 230 Introduction to Jewelry
DES 242 Fibers I
FAR 250 Art History I
FAR 251 Art History II
DES 312 History of Craft
DES 414 Senior Seminar (4)

B. Major Courses (30 cr)

DES 250 Wood Design I
A. Foundation Courses (24 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 350</td>
<td>Technical Processes in Wood</td>
</tr>
<tr>
<td>TEC 101</td>
<td>Technical Drawing</td>
</tr>
<tr>
<td>DES 338</td>
<td>Computer 3D Modeling and Rendering</td>
</tr>
<tr>
<td>DES 351</td>
<td>Wood - Junior Studio (3, 3)</td>
</tr>
<tr>
<td>DES 451</td>
<td>Wood - Senior Studio (3, 3)</td>
</tr>
<tr>
<td>DES 451</td>
<td>or Wood Design internship (6)</td>
</tr>
</tbody>
</table>

B. Studio Electives Selected by Advisement (12 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 320</td>
<td>Ceramics II</td>
</tr>
<tr>
<td>DES 330</td>
<td>Applied Jewelry Techniques</td>
</tr>
<tr>
<td>DES 336</td>
<td>Metalsmiling</td>
</tr>
<tr>
<td>DES 342</td>
<td>Fibers II</td>
</tr>
<tr>
<td>FAR 240</td>
<td>Introduction to Sculpture</td>
</tr>
</tbody>
</table>

All College Electives 2-8 cr

Total Required Credit Hours 120 cr

**WOOD/FURNITURE (B.S.)**

*BS-AH WFD*

Design Department

Bachelor of Science (HEGIS 1009)

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

Upton Hall 212 (716) 878-6032

The B.S. degree in wood/furniture design is a studio degree with a strong academic component. This degree offers students a broadly grounded educational experience as a basis for beginning careers as professional designers or artists. Students begin with foundation courses in two-dimensional design, three-dimensional design, drawing and design history along with courses in ceramics, fibers and metal/jewelry. Major courses in wood/furniture design focus on developing the aesthetic, conceptual and technical skills necessary to foster creativity as the student works toward developing their individual identity as a visual designer/artist. Internship opportunities are available. The remaining credit hours are completed in required Intellectual Foundations courses and in other academic subjects of the student's choosing. The academic component offers opportunities to gain a broader base of knowledge, as well as knowledge in other disciplines related to the major field of study.

*Admission Requirements:* There is no entrance portfolio review for admission. All students will enter the wood/furniture design major as a bachelor of science (BS-AH WFD) and complete a selection of foundation and major course(s) before a commit-to-major portfolio review for continuation in the B.S. degree program. Commit-to-major portfolio reviews are conducted by faculty and generally take place during the sophomore year. After passing the portfolio review, students to continue in the B.S. degree program a 2.5 GPA must be maintained in the major. Transfer students are urged to submit their portfolios the semester before transfer in order to facilitate placement in departmental courses and/or for possible commit-to-major portfolio review. Please call the Design Department for additional information.

The Design Department reserves the right to retain students' work for official purposes, such as exhibitions, catalogs, teaching aids, or permanent collections and to use images of the students and their work for publicity and recruitment. Students are expected to assume the costs of materials used in courses. Some studio courses may have an additional charge for materials used in class. Students enrolled in a studio course are expected to work a minimum of two additional hours each week outside of class for each credit granted for that class.

**Intellectual Foundations Requirements** 33-39 cr

**Total Required Credit Hours in Wood/Furniture Design** 45 cr

**WRITING (B.A.)**

*BA-AH WRT*

English Department

Bachelor of Arts (HEGIS 1507)

Ketchum Hall 326 (716) 878-5416

The Writing B.A. degree program offers students an opportunity to combine the study and practice of the craft of writing with the study of literature, theater, television and communication arts. The writing degree program allows for the development of skills in creative writing, journalistic writing, literary writing, and/or professional writing. Students can take courses from a variety of disciplines to fulfill their requirements. The program is intended for students interested in advanced study and practice of writing.

*Admission Requirements:* All applicants must submit a portfolio to be considered for acceptance into the program. Transfer or uncommitted students must have a 2.5 minimum GPA in all previous college credits to enter the major, and must complete the College Basic Writing requirement to be accepted into the major. Freshman may be admitted to the program on a one-year probationary basis at the discretion of the selection committee.

**Intellectual Foundations Requirements** 33-39 cr

**Total Required Credits in English** 42 cr

(24 credits must be upper-division)

A. Required Courses (12 cr)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 190</td>
<td>Introduction to Literary Analysis and Interpretation</td>
</tr>
<tr>
<td>ENG 201</td>
<td>The Craft of Writing</td>
</tr>
<tr>
<td>ENG 410</td>
<td>Composition and Rhetorical Theory</td>
</tr>
<tr>
<td>ENG 490</td>
<td>Senior Seminar</td>
</tr>
</tbody>
</table>

(B should be taken soon after completion of freshman composition requirement or within first year of transfer to English Department.)

B. Electives in Writing (15 cr)

Select five courses from the following areas: Students may choose to concentrate their studies in one primary area or may select freely from across the options.

**Creative Writing**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 305</td>
<td>Creative Writing: Narrative</td>
</tr>
<tr>
<td>ENG 306</td>
<td>Creative Writing: Poetry</td>
</tr>
<tr>
<td>ENG 402</td>
<td>Advanced Creative Writing: Narrative</td>
</tr>
</tbody>
</table>
ENG 403  Advanced Creative Writing: Poetry
THA 470  Ensemble Theater

**Professional Writing**
ENG 245  Writing about the Arts
ENG 300  Writing for the Professions
COM 308  Public Relations Writing
COM 304  Writing for Broadcast (Radio, TV & Film)
or TFA 304  or Writing for Television and Film Arts

**Journalism**
COM 303  Writing for News Publication
COM 325  Feature and Magazine Article Writing
COM 390  Journalistic Writing

**Literary Genres**
ENG 247  Nature Writing
ENG 266  The Personal Essay
ENG 320  Autobiography/Memoir
ENG 325  Creative Nonfiction

C. Electives in Literature, Linguistics, or Film (15 cr)
Select five literature, linguistics, and film courses offered by the Communication, English, Modern and Classical Languages, and Theater Departments; at least two courses must be upper-division.

<table>
<thead>
<tr>
<th>All College Electives</th>
<th>39-45 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Required Credits</td>
<td>120 credits</td>
</tr>
</tbody>
</table>
The African and African American Studies minor delineates the roles played by the people of Africa in countries all over the world. People of African descent live not only in the United States, but also in Canada, the Caribbean islands, Europe and South America. The minor deals with contributions made by Africa and the Black Diaspora to the global community. It focuses on Africana studies, which includes African, African American, and Caribbean people and their impact on a broad range of disciplines, including but not limited to: anthropology, art, history, culture, language and literature, political science, sociology, and gender studies.

**A. Required Courses (3 cr)**

- AAS 100 Introduction to Africana Studies

**B. Literature, Arts and Language (6 cr)**

- ENG 240 African American Literature to 1940
- ENG 241 African American Literature since 1940
- DAN 230 Survey of African American Dance
- DAN 234 The History of the Black Dance Movement
- DAN 250 Jazz Dance
- FAR 380 Art of Africa
- FAR 366 African American Art
- MUS 209 Sub-Saharan African Music and Cultures
- MUS 305 Modern Jazz
- THA 421 Black Drama in American

**C. Social Sciences and Education (6 cr)**

- AAS 333 African International Relations
- ANT 305 Peoples of Africa
- ANT 411 African Kinship and Marriage
- CRJ 425 Race and the Administration of Justice
- HIS 306 Africa to 1800
- HIS 322 African American History
- HIS 337 Africa Since 1800
- HIS 341 African Americans and Civil Rights
- HIS 468 Readings in African American History
- HIS 469 Black Protest and Leadership in the United States in the Twentieth Century
- PSC 218 African American Political Culture
- PSC 333 African International Relations
- SOC 321 The African American Family
- SOC 351 Sociology of Race and Ethnicity

**D. General Electives (3 cr)**

- AAS 189 Topics Course
- AAS 389 Topics in African And American American Studies
- AAS 488 Internship
- AAS 495 Special Project
- AAS 499 Independent Study

Or any class from B and C

---

**Undergraduate Minor Programs**

**African and African American Studies Minor**

AAS School of Natural and Social Sciences

Upton Hall 308D, 716-878-3675

The African and African American Studies minor delineates the roles played by the people of Africa in countries all over the world. People of African descent live not only in the United States, but also in Canada, the Caribbean islands, Europe and South America. The minor deals with contributions made by Africa and the Black Diaspora to the global community. It focuses on Africana studies, which includes African, African American, and Caribbean people and their impact on a broad range of disciplines, including but not limited to: anthropology, art, history, culture, language and literature, political science, sociology, and gender studies.

**Total Required Credit Hours** 18 cr

**A. Required Courses (3 cr)**

- AAS 100 Introduction to Africana Studies

**B. Literature, Arts and Language (6 cr)**

- ENG 240 African American Literature to 1940
- ENG 241 African American Literature since 1940
- DAN 230 Survey of African American Dance
- DAN 234 The History of the Black Dance Movement
- DAN 250 Jazz Dance
- FAR 380 Art of Africa
- FAR 366 African American Art
- MUS 209 Sub-Saharan African Music and Cultures
- MUS 305 Modern Jazz
- THA 421 Black Drama in American

**C. Social Sciences and Education (6 cr)**

- AAS 333 African International Relations
- ANT 305 Peoples of Africa
- ANT 411 African Kinship and Marriage
- CRJ 425 Race and the Administration of Justice
- HIS 306 Africa to 1800
- HIS 322 African American History
- HIS 337 Africa Since 1800
- HIS 341 African Americans and Civil Rights
- HIS 468 Readings in African American History
- HIS 469 Black Protest and Leadership in the United States in the Twentieth Century
- PSC 218 African American Political Culture
- PSC 333 African International Relations
- SOC 321 The African American Family
- SOC 351 Sociology of Race and Ethnicity

**D. General Electives (3 cr)**

- AAS 189 Topics Course
- AAS 389 Topics in African And American American Studies
- AAS 488 Internship
- AAS 495 Special Project
- AAS 499 Independent Study

Or any class from B and C

---

**Aging Minor**

**AGE Psychology Department**

Classroom Building C312, 878-6215

The Aging Minor draws together courses from a number of academic disciplines around the theme of human aging. Students will learn about physical, social, and psychological changes that occur in adulthood; ways of addressing older adults’ needs; and how to promote successful aging.

The Aging Minor is an interdisciplinary minor. The following academic departments are involved in the minor: Anthropology, Biology, Health and Wellness, Psychology, Social Work, and Sociology. The Aging Minor is open to majors from any department and is seen as complementing the training the student receives in his or her major.

**Objectives of the Minor:**

- Students will acquire a core foundation in the study of aging as an interdisciplinary field.
- Students will have an individualized experience in the field of aging that is tailored to their unique interests and for career goals.
- Students will understand the breadth of the field of aging by being able to select from a broader array of elective coursework that reflects the multiple disciplines in the study of aging.

**Requirements of the Aging Minor:**

- Since the minor is interdisciplinary, the requirement that a minor cannot be taken from the same discipline as a student’s major program does not apply. However, in keeping with the spirit of this requirement, no course used for the aging minor can be used towards fulfilling the major requirements.
- Students must have a minimum 2.0 average for admission into the minor.
- A maximum of 3 courses of transfer credit will be permitted.

**Total Required Credit Hours** 21 cr

**Required Courses (6 cr + 0-3 credits prerequisites)**

1. PSY 327 Adult Development and Aging I (prerequisite: PSY 101)
   - or SOC 352 Sociology of Aging (prerequisite: SOC 100)
   - or HEW 345 Wellness, Fitness, and Aging

2. XXX 499 Independent Study
   - or XXX 495 Independent Project
   - or XXX 488 Internship
   - Taken from any department, but must deal with aging issue

**Electives (12 - 15 cr, including prerequisites)**

Courses to be selected from among the following:

- ANT 327 Introduction to Medical Anthropology
- BIO 308 Human Anatomy and Physiology
- HEW 345 Wellness, Fitness, and Aging
- PSY 327 Adult Development and Aging I
- PSY 388 Psychology of Death and Dying
- PSY 427 Adult Development and Aging II
- SOC 352 Sociology of Aging
- SWK 320 Social Service Organizations
- SWK 321 Elderly and Social Services

**Notes:**

- Elective courses must be taken from at least two departments.
- If HEW 345, PSY 327, or SOC 352 is used as the required course, it cannot be used as a minor elective course.
- Courses used for the Aging Minor cannot be used to fulfill major requirements.
- Aging Minor requires 21 credit hours, including prerequisites. The minor elective courses vary in terms of their prerequisites, with some

---
having no prerequisites, or only upper division status. Because prerequisites count toward the 21 credits of the minor, the number of aging elective courses a student can choose will depend on the course.

**ANTHROPOLOGY MINOR**

ANT
Anthropology Department
Classroom Building B107, 716-878-6110

Anthropology is the exploration of what it means to be human. 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 minor exposes students to the primary subdivisions within the field: archaeology, cultural anthropology, folklore, linguistics, and physical anthropology. The minor in anthropology can complement all majors, for example in forensic science, social sciences, museum work, social services, education, government, and market research.

**Total Required Credit Hours** 18 cr

Required Courses (6 cr)
- ANT 100 Human Origins
- ANT 101 Understanding Culture

Electives (12 cr)
One upper division physical anthropology or archaeology course.

One upper division cultural anthropology course.

Two other upper division courses under advisement.

Please visit our website at http://anthropology.buffalostate.edu

**APPAREL CONSTRUCTION AND PATTERNMAKING MINOR**

ACP
Fashion and Textile Technology Department
Technology Building 303, (716)878-3478

The 18-credit minor consists of six classes focusing on the techniques and skills required to draft and create original garment designs. This program will introduce students to the processes and technology associated with fashion design as well as the creative and technical considerations of the apparel industry. Students will have the opportunity to design and create their own apparel using different equipment and software programs. The apparel construction and patternmaking minor creates opportunities for interdisciplinary specialization. For instance, a theater major could look into a career in costume design and development; a fiber arts major could learn how to express their designs in wearable art. This minor is open to all students not majoring in fashion and textile technology who have completed at least one semester of full-time study at Buffalo State and who are in good academic standing at this institution (2.00 or better G.P.A.). The curriculum is composed of 18 credit hours taken from the fashion and textile technology program and will provide a basic background in the subject area. All of the hours are normally taken at Buffalo State with a maximum of 6 semester hours at the lower division level. A maximum of three courses of transfer credit will be permitted.

**Total Required Credit Hours** 18 cr

Required Courses (18 cr)
- FTT 109 Fundamentals of Apparel Construction
- FTT 224 Pattern Drafting and Grading for Industry
- FTT 324 Industrial Apparel Assembly
- FTT 326 Traditional/Computer Flat Pattern
- FTT 327 2D/3D Computer Patternmaking
- FTT 328 Apparel Design III: Draping

**ART HISTORY MINOR**

ARH
Fine Arts Department
Upton Hall 502, 878-6697

Recognizing the value of a historical knowledge of the visual arts for students majoring in other disciplines, the Fine Arts Department offers an academic minor in art history.

**Total Required Credit Hours** 21 cr

Required Courses (21 cr)
- FAR 250 Art History I
- FAR 251 Art History II

Ancient  Choose 1
- FAR 354 Art and Culture of Greece
- FAR 355 Art and Culture of Rome

Medieval  Choose 1
- FAR Early Medieval Art
- FAR Late Medieval Art
- FAR Art of the Middle Ages

Renaissance and Baroque  Choose 1
- FAR Early Renaissance Art in Italy
- FAR High Renaissance and Mannerism
- FAR Italian Baroque Art
- FAR Baroque Art of Northern Europe

Nineteenth and Twentieth Centuries  Choose 1
- FAR Nineteenth Century Art
- FAR Twentieth Century Art
- FAR Art After 1940
- FAR American Art

Non-Western Art  Choose 1
- FAR Art and Culture of Islam
- FAR Introduction to Asian Art
- FAR Indian Art
- FAR Art of China and Japan

Electives (0 cr)

**ASIAN STUDIES MINOR**

ASI
History and Social Studies Education
Classroom Building C205, (716)878-6216

Asian Studies, an Interdisciplinary Minor, is intended to enhance and broaden the academic experience of students majoring in many academic or professional programs at Buffalo State. It provides students with the opportunity to acquire the knowledge and experience to appreciate the richness of Asian civilization, to relate professionally with Asians, and to deal competently with Asia-related concepts and issues. The Asian Studies Minor serves to prepare students for professions requiring a fundamental knowledge of Asian society or for future graduate work in Asian-related fields of study. The program allows students either to attain
A broad overview of Asian civilization or to focus more specifically on a particular region or field of interest. Students should apply for the minor after completing any one of the required courses with a grade of C or better.

**Total Required Credit Hours** 18 cr

### Language Requirement (6 cr)*

- CHI 101 Beginning Chinese I
- CHI 102 Beginning Chinese II

### Required Courses (6 cr)

Select two of the following:

- GEG 360 Geography of Asia
- FAR 375 Introduction to Asian Art
- HIS 307 History of India
- HIS 310 History of East Asia: The Traditional Era
- HIS 320 Modern History of Japan and Korea
- HIS 338 Modern History of China
- HIS 460 Patterns of History in Southeast Asia

### Interdisciplinary Electives (6 cr)**

Select two of the following:

- NFS 108 Food Culture and Civilization in the Far East
- SOC 208 Sociology of Contemporary China
- HIS 210 Modern Asia
- ANT 306 Peoples of Asia
- PHI 324 Zen Buddhism
- FAR 376 Indian Art
- FAR 377 Art of China and Japan
- GEG 461 Issues in Southeast Asia Environment and Sustainable Development

*At least six credit hours of Asian language study other than Chinese (e.g., Japanese, Korean, Malay, Thai, Hindi) completed elsewhere may be accepted to satisfy this requirement. Alternatively, at least six credit hours of service learning or other credit bearing programs of study in Asia may be accepted as a substitute for the language requirement.

**Students may take one lower division elective from the Interdisciplinary Electives category.

---

**Elective Option 2:**

Three courses from the list above AND an approved sequence in Physics, either PHY 107/PHY 108 (6 cr) or PHY 111/PHY 112 (8 cr). Note: a single Physics course cannot be applied to the minor.

---

### ASTRONOMY

**AST**

Earth Science and Science Education Department

Science Building 271, 878-6731

The astronomy minor program allows students to expand their interest in outer space and celestial bodies into a richly rewarding, lifelong vocation. This program may provide a Physics student with the initial knowledge base for a career in astronomy or prepare a student interested in Science Secondary Education for a career in Planetarium Education. The program is supported by two faculty and staff members and by the Whitworth Ferguson Planetarium.

**Total Required Credit Hours** 18-20 cr

### Required Courses (3 cr)

- GES 131 Introductory Astronomy

### Elective Option 1: All of the following (15 cr)

- GES 331 Modern Solar System
- GES 332 Stellar and Galactic Astronomy
- GES 335 Methods of Observational Astronomy
- GES 339 Cosmology
- GES 431 Planetarium Seminar

---

### BIOLOGY MINOR

**BIO**

Biology Department

Science Building 261, 878-5203

The Minor in Biology (20 credits) is designed for students majoring in another department who would like to develop an additional focus of study by completing a set of courses in Biology. This option may be appropriate for students in a wide range of fields. Chemistry majors with an interest in biochemistry could profit from more background in cellular and molecular biology. Earth Science majors with an interest in paleobiology could select courses in organismal biology, ecology and evolution. Pre-health students not majoring in Biology can use the Biology Minor as an opportunity to take a coherent set of courses to prepare for entrance exams (e.g., the MCAT). The Biology Minor is also appropriate for students whose major is not in the natural sciences. For example, students interested in careers in technical writing or journalism, or students planning a career as a lawyer specializing in environmental or biotechnology issues could benefit from a minor in Biology.

**Total Required Credit Hours** 20 cr

### Required Courses (12 cr)

- BIO 111 Introduction to Biology (4)
- BIO 212 Introduction to Organismal Biology and Diversity (4)
- BIO 213 Introduction Ecology, Evolution, Behavior (4)

### Electives (8 cr)

An additional 8 credit hours of 300-400 level coursework selected with the assistance of a Biology faculty advisor. Coursework may include any combination of 300-400 level Biology "majors" courses (i.e., biology courses required for the Biology BA) except as explained below.

Please note the following restrictions:

1. At least three courses must be taken at Buffalo State.

The following cannot be applied to the Biology minor: BIO 100, BIO 101, BIO 104, BIO 210, BIO 488 (Internship), BIO 495 (Project), or BIO 499 (Independent Study)

BIO 308/309 Human Anatomy and Physiology are allowed as electives in the minor even though they are not allowed in the Biology BA program.

A maximum of 1 credit of Biology seminar (BIO 361/362) is allowed.

A maximum of 3 transfer courses (12 credits maximum) will be accepted as part of the Biology minor. The Department Chairperson will judge the acceptability of transfer courses.

A student considering the Biology minor should check for prerequisite requirements when planning the program. Prerequisite requirements are listed in the Undergraduate Catalog.

---

### BUSINESS ECONOMICS MINOR

**BEC**

Economics and Finance Department

Classroom Building B207, 716-878-4606

**Total Required Credit Hours** 21 cr

### Required Courses (9 cr)

- ECO 201 Principles of Macroeconomics
- ECO 202 Principles of Microeconomics
- ECO 305 Statistics for Economics

(May substitute MAT 311)
Electives (12 cr)
ECO 304 Money and Banking
ECO 307 Intermediate Microeconomics
ECO 308 Intermediate Macroeconomics
FIN 314 Corporation Finance
ECO 320 Managerial Economics
ECO 325 Industrial Organization
ECO 350 Public Finance
ECO 424 Econometrics
FIN 345 Estate Planning
FIN 370 Technical Analysis of Financial Markets

Important policy reminder: Current College policy states that a maximum of 3 courses from a student’s academic major can be used to fulfill the requirements of a minor. For example, if a Business major earns the credits for the required Business courses of Principles of Macroeconomics, Economic Statistics and Corporation Finance, only THREE of these courses can be used to satisfy the requirements of an Economics Minor.

**CHEMISTRY MINOR**

CHE Chemistry Department
Science Building 267, 716-878-5204

All students interested in earning a minor in chemistry must complete one year of general chemistry and at least one semester of organic chemistry with lab. In addition, another eight (8) credit hours must be selected by advisement and in accordance with each student’s background and interests. Many chemistry courses have prerequisites, so care must be taken when taking elective courses.

**Total Required Credit Hours** 20 cr

Required Courses (12 cr)
- CHE 111 Fundamentals of Chemistry I (4)
- CHE 112 Fundamentals of Chemistry II (4)
- CHE 201 Organic Chemistry I (3)
- CHE 203 Organic Chemistry Laboratory I (1)

or, instead of CHE 201 and 203, a student may substitute:
- CHE 321 Principles of Organic Chemistry (4)

Electives (8 cr)
- CHE 202 Organic Chemistry II
- CHE 204 Organic Chemistry Laboratory II (1)
- CHE 300 Chemistry & Medicine
- CHE 301 Analytical Chemistry (4)
- CHE 310 Literature of Chemistry (1)
- CHE 315 Environmental Chemistry
- CHE 331 Principles of Physical Chemistry

or
- CHE 305 Physical Chemistry I
- CHE 306 Physical Chemistry II
- CHE 307 Physical Chemistry Laboratory I (1)
- CHE 308 Physical Chemistry Laboratory II (1)
- CHE 322 Biological Chemistry (4)

or
- CHE 470 Biochemistry I
- CHE 360 Introduction to Inorganic Chemistry
- CHE 403 Instrumental Analysis (4)
- CHE 462 Advanced Inorganic Chemistry
- CHE 471 Biochemical Techniques (2)

COACHING MINOR

COA Coaching and Physical Education
Classroom Building A113, 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** 18 cr

Required Courses (9 cr)
- HPR 300 Principles, Philosophy and Organization of Athletics in Education
- HPR 335 Care and Prevention of Athletic Injuries OR
- HEW 310 Health Standards and Emergency Care
- HPR 309 Health Sciences for Coaching

Electives (6 cr)
- HPR 201 Specialty Sports
- HPR 202 Soccer
- HPR 203 Football
- HPR 205 Track and Field
- HPR 207 Baseball / Softball
- HPR 208 Swimming
- HPR 209 Basketball
- HPR 488 Internship

Electives in Area Related to Coaching (3 cr)
- HPR / HEW 301 Kinesiology
- HPR 319 Sociology of Sport
- PSY 325 Social Behavior
- HEW 320 Psychoactive Drugs and Health
- HEW 425 Alcohol Problems
- BUS 368 Sport Management and Marketing

COMPUTER INFORMATION SYSTEMS MINOR

CIS Computer Information Systems Department
Technology Building 203, 716-878-5528

The Minor in CIS is a good complement to any major whose graduates will interact with computerized information systems. Interested students should take CIS 151, and earn at least a 2.0, before applying for the minor. Students with a 2.0 or better in a transfer course equivalent to CIS 151 can declare the minor at any time.

**Total Required Credit Hours** 18 cr

Required Courses (6 cr)
- CIS 151 Computer-based Information Processing I
- CIS 251 Computer-based Information Processing II

Electives (12 cr)
**Creative Studies Minor**

**CRS International Center for Studies in Creativity**

Chase Hall 244, (716)878-6223

Creativity is an effective resource that resides in all people and within all organizations. Our more than 30 years of research has conclusively demonstrated that creativity can be nurtured and enhanced through the use of deliberate tools, techniques, and strategies. Through our undergraduate courses, our students develop essential life skills that they can apply to their personal and professional lives.

Some of the core competencies developed through the undergraduate minor include:
- Expertise in facilitating problem-solving teams
- Enhanced ability to manage diverse groups
- Ability to develop, implement, and support an environment that nurtures creative thinking
- Learn a practical skill set for individual and group problem solving
- Ability to use problem solving tools to define complex problems, to generate creative solutions, and to transform solutions into action
- Learn theories and models for managing and coping with change in a complex world
- Increased effectiveness in decision making
- Sound theoretical base for understanding creativity
- Learn strategies to nurture the creative talent of others
- Enhanced leadership capabilities

**Total Required Credit Hours** 18 cr

**Required Courses (15 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRS 205</td>
<td>Introduction to Creative Studies</td>
</tr>
<tr>
<td>CRS 302</td>
<td>Creative Approaches to Problem Solving</td>
</tr>
<tr>
<td>CRS 303</td>
<td>Creative Leadership through Effective Facilitation</td>
</tr>
<tr>
<td>CRS 304</td>
<td>Developing Creative Problem Solving Skills</td>
</tr>
<tr>
<td>CRS 320</td>
<td>Applications of Creativity and Innovation</td>
</tr>
</tbody>
</table>

**Electives (3 cr)**

Plus 3 credit hour approved elective

To apply for the Creative Studies minor or for additional information about these courses, contact Mike Fox.

**Dance Minor**

**DAN Theater Department**

Savage Building 222, 878-6416

Buffalo State offers a bachelor of arts degree in arts and letters with a concentration in dance. Students receive a liberal arts education with dance as the primary course of study. The dance program also offers a 21-credit-hour minor. This minor is rigorous and highly selective. It is meant to enhance a major where the study of dance in art, science, education, and culture is critical.

In addition, the dance program offers a course of study for the dance enthusiast and advocate. This series satisfies Buffalo State’s mission to provide quality liberal arts study through the Intellectual Foundations program.

The dance minor is designed for students with previous experience. The program focuses on studio techniques, theory, history, and composition. Students who enter the dance minor with appropriate prior dance training will not be required to accrue credits in lower-division studio technique courses. Only six credits of lower-division courses may be applied to the 21-credit-hour dance minor. Upper-division courses may be substituted with faculty permission if the student is ready for the next technical level.

**Total Required Credit Hours** 21 cr

**Required Courses (15 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN 224</td>
<td>Dance Appreciation</td>
</tr>
<tr>
<td>DAN 303</td>
<td>Dance Composition</td>
</tr>
</tbody>
</table>

**Lower Division Studio Technique**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN 200</td>
<td>Modern Technique I</td>
</tr>
<tr>
<td>DAN 220</td>
<td>Ballet Technique I</td>
</tr>
<tr>
<td>DAN 230</td>
<td>Survey of African-American Dance</td>
</tr>
</tbody>
</table>

**Upper Division Studio Technique**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN 302</td>
<td>Modern Dance Technique II</td>
</tr>
<tr>
<td>DAN 312</td>
<td>Modern Dance Technique III</td>
</tr>
<tr>
<td>DAN 330</td>
<td>Ballet II</td>
</tr>
<tr>
<td>DAN 340</td>
<td>Ballet III</td>
</tr>
</tbody>
</table>

**Electives (6 cr)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN 200</td>
<td>Modern Technique I</td>
</tr>
<tr>
<td>DAN 201</td>
<td>Teaching Creative Movement for Children</td>
</tr>
<tr>
<td>DAN 220</td>
<td>Ballet Technique I</td>
</tr>
<tr>
<td>DAN 230</td>
<td>Survey of African-American Dance</td>
</tr>
<tr>
<td>DAN 234</td>
<td>History of the Black Dance Movement</td>
</tr>
<tr>
<td>DAN 250</td>
<td>Jazz Dance</td>
</tr>
<tr>
<td>DAN 302</td>
<td>Modern Dance Technique II</td>
</tr>
</tbody>
</table>
DAN 312  Modern Dance Technique III  
DAN 320  Rehearsal and Performance (1 cr. Repeatable up to 6 times)  
DAN 330  Ballet II  
DAN 340  Ballet III  
DAN 350  Tap Dance for the Stage: Elementary (1 cr.)  
DAN 401  Teaching Dance  
DAN 450  Tap Dance for the Stage: Intermediate (1 cr.)  
DAN 495  Special Project (1-3 cr.)  
DAN 499  Independent Study (3-6 cr.)  

DESIGN MINOR  
DES  
Design Department  
Upton Hall 212, 716-878-6032  
The Design Department offers a Minor in all four Craft Areas: Ceramics, Fiber/Weaving, Jewelry/Metal, and Wood/Furniture Programs. (Please note that the entry level course in Jewelry/Metal has Des 101 as a prerequisite.)  

Total Required Credit Hours 21 cr  

Required Courses (3 cr) Select one course with advisement  
DES 101  Introduction to 2DI  
DES 103  Introduction to 3DI  

Electives (18 cr) Select 18 credits from one of the following programs:  
Ceramics  
DES 220  Ceramics I  
DES 320  Ceramics II  
DES 321  Ceramics Junior Studio, repeatable  
DES 421  Ceramics Senior Studio, repeatable  

Fibers  
DES 242  Fibers I  
DES 342  Fibers II  
DES 344  Fibers Junior Studio, repeatable  
DES 444  Fibers Senior Studio, repeatable  

Metals/Jewelry  
DES 230  Introduction to Jewelry  
DES 330  Applied Jewelry Techniques  
DES 331  Jewelry Junior Studio, repeatable  
DES 431  Jewelry Senior Studio, repeatable  

Wood/Furniture  
DES 250  Wood Design I  
DES 330  Technical Process in Wood  
DES 351  Wood Junior Studio, repeatable  
DES 451  Wood Senior Studio, repeatable  

Ceramics Advisors: Robert Wood, Upton Hall 129A, 878-4414 woodr1@buffalostate.edu and Colleen Toledano, Upton Hall 130, 878-5154 toledacs@buffalostate.edu  
Fibers Advisor: Jozef Bajus, Upton Hall 413, 878-4133; bajusj@buffalostate.edu  
Metals/Jewelry: Tara Nahabetian, Upton Hall 238, 878-4904 and Steve Saracino, Upton Hall 236A, 878-4730  
Wood/Furniture Advisor: Sunhwa Kim, Upton Hall 256, 878-4768; kims1@buffalostate.edu  

DEVIANCE MINOR  
DEV  
Sociology Department  
Classroom Building B307, 878-5411  
The Minor in Deviance Program introduces students to the sociological analysis of deviance. The program emphasizes courses directly related to deviant behavior and social institutions.  

Total Required Credit Hours 18 cr  

Required Courses (6 cr)  
SOC 100  Introduction to Sociology  
SOC 370  Sociology of Deviant Behavior  

Deviance Electives (9 cr)  
SOC 380  Sociology of Crime  
SOC 381  Sociology of Violence  
SOC 382  Sociology of Law  
SOC 383  Sociology of Punishment/Corrections  
SOC 390  Juvenile Delinquency  
SOC 392  Sociology of Addiction  
SOC 393  Sociology of Mental Illness  

Sociology Electives (3 cr)  
SOC 240  Analyzing Social Problems  
SOC 330  Social Psychology  
SOC 340  Sociology of the City  
SOC 350  Power, Class, and Inequality  
SOC 351  Sociology of Race and Ethnicity  

DIGITAL MUSIC PRODUCTION MINOR  
DMP  
Music Department  
Rockwell Hall 203, 716-878-6401  
The minor in Digital Music Production is an interdisciplinary program that offers hands-on experience in the increasingly relevant field of music technology. It provides students with a comprehensive and up-to-date knowledge of hardware and software tools for electronic music composition, ensemble performance, sound recording and music production. For more information, please contact the DMP minor coordinator and visit http://music.buffalostate.edu/programs/digital  

Total Required Credit Hours 21 cr  

Required Courses (12 cr)  
PHY 103  Understanding Sound  
DMP 221  Introduction to Sound Recording and Reinforcement  
DMP 350  Electronic Music Composition I  
DMP 491  Capstone in Digital Music Production  

Electives (9 cr)  
DMP 321  Recording Techniques  
DMP 331  Intermediate Recording Techniques  
DMP 341  Advanced Recording Techniques  
DMP 351  Electronic Music Composition II  
DMP 450  Real-Time Interactive Computer Music  
COM 312  Basic Media Production  
COM 328  Audio Production  
COM 428  Advanced Audio Production
**ECONOMIC POLICY ANALYSIS MINOR**

**BEC**  
Economics and Finance Department  
Classroom Building B207, 716-878-4606

**Total Required Credit Hours**  21 cr

**Required Courses**  9 cr  
ECO 201  Principles of Macroeconomics  
ECO 202  Principles of Microeconomics  
ECO 305  Statistics for Economics  
(May substitute MAT 311)

**Electives**  12 cr  
ECO 301  Economics of Labor Relations  
ECO 302  Women in the Economy  
ECO 312  Urban Economics  
ECO 325  Industrial Organization  
ECO 350  Public Finance  
ECO 355  Economics of Energy & the Environment  
ECO 403  Comparative Economic Systems  
ECO 404  Economics of Development  
ECO 411  Regional Economics

Important policy reminder: Current College policy states that a maximum of 3 courses from a student’s academic major can be used to fulfill the requirements of a minor. For example, if a Business major earns the credits for the required Business courses of Principles of Macroeconomics, Economic Statistics and Corporation Finance, only THREE of these courses can be used to satisfy the requirements of an Economics Minor.

**ENVIRONMENT AND SOCIETY MINOR**

**ENV**  
Sociology Department  
Classroom Building B307, 878-5411

The Minor in Environment and Society offers students an opportunity for comprehensive interdisciplinary study of “human-environment” interactions, providing the skills to think holistically about environmental problems and solutions. The “Core” courses are particularly geared toward developing an understanding of the environment as socially constructed and interactive rather than as an objective reality.

**Total Required Credit Hours**  18 cr

**Required Courses**  9 cr  
SOC 353  Environment and Society  
HIS 330  U.S. Environmental History  
ENG 247  Nature Writing

**Social Science Electives**  6 cr  
ANT 367  Culture and Ecology  
PSC 305  Environmental Policy  
PSC 306  Politics of Energy  
ECO 355  The Economics of Energy and the Environment  
PSY 370  Environmental Psychology

**Natural Science Electives**  3 cr  
BIO 104  Environmental Biology  
BIO 213  Introduction to Ecology, Evolution, and Behavior  
ENS 300  Environmental Studies  
ENS 100  Urban Environmental Science  
GEG 101  World Natural Environments  
GEG 307  Conservation and Environmental Management  
GEG 478  Global Change  
GES 101  Introductory Geology  
GES 223  Environmental Earth Science  
GES 460  Environmental Field Methods and Analysis

**ENVIRONMENTAL SCIENCE**

**ENV**  
Earth Science and Science Education Department  
Science Building 271, 878-6731

The environmental science minor is designed to provide a broad base of knowledge in the various natural science disciplines that compose environmental science. The minor gives students the background necessary to understand and evaluate complex environmental issues. The program also provides a basic understanding of the interrelationships of the physical, biological, and human dimensions of the environment.

**Total Required Credit Hours**  21-23 cr

**Required Courses** (21-23 cr)  
**Biology:**  3-4 cr (select one)  
BIO 104  Environmental Biology  
BIO 213  Introduction to Ecology, Evolution, and Behavior  (4 cr)

**Physical Environment:**  3 cr (select one)  
GEG 101  World Natural Environments  
GES 101  Introductory Geology

**Seminar:**  3 cr  
ENS 300  Environmental Studies

**Society and Policy:**  3 cr (select one)  
ANT 367  Culture and Ecology  
ECO 355  The Economics of Energy and the Environment  
HIS 330  U.S. Environmental History  
PSC 305  Environmental Policy  
PSY 370  Environmental Psychology  
SOC 353  Environment and Society

**Human Impact on the Environment:**  3 cr (select one)  
ENS 100  Urban Environmental Science  
GES 223  Environmental Earth Science  
SCI 231  Pollution, Environment, and Society

**Environmental Science:**  6-7 cr (select two)  
BIO 315  Ecology  (4 cr)  
CHE 315  Environmental Chemistry  
GEG 307  Conservation and Environmental Management  
GEG 365  Soil Science and Management  
GEG 375  Principles of Hydrology  
GEG 386  Applied Climatology  
GEG 421  Watershed Analysis  
GEG 478  Global Change  
GES 310  Great Lakes Environmental Issues  
GES 350  Environmental Geochemistry  
GES 452  Hydrogeology  
GES 460  Environmental Field Methods and Analysis  
PLN 360  Environmental Impact Assessment
Electives (6 cr)
Required Courses (15 cr)
Total Required Credit Hours

highly recognized certifications in the strength and conditioning industry.
with an exercise science minor will be equipped to successfully pursue
physical therapy, kinesiology, or clinical exercise physiology. Students
fitness, strength and conditioning, or graduate school in applied exercise,
minor will be prepared to pursue longevity and disease prevention. Individuals
This minor emphasizes that physical activity is inextricably linked to

Electives (9 cr)
Required Courses (9 cr)
Total Required Credit Hours

A minimum cumulative GPA of 2.0 is required for admission to the minor
program and at least three of the courses must be completed at SUNY
Buffalo State. Philosophy majors may elect to pursue the Ethics Minor.

Required Courses (21 cr)
Electives (6 cr)
Total Required Credit Hours

The focus is the discovery, preservation and interpretation of material
evidence, emphasizing the significance of context. The application of
findings as evidentiary in legal cases is the goal. The required courses
build on the traditional skills and knowledge of physical anthropology and
field archaeology, with recovery and analysis of fragmentary data and
reconstruction of earlier events as primary proficiencies.

Required Courses (15 cr)
Electives (6 cr - 3 cr lower division and 3 cr upper division)
Other elective courses possible by advisement - consult department.
operations management, epidemiology, criminology, land use planning
GIS applications are found in many fields; such as business planning and operations management, epidemiology, criminology, land use planning and economic development, environmental management and conservation, military operations, emergency management, infrastructure management, transportation planning, operations and management, and library sciences. The list goes on. The GIS minor provides students in any discipline the background and skills to use the technology to support decisions in their field of interest.

The geographic information systems (GIS) minor allows students to gain the depth needed for many of the jobs available today requiring knowledge of spatial analysis and geographic data processing capabilities.

The geographic information systems (GIS) minor allows students to gain the depth needed for many of the jobs available today requiring knowledge of spatial analysis and geographic data processing capabilities. Technical and management skills are needed in many fields: such as business planning and operations management, epidemiology, criminology, land use planning and economic development, environmental management and conservation, military operations, emergency management, infrastructure management, transportation planning, operations and management, and library sciences. The list goes on. The GIS minor provides students in any discipline the background and skills to use the technology to support decisions in their field of interest.

Total Required Credit Hours 18 cr

Required Courses (9 cr)
- GEG / PLN 325 Maps and Mapmaking Using GIS
- GEG 425 Fundamentals of GIS
- GEG 429 Advanced Topics in GIS

Choose three from the following (9 cr)
- GEG 151 Computer-based Information Processing I
- GEG 405 Urban Analysis Using GIS
- GEG 418 Remote Sensing
- GEG 427 Corporate Applications in GIS
- GEG 428 Environmental Assessment & Planning Applications in GIS
- GEG 485 Interactive and Web-based Mapping

French Minor

FRE
Modern and Classical Languages
Bishop Hall 122, 878-5414

Whether you are thinking about an international career or just yearn for a life of travel, a minor in French can prepare you for the world ahead, or signal to employers and graduate schools that you are ready for international opportunities. A minor will provide you with the background and skills to use the technology to support decisions in your field of interest.

Total Required Credit Hours 21 cr

Required Courses (6-18 cr)*
- FRE 301 French Conversation and Composition
- FRE 302 French Conversation and Composition
- FRE 101 French I
- FRE 102 French II
- FRE 201 Intermediate French I
- FRE 202 Intermediate French II

Electives (3-15 cr)

Areas of Advanced Study

Language and Linguistics
- FRE 303 Translation
- FRE 305 Phonetics and Orthography
- FRE 415 Advanced Grammar and Composition
- FRE 416 Advanced Conversation and Composition
- FRE 417 Business French

French Literature and Culture
- FRE 306 Literature and Culture of France: Prehistory to Renaissance
- FRE 307 Literature and Culture of France Renaissance to Revolution
- FRE 308 Literature and Culture of France Nineteenth Century
- FRE 309 Survey of French Literature (Nineteenth and Twentieth Century)
- FRE 411 Studies in French Poetry
- FRE 412 Studies in French Novel
- FRE 413 Studies in French Theater

Francophone Literature and Culture
- FRE 341 Francophone Literature in Translation

*Students who begin with FRE 101 must select one (1) course within any advanced study area. Students who begin with FRE 102 or FRE 201 must select at least two (2) courses within one advanced study area. Students who begin study in FRE 202 or higher must select two courses or more in any two advanced study areas for a total of 21 credits.

Geography Minor

GEG
Geography and Planning
Classroom Building A213, (716)878-6216

The objective of this minor is to acquaint the student with the differences and similarities that exist from place to place on Earth’s surface in both natural and cultural environments. It is designed to accommodate a range of interests from the very general to specific subject matter within geography. Education majors who would be involved with a social science curriculum would also find this minor beneficial.

Total Required Credit Hours 18 cr

Required Courses (12 cr)
- GEG 101 World Natural Environments
- GEG 102 Human Geography
- GEG 325 Maps and Mapmaking using GIS

One of the following Regional courses
- GEG 300 World Regional Geography
- GEG 359 Arctic Geography from an Inuit Perspective
- GEG 360 Geography of Asia
- GEG 362 Geography of the United States & Canada
- GEG 364 Geography of Europe

Electives (6 cr)
Two upper-division Geography courses selected by advisement

Geology

GEO
Earth Science and Science Education Department
Science Building 271, 878-6731

The geology minor requires a broad selection of courses in geology and earth sciences, chosen through advisement. It is designed for a diverse clientele, many of whom desire to strengthen their employability. Candidates for this program may include science majors contemplating a future in geophysics or geochemistry, students in environmental fields with a geological aspect, and students who may wish to be involved in land use planning.

The objective of this minor is to acquaint the student with the differences and similarities that exist from place to place on Earth’s surface in both natural and cultural environments. It is designed to accommodate a range of interests from the very general to specific subject matter within geography. Education majors who would be involved with a social science curriculum would also find this minor beneficial.

Total Required Credit Hours 18 cr

Required Courses (9 cr)
- GEG / PLN 325 Maps and Mapmaking Using GIS
- GEG 425 Fundamentals of GIS
- GEG 429 Advanced Topics in GIS

Choose three from the following (9 cr)
- GEG 151 Computer-based Information Processing I
- GEG 405 Urban Analysis Using GIS
- GEG 418 Remote Sensing
- GEG 427 Corporate Applications in GIS
- GEG 428 Environmental Assessment & Planning Applications in GIS
- GEG 485 Interactive and Web-based Mapping

French Minor

FRE
Modern and Classical Languages
Bishop Hall 122, 878-5414

Whether you are thinking about an international career or just yearn for a life of travel, a minor in French can prepare you for the world ahead, or signal to employers and graduate schools that you are ready for international opportunities. A minor will provide you with the background and skills to use the technology to support decisions in your field of interest.

Total Required Credit Hours 21 cr

Required Courses (6-18 cr)*
- FRE 301 French Conversation and Composition
- FRE 302 French Conversation and Composition
- FRE 101 French I
- FRE 102 French II
- FRE 201 Intermediate French I
- FRE 202 Intermediate French II

Electives (3-15 cr)

Areas of Advanced Study

Language and Linguistics
- FRE 303 Translation
- FRE 305 Phonetics and Orthography
- FRE 415 Advanced Grammar and Composition
- FRE 416 Advanced Conversation and Composition
- FRE 417 Business French

French Literature and Culture
- FRE 306 Literature and Culture of France: Prehistory to Renaissance
- FRE 307 Literature and Culture of France Renaissance to Revolution
- FRE 308 Literature and Culture of France Nineteenth Century
- FRE 309 Survey of French Literature (Nineteenth and Twentieth Century)
- FRE 411 Studies in French Poetry
- FRE 412 Studies in French Novel
- FRE 413 Studies in French Theater

Francophone Literature and Culture
- FRE 341 Francophone Literature in Translation

*Students who begin with FRE 101 must select one (1) course within any advanced study area. Students who begin with FRE 102 or FRE 201 must select at least two (2) courses within one advanced study area. Students who begin study in FRE 202 or higher must select two courses or more in any two advanced study areas for a total of 21 credits.

Geography Minor

GEG
Geography and Planning
Classroom Building A213, (716)878-6216

The objective of this minor is to acquaint the student with the differences and similarities that exist from place to place on Earth’s surface in both natural and cultural environments. It is designed to accommodate a range of interests from the very general to specific subject matter within geography. Education majors who would be involved with a social science curriculum would also find this minor beneficial.

Total Required Credit Hours 18 cr

Required Courses (12 cr)
- GEG 101 World Natural Environments
- GEG 102 Human Geography
- GEG 325 Maps and Mapmaking using GIS

One of the following Regional courses
- GEG 300 World Regional Geography
- GEG 359 Arctic Geography from an Inuit Perspective
- GEG 360 Geography of Asia
- GEG 362 Geography of the United States & Canada
- GEG 364 Geography of Europe

Electives (6 cr)
Two upper-division Geography courses selected by advisement

Geology

GEO
Earth Science and Science Education Department
Science Building 271, 878-6731

The geology minor requires a broad selection of courses in geology and earth sciences, chosen through advisement. It is designed for a diverse clientele, many of whom desire to strengthen their employability. Candidates for this program may include science majors contemplating a future in geophysics or geochemistry, students in environmental fields with a geological aspect, and students who may wish to be involved in land use planning.
contribute to change, now and in the future. A minor in the study of relevant to modern life. Seeing how individuals in the past made choices once lived, and create meaningful interpretations of th

students understand how historians find evidence about the ways people American History or European History. A History minor can help

Classroom Building C205, (716)878

History and Social Studies Education
HIS

**German Minor**

GER Modern and Classical Languages
Bishop Hall 122, 878-5414

Whether you are thinking about an international career or just yearn for a life of travel, a minor in German can prepare you for the world ahead, or signal to employers and graduate schools that you are ready for international opportunities. A minor involves taking six courses, as described below, and can augment your major program.

**Total Required Credit Hours** 21 cr

Required Courses (6-18 cr)*
GER 301 German Conversation and Composition
GER 302 German Conversation and Composition
GER 101 Beginning German I
GER 102 Beginning German II
GER 201 Intermediate German I
GER 202 Intermediate German II

Electives (3-15 cr)

Areas of Advanced Study
GER 337 Modern German Literature in Translation
GER 338 German Film and Related Literature in Translation
GER 339 Modern German Culture
GER 401 Twentieth Century German Literature
GER 450 Directed Readings I
GER 451 Directed Readings II
GER 495 Special Project
GER 497 Workshop

*Students who begin with GER 101 must select one (1) course within the advanced study area. Students who begin with GER 102 must select two (2) courses within the advanced study area. Students who begin with GER 201 must select three (3) courses within the advanced study area. Students who begin with GER 202 or higher must select four (4) or more courses from the advanced study area for a total of 21 credits.

**History Minor**

HIS History and Social Studies Education
Classroom Building C205, (716)878-6216

Students may choose one of two alternatives in the History minor: American History or European History. A History minor can help students understand how historians find evidence about the ways people once lived, and create meaningful interpretations of the past that are relevant to modern life. Seeing how individuals in the past made choices that impact us today, students can better understand how such choices contribute to change, now and in the future. A minor in the study of history can be of great value in a career because students learn to conduct research, write well, and think critically.

**American History Minor**

**Total Required Credit Hours** 18 cr

Required Courses (6 cr)
HIS 106 American Life I
HIS 107 American Life II

Upper Division Electives (12 cr)
Four upper-division American history courses

**European History Minor**

**Total Required Credit Hours** 18 cr

Required Courses (6 cr)
HIS 116 Europe Since 1500
HIS 115 Foundations of Western Civilization
HIS 117 Twentieth Century Europe

Upper Division Electives (12 cr)
Four upper-division European history courses

**Hospitality Administration Minor**

HTR Hospitality Administration Department
{Buckham Hall A238, (716)878-5913

Students are required to take 18 credit hours, distributed in the following manner, to fulfill the requirements of a minor in hospitality and tourism. Courses within the minor provide for both general and specialized preparation.

Admission Requirements:
Hospitality Administration minor guidelines:
-- A minimum cumulative grade point average of 2.0 is required for admission to the hospitality minor program, which consists of 18 credit hours.
-- A maximum of two lower-division (100- and 200-level) courses may be accepted.
-- A maximum of two courses may be transferred.
-- All prerequisite courses for the hospitality major are included in the minor program.
-- Only degree-seeking, matriculated students may be accepted into the minor program.
-- The minor program is not available to students majoring in hospitality administration.

**Total Required Credit Hours** 18 cr

Program Requirements: Students are required to take 18 credit hours, distributed in the following manner, to fulfill the requirements of a minor in hospitality and tourism:

Required Courses (9 cr)
HTR 110 Introduction to Hospitality and Tourism
HTR 368 Hotel Operations
HTR 400 Catering Management

Electives (9 cr)
Choose any three of the following by advisement
HTR 100 Multicultural Foods
HTR 200 Sanitation and Safety in Food Service
HTR 305 Applied Culinary Arts
HTR 330 Fundamentals of Bakeshop Production
HTR 335 Wine Essentials
### INDIGENOUS STUDIES MINOR

**Anthropology Department**

**Classroom Building B107, 716-878-6110**

This interdisciplinary minor includes the cultures, histories, languages, literatures, and contemporary legal and political issues of the indigenous cultures of North America. Electives allow investigation of Central and South America. The Indigenous Studies minor draws on information presented in Anthropology, History, English, Elementary Education and Reading, Geography and Planning, Communication, and Modern and Classical Language courses.

**Total Required Credit Hours** 21 cr

<table>
<thead>
<tr>
<th>Required Courses (15 cr)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 100 Human Origins</td>
<td></td>
</tr>
<tr>
<td>ANT 300 Indigenous Peoples of Western North America OR</td>
<td></td>
</tr>
<tr>
<td>ANT 301 Indigenous Peoples of Eastern North America</td>
<td></td>
</tr>
<tr>
<td>ENG 353 Native American Literature</td>
<td></td>
</tr>
<tr>
<td>HIS 349 History of American Indians</td>
<td></td>
</tr>
<tr>
<td>Plus 3 credits</td>
<td></td>
</tr>
<tr>
<td>Internship, independent project, OR independent study related to Indigenous peoples of the Americas in a participating department including Anthropology, History &amp; Social Studies Education, Geography &amp; Planning, English, Elementary Education &amp; Reading, Modern &amp; Classical Languages &amp; Communication.</td>
<td></td>
</tr>
</tbody>
</table>

**Electives (6 cr - 3 cr lower division and 3 cr upper division)**

| ANT 300 or Indigenous Peoples of Western/Eastern North America |  |
| ANT 301* Mesoamerican Archaeology |  |
| ANT 310 Archaeology of North America |  |
| ANT 341 Indigenous Art of North America |  |
| GEG 359 Arctic Geography from an Inuit Perspective |  |
| HIS 385 Aztec & Maya History |  |
| HIS 386 History of the Inca Empire |  |
| SSE 350 / Peoples of the Longhouse |  |
| HIS 500 |  |

**NOTE:** Anthropology majors may count ONLY ANT 101 for both this minor and the major program. *Whichever course is not taken is part of the required courses. Please visit our website at http://anthropology.buffalostate.edu

### INTERNATIONAL ECONOMICS MINOR

**Economics and Finance Department**

**Classroom Building B207, 716-878-4606**

**Total Required Credit Hours** 21 cr

<table>
<thead>
<tr>
<th>Required Courses (9 cr)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 201 Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ECO 202 Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECO 305 Statistics for Economics</td>
<td></td>
</tr>
<tr>
<td>(May substitute MAT 311)</td>
<td></td>
</tr>
</tbody>
</table>

**Electives (12 cr)**

| ECO 307 Intermediate Microeconomics |  |
| ECO 308 Intermediate Macroeconomics |  |
| ECO 400 International Finance |  |
| ECO 401 International Trade |  |
| ECO 403 Comparative Economic Systems |  |
| ECO 404 Economics of Development |  |

Important policy reminder: Current College policy states that a maximum of 3 courses from a student’s academic major can be used to fulfill the requirements of a minor. For example, if a Business major earns the credits for the required Business courses of Principles of Macroeconomics, Economic Statistics and Corporation Finance, only THREE of these courses can be used to satisfy the requirements of an Economics Minor.

### INTELLIGENCE ANALYSIS MINOR

**Criminal Justice Minor**

**Classroom Building C114, 716-878-4517**

Intelligence Analysis, as an academic minor area of study, provides students with an understanding of the theoretical, conceptual, and technological dimensions of intelligence analysis. The intelligence community seeks people who have an interest in history, local and national government, current world events, geographic and planning knowledge, as well as those who are curious and think broadly and critically about a problem. Through a multidisciplinary course of study, students will gain an extensive understanding of local, regional, national, and international issues that will enhance their analysis of critical problems.

The Intelligence Analysis minor is open to all students at Buffalo State who have a GPA of 2.5 or better. The Intelligence Analysis Minor is intended to provide a structured intellectual framework for students interested in pursuing analyst careers in government intelligence agencies, military intelligence or law enforcement. The minor may also appeal to the traditional liberal arts student who is interested in a multidisciplinary, analytical program of study. Elective classes in the minor are grouped into two tracks (national security and crime analysis) depending on student interests and career goals. The minor consists of 21 credit hours taken from a multidisciplinary mix of departments. No more than 6 credit hours of lower division work may be applied to the minor program. A maximum of three courses of transfer credit will be permitted. Intelligence Analysis (Minor)

**Total Required Credit Hours** 21 cr

<table>
<thead>
<tr>
<th>Required Courses (12 cr) - All four courses required</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ 250 Introduction to Intelligence Analysis</td>
<td></td>
</tr>
<tr>
<td>CRJ 355 Crime Analysis</td>
<td></td>
</tr>
<tr>
<td>CRJ 450 Terrorism</td>
<td></td>
</tr>
<tr>
<td>CRJ 455 Advanced Intelligence Analysis</td>
<td></td>
</tr>
</tbody>
</table>

**Electives (9 cr; no more that 3 credit hours of lower division coursework may be selected)**

**National Security Track - select 3 courses**

| GEG 102 Human Geography |  |
| GEG 325 Maps and Mapmaking using GIS |  |
| HIS / PSC 313 Politics and History of the Middle East |  |
| HIS 372 American Foreign Policy in the Far East |  |
| PHI 103 Introduction to Logic |  |
| PSC 230 International Relations |  |

**X**
ITALIAN MINOR

ITA
Modern and Classical Languages
Bishop Hall 122, 878-5414

Whether you are thinking about an international career or just yearn for a life of travel, a minor in Italian can prepare you for the world ahead, or signal to employers and graduate schools that you are ready for international opportunities. A minor involves taking six courses, as described below, and can augment your major program.

Total Required Credit Hours 21 cr

Required Courses (6-18 cr)*
ITA 301 Italian Conversation and Composition
ITA 302 Italian Conversation and Composition
ITA 101 Beginning Italian I
ITA 102 Beginning Italian II
ITA 201 Intermediate Italian I
ITA 202 Intermediate Italian II

Electives (3-15 cr)
Areas of Advanced Study
ITA 306 The Civilization of Italy
ITA 307 Survey of Italian Literature
ITA 308 Survey of Italian Literature
ITA 336 Modern Italian Literature in Translation
ITA 401 Dante’s Divina Commedia
ITA 406 Nineteenth Century Italian Literature
ITA 410 Modern Italian Literature
ITA 450 Directed Readings I
ITA 451 Directed Readings II

*Students who begin with ITA 101 must select one (1) course within the advanced study area. Students who begin with ITA 102 must select two (2) courses within the advanced study area. Students who begin with ITA 201 must select three (3) courses within the advanced study area. Students who begin with ITA 202 or higher must select four (4) or more courses from the advanced study area for a total of 21 credits.

**Courses in English translation must have the readings done in Italian, exams and papers must be written in Italian for credit towards minor.

LEADERSHIP MINOR

LDR
International Center for Studies in Creativity
Chase Hall 244, (716)878-6223

The leadership minor program is designed for all students interested in studying and applying leadership theory and practice. The leadership minor supports the mission of Buffalo State in preparing a diverse population of students for leadership roles and responsibilities in a challenging world. The minor serves as a nexus for connecting and integrating the insights of a variety of disciplines in understanding the complex phenomenon of leadership. Out of multiple modes of inquiry, students acquire frameworks that guide creative and critical thinking, and inform the practice of leadership in relevant contexts.

Total Required Credit Hours 18 cr

Required Courses (12 cr)
CRS / UNC Foundations of Leadership
201
CRS 302 Creative Approaches to Problem Solving
CRS 303 Creative Leadership through Effective Facilitation
CRS / UNC/ BUS 435 Experiences in Leadership

INTERNATIONAL RELATIONS MINOR

IRE
Political Science Department
Classroom Building B218, 716-878-6116

The international relations minor primarily focuses on the interactions and interconnectedness of nation-states at the international level, but also encompasses other participants in international affairs, such as international organizations, non-governmental organizations, sub-national entities, and individual citizens. The minor emphasizes the conceptual and methodological tools used to examine international relations and investigates the crucial global issues and agendas of our time. These global issues include international and local conflicts, terrorism, international trade and economic integration, international development, global issues, and the protection of human dignity.

Students will be challenged with evaluating opposing worldviews and contentious issues. Upon the completion of this program, students will be better prepared to enter into a professional career or further their education, armed with analytical thinking and writing skills, and develop a broader and more informed vision of international relations.

Total Required Credit Hours 18 cr

Required Courses: Choose one (3 cr)
PSC 230 International Relations
PSC 330 American Foreign Policy
GEG 300 World Regional Geography

Electives (9 cr)
Must select at least one International Relations course and one Comparative Politics course
International Relations and Comparative Government
PSC 302 International Conflict and Peaceful Resolution
PSC 303 Environmental Policy
PSC 304 International Organizations and International Law
PSC 305 International Political Economy
PSC 333 African International Relations
AAS 333
PSC 336 Latin America in World Politics
PSC 337 The Politics of Globalization

Comparative Politics
PSC 240 European Political Systems
PSC 340 Politics of Developing Countries
PSC 341 Government, Politics, and Policies of the European Union
PSC 345 Politics and History of the Middle East
HIS 313
Electives must be chosen from two different skill areas (Ability to Interact Socially, Critical Evaluation and Systematic Thinking, Empowerment, or Diversity) identified as critical to effective leadership. One of the chosen electives must be an upper-level elective. Select two classes from the following:

**Electives (6 cr)**

**Ability to Interact Socially**
- COM 306  Public Speaking*
- ENG 300W  Writing for the Professions
- SPC 205  Introduction to Oral Communication
- SPC 311  Intercultural Communication
- SWK 105  Interpersonal Relations

**Critical Evaluation and Systematic Thinking**
- BUS 360  Principles of Management
- COM 321  Rhetorical Criticism
- PHI 103  Introduction to Logic
- PHI 106  Critical Thinking
- PHI 310  History of Ethics*

**Empowerment**
- BUS 426  Creative Opportunities in Leadership and Management Practices
- PSY 365  Psychology in the Workplace*
- SOC 331  Sociology of Group Dynamics*
- SPC 205  Introduction to Oral Communication
- SPC 307  Group Communication

**Diversity**
- BUS 305  Workforce Diversity in the 21st Century
- HIS / SSE 363  American Identity in Transition: Diversity & Pluralism in the US
- PSC 230  International Relations
- SOC 312  Women in Society

* Indicates courses with prerequisites

---

**LEGAL STUDIES MINOR**

LGL  Political Science Department

**Classroom Building B218, 716-878-6116**

The legal studies minor is designed to prepare students for successful admission to law school by exposing students to a variety of subjects and providing a balance in students’ educational experiences. Selecting courses from among those offered through the legal studies minor helps students develop oral and written communication proficiency, as well as acquire knowledge of legal history, theory, and philosophy. The Moot Court capstone course requires students to use analytical and problem-solving skills to construct factually sound and logically consistent oral arguments.

**Total Required Credit Hours** 18 cr

**Required Courses (6 cr)**
- PSC 250  Introduction to Law
- PHI 103  Introduction to Logic
- PHI 107  Introduction to Mathematical Logic

**Electives (9 cr)**
Electives must be selected from at least two different departments
- BUS 334  Business Law I
- BUS 335  Business Law II

---

**LITERARY STUDIES MINOR**

ENG  English Department

Ketchum Hall 326, 716-878-5416

On the assumption that there is a correlation between mastery of language and success in virtually every field, the English Department devised a minor curriculum intended to strengthen student abilities in several areas connected with language. First and foremost, the minor in Literary Studies places an emphasis on training persons to communicate lucidly, purposefully, and concisely, whether they be writing for a livelihood or using the skill as an adjunct to another expertise. The study of literature is also recognized for its ability to acquaint persons with the world and all the aspects of human experience and to enable them to understand and make value judgments without having to acquire the knowledge empirically themselves.

**Total Required Credit Hours** 18 cr at least 12 cr upper division

**Required Courses (3 cr)**
- ENG 190  Introduction to Literary Interpretation

**Electives (15 cr)**
- 3 units in British Literature
- 3 units in American Literature
- 3 units in World Literature
- 6 units in English Literature

* One of the literature electives must be a course in literature before 1900, to be chosen by advisement.

** With the adviser’s approval, ENG 370 Foundations of Language, ENG 380 The History of the Printed Book, ENG 390 Literary Criticism and Theory, or a literature course from another department may be used in place of one of the two English Literature electives.
MATHEMATICS MINOR

MAT
Mathematics Department
Bishop Hall 317, 878-5621

Total Required Credit Hours 20-23 cr

Required Courses (11-14 cr)
Select one of the following
MAT 126  Applied Calculus
or
MAT 161*  Calculus I 4-5 hours

Select one of the following
MAT 127  Applied Calculus II
or
MAT 162*  Calculus II 4-5 hours

Select one of the following
MAT 202  Introduction to Linear Algebra
or
MAT 270  Discrete Mathematics I
or
MAT 263*  Calculus III 3-4 hours

*MAT 161, MAT 162, and MAT 263 have one-hour co-requisites, MAT 163, MAT 164, MAT 264, respectively.

Electives (9 cr) Choose 9 credit hours from the list below. All courses are 3 credit hours. Prerequisites are noted in parentheses.
MAT 300  Techniques of Proof (MAT 162)
MAT 301W  Fundamentals of Abstract Algebra ((MAT 202 and MAT 270) or (MAT 300))
MAT 302  Abstract Algebra II (MAT 301W)
MAT 309  Discrete Mathematics II (MAT 270)
MAT 315  Differential Equations (MAT 162 or Permission of Instructor)
MAT 316  Intermediate Differential Equations (MAT 315)
MAT 322W  Modern Geometry (MAT 270 or MAT 300)
MAT 325  Probability and Statistics ((MAT 127 or MAT 162) and MAT 270 or Permission of Instructor))
MAT 351  Elementary Theory of Numbers
MAT 370  Applied Networks ((MAT 202 and MAT 270) or MAT 300))
MAT 381  Probability Theory (MAT 270 and MAT 162) Credit will not be awarded for both MAT 325 & MAT 381
MAT 382  Topics in Mathematical Statistics (MAT 263 and MAT 381)
MAT 383  Applied Statistics (MAT 382 and MAT 325)
MAT 390  Introduction to Operations Research (MAT 202)
MAT 401  Introduction to Computability (MAT 270 and either MAT 301W or MAT 351)
MAT 404  Applications of Linear Algebra (MAT 162 and MAT 202)
MAT 411  Complex Variables (MAT 263)
MAT 417  Introduction to Real Analysis I (MAT 263)
MAT 418  Introduction to Real Analysis II (MAT 417)
MAT 431  Mathematical Logic (MAT 300)
MAT 461  Numerical Analysis (MAT 162 and MAT 202)

METEROLOGY AND CLIMATOLOGY MINOR

MTC
Geography and Planning
Classroom Building A213, (716)878-6216

The meteorology and climatology minor may add a useful dimension to the student’s major (e.g., a communications major positioning themselves to work as a broadcast meteorologist, or a chemistry major interested in the implications of weather on air quality, or a psychology/health and wellness major acquiring the needed background to understand the role of weather on our mental and physical health), positioning a student for a possible alternative career option, or taken simply because the student has an interest in weather and climate.

Total Required Credit Hours 18 cr

Required Courses (6 cr)
GEG 101  World Natural Environments
GEG / GES  Meteorology 241

Choose three from the following (9 cr)
GEG 303  Global Climatology
GEG 382  Weather Forecasting
GEG 383  Severe and Unusual Weather
GEG 384  Atmospheric Science
GEG 385  Paleoclimatology
GEG 386  Applied Climatology

Choose one from the following (3 cr)
Any course not selected to fulfill the above requirements
GEG 375  Principles of Hydrology
GEG 478  Global Change
GEG 480  Air Pollution Applications
GEG 488  Internship
GEG 499  Independent Study

MUSEUM STUDIES MINOR

MST
History and Social Studies Education
Classroom Building C205, 878-5412

The minor in museums studies is designed to provide students with the knowledge and expertise to work in the museum setting. It supplements majors in the School of Natural and Social Sciences and the School of Arts and Humanities. An important feature is its flexibility, allowing students to customize the program according to individual interests. It offers three specialization possibilities: administration, curation, and archival/technology. The minor will complement the studies of history, anthropology, art history, geography, music, planning, art education, social studies education and others. It offers students the opportunity to develop interests in history through material culture, and curation and exhibition design. The minor reflects the mission of the History and Social Studies Education department and the college in that it allows students to explore career options by working for cultural institutions and not-for-profit agencies through internships and to prepare for advanced graduate study. Students choose one of three Tracks: Administration Specialization, Curation Specialization, and Archival/Technology Specialization.
## Total Required Credit Hours

<table>
<thead>
<tr>
<th>Required Courses (6 cr)</th>
<th>Electives (6 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIS 380</strong> Introduction to the Museum</td>
<td><strong>CRS 302</strong> Creative Approaches to Problem Solving</td>
</tr>
<tr>
<td><em>(Prerequisite for all other courses)</em></td>
<td><strong>HIS 450</strong> Museum Internship <em>(6 cr with approval)</em></td>
</tr>
<tr>
<td><strong>HIS 419</strong> Curatorship</td>
<td><strong>HIS / SSE 488</strong> Internship</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td><strong>HIS 420</strong> Administration of the Historical Agency or Art Museum</td>
<td></td>
</tr>
</tbody>
</table>

## Specialization Electives (Choose one track: 9 cr)

**Administration Specialization**

- **AED 200** Fundamentals of Art Inquiry and
- **AED 315** Arts in Living
- **ANT 307** Urban Anthropology
- **COM 210** Converged Media Writing
- **COM 301** Principles of Public Relations and Advertising
- **ECO 201** Macroeconomics and
- **FIN 314** Corporation Finance
- **ENG 300** Writing for the Professions
- **HIS 381** The Role of the History Museum
- **PLN 315** Principles of Urban and Regional Planning

**Curation Specialization**

- **ANT 100** Human Origins and
- **ANT 312** Archaeology of North America or
- **ANT 377** Ancient Civilizations
- **ATS 320** Introduction to Art and Therapy and
- **ATS 325** Art for Children with Special Learning Needs
- **FAR 250** Art History I or
- **FAR 251** Art History II and
- **FAR 362** Nineteenth Century Art
- **FTT 206** Introduction to Textiles and
- **FTT 349** History of Textiles
- **FTT 348** History of Costume
- **MUS 305** Modern Jazz and
- **MUS 306** Urban Blues and Rock
- **HIS 425** Museum Preservation and Practice
- **HIS 468** Readings in African American History
- **THA 337** Set Design I

**Archival/Technology Specialization**

- **CIS 370** Systems Analysis and Design and
- **CIS 411** Database Systems

### TOTAL REQUIRED CREDIT HOURS

21 cr

---

## PAINTING MINOR

**PTG**

Fine Arts Department

Upton Hall 502, 878-6697

It is often desirable for students in areas such as art education and design to pursue a concentrated, but not all-encompassing, study of an art discipline outside of their major field. This widens the students’ perspective, increases their professional and job-related opportunities and enhances qualifications for those planning to pursue a graduate degree, as well as satisfies other personal interests. Many students do this now but receive no formal recognition of their work. This minor program in painting meets the needs of these students and recognizes their efforts and achievements.

### Total Required Credit Hours

18 cr

**Required Courses (18 cr)**

- **FAR 101** Drawing I
- **FAR 220** Introductory Painting
- **FAR 311** Intermediate Painting I
- **FAR 312** Intermediate Painting II
- **FAR 313** Advanced Painting (6 cr)

---

## PHILOSOPHY MINOR

**PHI**

Philosophy and Humanities

Bishop Hall 231, 878-5136

The philosophy minor engages students in philosophy through the articulation and critical examination of the concepts, values, positions and arguments of others and the development and defense of their own.

### Total Required Credit Hours

18 cr

**Required Courses (0 cr)**

**Electives (18 cr)**

- **PHI 101** Introduction to Philosophy
- **PHI 102** Introduction to Ethics
- **PHI 103** Introduction to Logic
- **PHI 107** Introduction to Mathematical Logic
- **PHI 110** Meaning of Life
- **PHI 204** Philosophy of Religion
- **PHI 207** Philosophy in Literature
- **PHI 210** Existentialism
PHI 300  Problems of Philosophy
PHI 301  History of Political Philosophy
PHI 305  Philosophy of Language
PHI 307  Symbolic Logic
PHI 308  Philosophy of Love and Sex
PHI 309  Knowledge and Justification
PHI 310  History of Ethics
PHI 312  Philosophy of Mind
PHI 314  Contemporary Ethics
PHI 317  Ancient Philosophy
PHI 318  Modern Philosophy
PHI 324  Zen Buddhism
PHI 333  Philosophy of Natural Science
PHI 347  Western Thought: Homer to Alexander
PHI 351  Ethics Bowl
PHI 401  Problems in Philosophy Seminar
PHI 402  Seminar in History of Philosophy
PHI 495  Project
PHI 499  Independent Study

No student may declare a minor in the same discipline as their major, therefore, a Philosophy major may not declare a philosophy minor.

PHOTOGRAPHY MINOR

PHO
Fine Arts Department
Upton Hall 502, 878-6697

It is often desirable for students in areas such as art education and design to pursue a concentrated, but not all-encompassing, study of an art discipline outside of their major field. This widens the students' perspective, increases their professional and job-related opportunities and enhances qualifications for those planning to pursue a graduate degree, as well as satisfies other personal interests. Many students do this now but receive no formal recognition of their work. This minor program in photography meets the needs of these students and recognizes their efforts and achievements.

Total Required Credit Hours  18 cr

Required Courses (18 cr)
FAR 101  Drawing I
FAR 220  Introductory Photography
FAR 321  Intermediate Photography I
FAR 322  Intermediate Photography II
FAR 323  Advanced Photography (6 cr)

PHYSICS

PHY 305  Modern Physics I

Electives (4-7 cr)
PHY 306  Modern Physics II
PHY 308  Optics
PHY 310  Computational Physics Laboratory (2 cr)
PHY 315  Heat and Thermodynamics
PHY 320  Introduction to Theoretical Physics (4 cr)
PHY 324  Electric Circuit Analysis
PHY 410  Advanced Physics Laboratory
PHY 425  Classical Mechanics (4 cr)
PHY 440  Electricity and Magnetism I

Prequisites:
MAT 161  Calculus I (4 cr)
MAT 163  Using Technology to Explore Calculus I (1 cr)
MAT 162  Calculus II
MAT 164  Using Technology to Explore Calculus II (1 cr)
MAT 263  Calculus III
MAT 234  Using Technology to Explore Calculus III (1 cr)

All courses are 3 credits unless otherwise indicated.

PLANNING MINOR

PLN
Geography and Planning
Classroom Building A213, (716)878-6216

The objective of this minor is to introduce students to the discipline of Planning and to familiarize them with some of the fundamental approaches to the discipline. It is primarily designed for arts and science majors who would like to enhance their employment opportunities in a planning or related area, or who desire to pursue graduate training in such an area.

Total Required Credit Hours  18 cr

Required Courses (6 cr)
PLN 315  Principles of Urban & Regional Planning
PLN 325  Maps and Mapmaking Using GIS

Electives (12 cr): Selected by advisement
PLN 310  Urban Transportation Planning
PLN 330  Land Resource Analysis & Planning
PLN 340  Fundamentals of Zoning
PLN 341  Housing & Real Estate
PLN 370  Water Resource Planning
PLN 401  Comprehensive Planning Principles
GEG 305  Principles of Economic Geography
GEG 307  Conservation & Environmental Management
GEG 365  Soil Science & Management
GEG 375  Principles of Hydrology
GEG 421  Watershed Analysis
GEG 425  Fundamentals of GIS
GEG 427  Corporate Applications in GIS or
GEG 428  Environmental Assessment & Planning Applications in GIS
POLITICAL SCIENCE MINOR

PSC
Political Science Department
Classroom Building B218, 716-878-6116

Total Required Credit Hours 18 cr

A. Required Courses: Choose one (3 cr)
PSC 101 Introduction to Government and Politics
PSC 102 Introduction to American Government and Politics
PSC 103 Great Political Issues

B. Distribution Requirements: Choose one course from each category (9 cr)
American Government and Politics
PSC 210 American Presidency
PSC 215 Urban Government
PSC 218 African American Political Culture
PSC 225 Women in American Politics
PSC 310 American Political Parties
PSC 311 Interest Groups
PSC 312 Legislative Process
PSC 315 State and Local Government and Politics
PSC 316 Urban Ethnic Politics
PSC 317 U.S. Constitutional Law
PSC 320 U.S. Constitution and Civil Liberties
PSC 326 Politics and Media
PSC 327 Practical Politics
PSC 360 Public Administration
PSC 364 American Public Policy
PSC 410 Political Behavior and Public Opinion
PSC 415 Urban Public Policy
PSC 420 Contemporary Constitutional Issues
PSC/CRJ/SOC 485 Moot Court

International Relations and Comparative Government
PSC 230 International Relations
PSC 240 European Political Systems
PSC 305 Environmental Policy
PSC 308 International Organizations and International Law
PSC 309 International Political Economy
PSC 330 American Foreign Policy
PSC 333 African International Relations
PSC 335 International Relations of the Middle East
PSC 336 Latin America in World Politics
PSC 337 The Politics of Globalization
PSC 340 Politics of Developing Countries
PSC 341 Government, Politics, and Policies of the European Union
PSC 342 Russian Politics
PSC 345/HIS 313 Politics and History of the Middle East

Political Theory or Political Analysis
PSC 203 Political Analysis
PSC 204 Political Statistics
PSC 250 Introduction to Law
PSC 318 Democracy and Peace: Principles and Practices in the Urban Experience
PSC 351 History of Political Thought I

Required Courses: Choose one (3 cr)
PSC 352 History of Political Thought II
PSC 355 American Political Thought
PSC 375 Race/Sex/Politics of Myth and Story
PSC 450 Contemporary Political Thought

C. General Electives in Political Science (6 cr)
Note: Courses not used to fulfill sections A and B may also be used as general electives in Political Science.
PSC 306 Politics of Energy
PSC 389 Topics in Political Science
PSC 390 Italian American Experience
PSC 495 Special Project
PSC 497 Washington Semester
PSC 499 Independent Study

PRINTMAKING MINOR

PRT
Fine Arts Department
Upton Hall 502, 878-6697

It is often desirable for students in areas such as art education and design to pursue a concentrated, but not all-encompassing, study of an art discipline outside of their major field. This widens the students' perspective, increases their professional and job-related opportunities and enhances qualifications for those planning to pursue a graduate degree, as well as satisfies other personal interests. Many students do this now but receive no formal recognition of their work. This minor program in printmaking meets the needs of these students and recognizes their efforts and achievements.

Total Required Credit Hours 18 cr

Required Courses (15 cr)
FAR 101 Drawing I
FAR 230 Introductory Printmaking
FAR 331 Intermediate Printmaking I
FAR 332 Intermediate Printmaking II
FAR 335 Papercutting

Electives (3 cr)
FAR 333 Advanced Printmaking
FAR 335 Papercutting (may be repeated)

FAR 230, 331, and 332 must cover work in at least two separate media.

PSYCHOLOGY MINOR

PSY
Psychology Department
Classroom Building C312, 878-6215

The field of psychology is broad and relevant to a variety of disciplines. The minor is offered for those students who wish to follow a systematic plan of study in psychology while completing a major in another department. Specifically, the minor is designed to give students a broad background in psychology. As designed, the minor is flexible and should meet the needs of many students. Accordingly, students should seek advice to determine what courses would best suit their own particular interests and needs. To fulfill the requirements of the minor, students will be required to take 21 hours in psychology to be distributed in the following manner:

Total Required Credit Hours 21 cr

Required Courses (3 cr)
PSY 101 Introduction to Psychology
Electives (18 cr)

1. Students must choose at least one course from three of the following four areas (9 cr)
   a. Bio/Cognitive Psychology
      - PSY 304 Learning: Theory and Research
      - PSY 308 Sensation and Perception
      - PSY 321 Comparative Animal Psychology
      - PSY 330 Psychological Power of Language
      - PSY 340 Cognitive Psychology
   b. Social/Developmental Psychology
      - PSY 325 Social Behavior
      - PSY 327 Adult Development and Aging I
      - PSY 355 Life-span Developmental Psychology
      - PSY 356 Child Development
      - PSY 357 Adolescent and Young Adult Development
      - PSY 370 Environmental Psychology I
   c. Clinical/Applied Psychology
      - PSY 311 Personality: Theory and Research
      - PSY 365 Workplace Psychology
      - PSY 367 Organizational Psychology
      - PSY 375 Forensic Psychology
      - PSY 376 Health Psychology
   d. Statistics
      - PSY 306 Statistics in Psychological Research

2. Students must complete two courses from the following (6 cr)
   - PSY 411 Abnormal Psychology
   - PSY 412 Community Psychology
   - PSY 415 Competent Infant
   - PSY 416 Abnormal Child Psychology
   - PSY 417 Atypical Infant
   - PSY 421 Physiological Psychology
   - PSY 427 Adult Development and Aging II
   - PSY 430 Psycholinguistics: Language Structures and Processes
   - PSY 432 Human Motivation and Emotion
   - PSY 440 Addictive Behaviors
   - PSY 441 Introduction to Neuropsychology
   - PSY 450 Research Methods
   - PSY 460 Legal Behavior
   - PSY 466 Personnel Psychology
   - PSY 471 History and Systems of Psychology
   - PSY 480 Psychotherapy: Theory, Research, & Procedures
   - PSY 481 Psychological Tests and Measurements

3. Any additional three hours of psychology at the 300-400 level (3 cr)

RESCUE MINOR

QUALITY MINOR

QUALITY MINOR

Religious Studies Minor

REL
Philosophy and Humanities
Bishop Hall 231, 878-5136
A minor in religious studies deepens students' understanding of the various religious traditions and their own religious beliefs and values. Every candidate for the minor in religious studies must take six courses from the list below, based on advisement

<table>
<thead>
<tr>
<th>Cr</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Total Required Credit Hours</td>
</tr>
</tbody>
</table>

Required Courses (0 cr)

Electives (18 cr)

<table>
<thead>
<tr>
<th>Cr</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Total Required Credit Hours</td>
</tr>
</tbody>
</table>

Required Courses (15 cr)

<table>
<thead>
<tr>
<th>Cr</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Total Required Credit Hours</td>
</tr>
</tbody>
</table>

Electives (3 cr) Chose one of the following
   - TEC 311 Materials Science and Testing
   - TEC 321 Measurement Systems
   - TEC 323 Quality Improvement Through the Design of Experiments
   - TEC 324 Quality in the Service Sector

No student may declare a minor in the same discipline as their major, therefore, a Philosophy major may not declare a philosophy minor.
SAFETY STUDIES MINOR

SAF
Engineering Technology Department
Technology Building 126, (716)878-6017

The major social problem of our nation in terms of wasted human and national resources is that of accidents and public health and safety as affected by numerous industrial and social processes. Safety Science and Technology is, without a doubt, the principal source of help for humanity in effectively controlling those accidents and processes which result in personal injury or death, property destruction, and degradation of the social and natural environments.

The safety minor is designed to provide the basic preparation needed by individuals for entry into the public and private health and safety professions. Courses available within the minor provide an opportunity for both general and specialized preparation in safety, risk assessment, and public policy to meet a variety of student interests and needs. All or part of the 18 semester hours of safety course work needed to satisfy the requirements of the minor may be taken from the elective category of the degree requirements for the college major.

Total Required Credit Hours 18 cr

Required Courses (9 cr)
- SAF 305 Fundamentals of Safety
- SAF 333 Occupational Safety
- SAF 340 Community Safety

Electives (9 cr) Three of the following
- SAF 310 Personal Safety and First Aid
- SAF 320 Product Safety
- SAF 360 Industrial Hygiene
- TEC 402 Ergonomics
- TEC 465 Safety Management
- TEC 488W Safety Internship/Externship

SCULPTURE MINOR

SCL
Fine Arts Department
Upton Hall 502, 878-6697

It is often desirable for students in areas such as art education and design to pursue a concentrated, but not all-encompassing, study of an art discipline outside of their major field. This widens the students' perspective, increases their professional and job-related opportunities and enhances qualifications for those planning to pursue a graduate degree, as well as satisfies other personal interests. Many students do this now but receive no formal recognition of their work. This minor program in sculpture meets the needs of these students and recognizes their efforts and achievements.

Total Required Credit Hours 18 cr

Required Courses (15 cr)
- FAR 101 Drawing I
- FAR 240 Introductory Sculpture
- FAR 341 Intermediate Sculpture I
- FAR 342 Intermediate Sculpture II
- FAR 343 Advanced Sculpture

Required Courses (18 cr)
- FAR 343 Advanced Sculpture (may be repeated)
- FAR 345 Figure Modeling

SOCIAL WELFARE MINOR

SOW

Social Work Department
Classroom Building C115, (716)878-5705

The social welfare minor will be directed to students who are interested in social welfare issues but are majoring in other disciplines. Minors can profit from understanding the welfare system and taking courses relevant to various groups who often are impacted by or are part of the welfare system. This information will serve as an enhancement to the students' major discipline and/or add to their knowledge as good citizens. Along with certain majors, additional knowledge about social welfare may improve employability, though social welfare minors will not be able to serve as social workers.

Acceptance criteria: CWP 102, Math 311, BIO 101, and a minimum GPA of 2.5.

Total Required Credit Hours 18 cr

Required Courses (12 cr)
- SWK 220 Introduction to Social Work
- SWK 301 Poverty and Public Policy
- SWK 320 Social Service Organizations
- PSC 364 American Public Policy
  or
- PSC 415 Urban Public Policy

Electives (6 cr) Select two of the following
- SOC 312 Women in Society
- SOC / AAS 321 The African-American Family
- SOC 350 Power, Class, and Inequality
- SOC 351 Sociology of Race and Ethnicity
- EXE 100 Nature and Needs of Individuals with Special Needs
- HIS 363 American Identity in Transition: Diversity and Pluralism in the U.S.
- ANT 307 Urban Anthropology
- PSC 375 Race, Sex, and Politics of Myth and Story

A minor may include no more than two courses at the lower division.

The minor will accept a maximum of three courses of transfer credit.

SOCIOLOGY MINOR

SOC
Sociology Department
Classroom Building B307, 878-5411

The Minor in Sociology Program introduces students to the basic coursework and concepts in the discipline. By requiring an introductory course and emphasizing sociological theory, the program provides a structured introduction and the freedom to select three elective courses.

Total Required Credit Hours 18 cr

Required Courses (9 cr)
- SOC 100 Introduction to Sociology
- SOC 330 Social Psychology
  or
- SOC 350 Power, Class, and Inequality
- SOC 400 Foundations of Social Thought
  or
- SOC 408 Contemporary Sociological Theory

Electives (9 cr)
May be fulfilled by any SOC courses not already taken
### SPANISH MINOR

**SPA**
Modern and Classical Languages  
Bishop Hall 122, 878-5414

Whether you are thinking about an international career or just yearn for a life of travel, a minor in Spanish can prepare you for the world ahead, or signal to employers and graduate schools that you are ready for international opportunities. A minor involves taking six courses, as described below, and can augment your major program.

**Total Required Credit Hours** 21 cr

#### Required Courses (6-18 cr)*
- **SPA 301** Introduction to Hispanic Culture
- **SPA 302** Introduction to Hispanic Media
- **SPA 101** Beginning Spanish I
- **SPA 102** Beginning Spanish II
- **SPA 201** Intermediate Spanish I
- **SPA 202** Intermediate Spanish II

#### Electives (3-15 cr)
- **Language and Linguistics**
  - **SPA 305** Spanish Phonetics
  - **SPA 317** Business Spanish
  - **SPA 405** Old Spanish
  - **SPA 415** Advanced Spanish Grammar and Composition
  - **SPA 416** Advanced Conversation
  - **SPA 421** Structure of Modern Spanish
- **Culture and Civilization**
  - **SPA 306** The Civilization and Culture of Spain
  - **SPA 309** Culture and Civilization of Latin American
- **Peninsular Literature**
  - **SPA 307** Spanish Authors Pre-1800
  - **SPA 308** Spanish Authors 1800-Present
- **Spanish American Literature**
  - **SPA 310** Spanish American Literature Authors 1492-1810
  - **SPA 311** Spanish-American Authors 1810-Present

*A students who begin with **SPA 101** must select one (1) course within any advanced study area.

### SPEECH MINOR

**SPE**
Communication  
Bishop Hall 210, 878-6008

The minor involves six courses (18 hours) within the Communication Department. It is designed for students in majors in which oral communication plays an integral role in career success. Students majoring in criminal justice, education, English, and business have found this minor to be particularly useful.

**Total Required Credit Hours** 18 cr

#### Required Courses (3 courses; 9 credit hours)
- **SPC 103** Introduction to Human Communication
- **SPC 205** Introduction to Oral Communication
- **SPC 306** Public Speaking

#### Electives (3 courses; 9 credit hours)
- **SPC 307** Communication and Group Process

### THEATER MINOR

**THA**
Theater Department  
Savage Building 222, 878-6416

Often a student enrolled in a major other than theater has great enthusiasm and talent for theater arts. In that case, a minor in theater is an excellent way to augment your education and to document your these aptitudes. Graduate schools and employers will see that you have a talent for theater arts, as well as experience in such areas as collaborative problem solving and project management. The minor requires 19 credits, as described below.

**Total Required Credit Hours** 19 cr

#### Required Courses (10 cr)
- **THA 106** Introduction to Theater  
  OR  
- **THA 216** Theater Fundamentals
- **THA 226** Acting I
- **THA 317** History of Theater (Ancient to Renaissance)  
  OR  
- **THA 318** History of Theater (Renaissance to Modern)
- **THA 230** Theater Practicum I (1 cr.)

#### Electives (9 cr)
- **THA 200** Introduction to Acting: The Actor’s Instrument
- **THA 218** Script Analysis I: Play Reading
- **THA 227** Acting II: Scene Study
- **THA 234** Theater Design and Technology
- **THA 235** Costume Construction
- **THA 300** Voice and Movement II
- **THA 316** Script Analysis
- **THA 325** Business of Performing Arts
- **THA 327** Acting III: Advanced Scene Study
- **THA 329** Acting IV: Solo Show
- **THA 332** Period Styles: Roots and Regeneration
- **THA 333** Scene Painting
- **THA 334** Costume Construction II
- **THA 335** Costume Design
- **THA 336** Lighting Techniques
- **THA 337** Set Design I
- **THA 338** Digital Design Media for Theater
- **THA 340** Play Writing
- **THA 350** Directing I
- **THA 370** Stage Makeup
- **THA 400** Voice and Movement III
- **THA 421** Black Drama
- **THA 426** Advanced Acting

A maximum of 9 credits toward this minor may be transferred from other schools.
and forms of diversity, such as race, class, and culture; the nature of sexuality; gender influences thoughts and behavior; how gender intersects with other sociocultural and biologic influences women and men's lives and experiences in society and politics; Gender Studies examines a range of issues, including how gender women's experiences, as well as gend

Women and Gender Studies is an interdisciplinary field that examines Classroom Building B328, 878-6771

Additional Notes:

Transfer Credit:

Entry to Minor:

Suggested Tracks:

Required Courses (7 cr)

Total Required Credit Hours

19 cr

Electives (12 cr) - Take four courses from the following:

AAS 425  Race, Ethnicity, and The Administration of Social Justice
CRS 303  Creative Leadership
EXE 245  Community Service with Individuals with Special Needs
HIS 341  African Americans and Civil Rights
PHI 334  Philosophy of Social Sciences
PSC 311  Interest Groups
PSC 316  Urban Ethnic Politics
PSC 318  Democracy and Peace: Principles and Practices in the Urban Experiences
SOC 100  Introduction to Sociology
SOC 351  Sociology of Race and Ethnicity
SOC 322  Sociology of Childhood and Youth
SWK 301  Poverty and Public Policy

Suggested Tracks: None

Entry to Minor: 2.00 GPA

Transfer Credit: A maximum of 6 upper division credits are accepted toward fulfillment of the minor.

Additional Notes: Students may not take more than two lower level courses.

Women and Gender Studies Minor

Women and Gender Studies Interdisciplinary Unit

Classroom Building B328, 878-4591

Women and Gender Studies is an interdisciplinary field that examines women’s experiences, as well as gender and sexuality. Women and Gender Studies examines a range of issues, including how gender influences women and men’s lives and experiences in society and politics; the portrayal of women and men in arts, literature, and media; sociocultural and biological influences on gender development; how gender influences thoughts and behavior; how gender intersects with other forms of diversity, such as race, class, and culture; the nature of sexuality; and feminist theory and scholarship.

Total Required Credit Hours 18 cr

Required Courses (3 cr)

WGS 101  Introduction to Women and Gender Studies or
SOC 312  Women in Society

Electives (15 cr) - 9 or more credits must come from Group A

Group A: Women and Gender as Primary Focus

AED 365  Seminar in Feminist Art and Criticism
ANT 332  Women and Men in Prehistory
ANT 340  Women in Anthropological Perspective
CRJ 430  Gender and the Administration of Justice
ECO 302  Women in Economy
ENG 231  Women in Literature
ENG 385  Gender and Sexuality in Literature
HEW 308  Women's Health Issues
HIS 302  History of Women in America
HIS 445  History of Women and Gender in the Middle East
PSC 225  Women in American Politics
PSY 387  Psychology of Gender
REL 303  Women in Religion
SOC 310  Sociology of Sex and Gender
WGS 189  Topics in Women and Gender Studies
WGS 389  Topics in Women and Gender Studies
WGS 488  Internship
WGS 495  Independent Project
WGS 499  Independent Research

Group B: Women and Gender in A Broader Context

ANT 350  Global Marriage Practices
BUS 305  Workplace Diversity in the 21st Century
FTT 348  History of Costume
PHI 308  Philosophy of Love and Sex
PSC 319  Gay, Lesbian, Bisexual, Transgender, and Questioning Politics
PSC 375  Race/Sex/Politics of Myth
PSY 383  Psychology of Human Sexual Behavior
SOC 320  Sociology of the Family
SOC 392  Sociology of Sexual Behavior
SPC 333  Race, Class, and Gender in Media
SWK 310  Sexuality in Human Development

Note: Specific sections of topics courses (e.g., ANT 189, ANT 389, COM 382, SWK 485) that are relevant to Women and Gender Studies may be counted toward the minor with the approval of the Women’s Studies Coordinator. Group A or B status will be determined on a case-by-case basis.

Writing Minor

WTG

English Department

Ketchum Hall 326, 716-878-5416

The writing minor offers students an opportunity to design a writing program that coincides with their major and/or their career plans. Writing is perhaps the single most important skill students can develop, and the writing minor gives interested students a wide degree of flexibility in designing a program that increases that skill. The minor allows for the development of skills in creative writing, journalistic writing, and/or professional writing of various kinds. It should appeal to English majors,
communication majors, and students in applied or professional areas seeking a strong writing component in their studies. Students design their program with the coordinator of the Writing major, the English Department chair, or the Communication Department chair. Both the English Department chair and the Communication Department chair must approve the plan. Students can focus their minor program on creative, journalistic, or professional writing, or they can take a combination of courses from these different areas.

**Total Required Credit Hours**

<table>
<thead>
<tr>
<th>Required Courses (3 cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 201</td>
</tr>
</tbody>
</table>

**Electives (15 cr; at least 12 credits must be upper-division)**

**English Department Courses**

<table>
<thead>
<tr>
<th>Creative Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 305</td>
</tr>
<tr>
<td>ENG 306</td>
</tr>
<tr>
<td>ENG 402</td>
</tr>
<tr>
<td>ENG 403</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 245</td>
</tr>
<tr>
<td>ENG 300</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Literary Genres</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 247</td>
</tr>
<tr>
<td>ENG 266</td>
</tr>
<tr>
<td>ENG 320</td>
</tr>
<tr>
<td>ENG 325</td>
</tr>
</tbody>
</table>

**Communication Department Courses**

| COM 210  | Introduction to Media Writing (This course is a prerequisite for later courses.) |
| COM 303  | Print News I: Reporting                 |
| COM 304  | Writing for Broadcast                   |
| COM 308  | Public Relations Writing                |
| COM 325  | Feature Writing                         |
| *COM 390 | Special Topics: Journalistic Writing    |

**Other Interdisciplinary Courses**

| THA/ENG 305 | Playwriting                             |
| THA 340     |                                        |

*COM 390 may be repeated with a different title as topics vary*
# Course Listings

<table>
<thead>
<tr>
<th>Course Prefixes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS</td>
<td>AFRICAN AND AFRICAN AMERICAN STUDIES</td>
</tr>
<tr>
<td>AED</td>
<td>ART EDUCATION</td>
</tr>
<tr>
<td>ANT</td>
<td>ANTHROPOLOGY</td>
</tr>
<tr>
<td>ATS</td>
<td>ART THERAPY STUDIES</td>
</tr>
<tr>
<td>BIO</td>
<td>BIOLOGY</td>
</tr>
<tr>
<td>BME</td>
<td>BUSINESS AND MARKETING EDUCATION</td>
</tr>
<tr>
<td>BSC</td>
<td>INTELLECTUAL FOUNDATIONS</td>
</tr>
<tr>
<td>BUS</td>
<td>BUSINESS</td>
</tr>
<tr>
<td>CHE</td>
<td>CHEMISTRY</td>
</tr>
<tr>
<td>CHI</td>
<td>CHINESE</td>
</tr>
<tr>
<td>CIS</td>
<td>COMPUTER INFORMATION SYSTEMS</td>
</tr>
<tr>
<td>COM</td>
<td>COMMUNICATION</td>
</tr>
<tr>
<td>CRJ</td>
<td>CRIMINAL JUSTICE</td>
</tr>
<tr>
<td>CRS</td>
<td>CREATIVE STUDIES</td>
</tr>
<tr>
<td>CTE</td>
<td>CAREER AND TECHNICAL EDUCATION</td>
</tr>
<tr>
<td>CWP</td>
<td>COLLEGE WRITING PROGRAM</td>
</tr>
<tr>
<td>DAN</td>
<td>DANCE</td>
</tr>
<tr>
<td>DES</td>
<td>DESIGN</td>
</tr>
<tr>
<td>ECO</td>
<td>ECONOMICS</td>
</tr>
<tr>
<td>SPF</td>
<td>EDUCATIONAL FOUNDATIONS</td>
</tr>
<tr>
<td>EDU</td>
<td>EDUCATION</td>
</tr>
<tr>
<td>ENG</td>
<td>ENGLISH</td>
</tr>
<tr>
<td>ENS</td>
<td>ENVIRONMENTAL SCIENCE</td>
</tr>
<tr>
<td>ESL</td>
<td>ENGLISH AS A SECOND LANGUAGE</td>
</tr>
<tr>
<td>ENT</td>
<td>ENGINEERING TECHNOLOGY</td>
</tr>
<tr>
<td>EXE</td>
<td>EXCEPTIONAL EDUCATION</td>
</tr>
<tr>
<td>FCS</td>
<td>FAMILY AND CONSUMER SCIENCE EDUCATION</td>
</tr>
<tr>
<td>FAR</td>
<td>FINE ARTS</td>
</tr>
<tr>
<td>FIN</td>
<td>FINANCE</td>
</tr>
<tr>
<td>FLE</td>
<td>FOREIGN LANGUAGE EDUCATION</td>
</tr>
<tr>
<td>FOR</td>
<td>FORENSIC CHEMISTRY</td>
</tr>
<tr>
<td>FRE</td>
<td>FRENCH</td>
</tr>
<tr>
<td>FST</td>
<td>FOOD TECHNOLOGY</td>
</tr>
<tr>
<td>FTT</td>
<td>FASHION AND TEXTILE TECHNOLOGY</td>
</tr>
<tr>
<td>GEG</td>
<td>GEOGRAPHY</td>
</tr>
<tr>
<td>GER</td>
<td>GERMAN</td>
</tr>
<tr>
<td>GES</td>
<td>GEO SCIENCES</td>
</tr>
<tr>
<td>GRK</td>
<td>GREEK</td>
</tr>
<tr>
<td>GST</td>
<td>GLOBAL STUDIES</td>
</tr>
<tr>
<td>HEW</td>
<td>HEALTH AND WELLNESS</td>
</tr>
<tr>
<td>HIS</td>
<td>HISTORY</td>
</tr>
<tr>
<td>HON</td>
<td>HONORS</td>
</tr>
<tr>
<td>HPR</td>
<td>HEALTH AND PHYSICAL RECREATION</td>
</tr>
<tr>
<td>HTR</td>
<td>HOSPITALITY AND TOURISM</td>
</tr>
<tr>
<td>HUM</td>
<td>HUMANITIES</td>
</tr>
<tr>
<td>IDE</td>
<td>INTERIOR DESIGN</td>
</tr>
<tr>
<td>INS</td>
<td>INDIVIDUALIZED STUDIES</td>
</tr>
<tr>
<td>ITA</td>
<td>ITALIAN</td>
</tr>
<tr>
<td>LAT</td>
<td>LATIN</td>
</tr>
<tr>
<td>LIB</td>
<td>LIBRARY RESEARCH</td>
</tr>
<tr>
<td>MAT</td>
<td>MATHEMATICS</td>
</tr>
<tr>
<td>MED</td>
<td>MATHEMATICS EDUCATION</td>
</tr>
<tr>
<td>MCL</td>
<td>MODERN AND CLASSICAL LANGUAGES</td>
</tr>
<tr>
<td>MST</td>
<td>MUSEUM STUDIES</td>
</tr>
<tr>
<td>MUS</td>
<td>MUSIC</td>
</tr>
<tr>
<td>NFS</td>
<td>NUTRITION AND FOOD SCIENCE</td>
</tr>
<tr>
<td>PHI</td>
<td>PHILOSOPHY</td>
</tr>
<tr>
<td>PHY</td>
<td>PHYSICS</td>
</tr>
<tr>
<td>PLN</td>
<td>PLANNING</td>
</tr>
<tr>
<td>PSC</td>
<td>POLITICAL SCIENCE</td>
</tr>
<tr>
<td>PSY</td>
<td>PSYCHOLOGY</td>
</tr>
<tr>
<td>REL</td>
<td>RELIGIOUS STUDIES</td>
</tr>
<tr>
<td>SAF</td>
<td>SAFETY STUDIES</td>
</tr>
<tr>
<td>SCI</td>
<td>GENERAL SCIENCE</td>
</tr>
<tr>
<td>SED</td>
<td>SCIENCE EDUCATION</td>
</tr>
<tr>
<td>SLP</td>
<td>SPEECH-LANGUAGE PATHOLOGY</td>
</tr>
<tr>
<td>SOC</td>
<td>SOCIOLOGY</td>
</tr>
<tr>
<td>SPA</td>
<td>SPANISH</td>
</tr>
<tr>
<td>SPC</td>
<td>SPEECH COMMUNICATION</td>
</tr>
<tr>
<td>SPF</td>
<td>SOCIAL PSYCHOLOGICAL FOUNDATIONS</td>
</tr>
<tr>
<td>SSE/SST</td>
<td>SOCIAL STUDIES EDUCATION</td>
</tr>
<tr>
<td>SWA</td>
<td>SWAHILI</td>
</tr>
<tr>
<td>SWK</td>
<td>SOCIAL WORK</td>
</tr>
<tr>
<td>TEC</td>
<td>TECHNOLOGY</td>
</tr>
<tr>
<td>TED</td>
<td>TECHNOLOGY EDUCATION</td>
</tr>
<tr>
<td>THA</td>
<td>THEATER ARTS</td>
</tr>
<tr>
<td>TFA</td>
<td>TELEVISION AND FILM ARTS</td>
</tr>
<tr>
<td>UNC</td>
<td>UNIVERSITY COLLEGE</td>
</tr>
</tbody>
</table>
Course Coding System
At the time of the printing of this catalog, all incoming students at Buffalo State College, both first-year and transfer students, are required to fulfill requirements. Students starting their education before fall 2006 are required to fulfill general education (GE2K) requirements via petition and should Intellectual Foundations 2014 consult their department adviser about whether that would be advantageous. See page 00 of this catalog for more information.

Banner codes are used to identify which Intellectual Foundations requirement(s) a course fulfills. The Intellectual Foundations 2014 (IF 14) codes are as follows:

- **AH14**  American History
- **AR14**  Arts
- **WO14**  Basic Written and Oral Communication
- **DI14**  Diversity
- **GE14**  Global Engagement
- **HU14**  Humanities
- **MQ14**  Mathematics and Quantitative Reasoning
- **NS14**  Natural Science
- **NW14**  Non-Western Civilization
- **SS14**  Social Science
- **WC14**  Western Civilization

Here’s a sample course listing:

**ANT 300**
**INDIGENOUS PEOPLES OF WESTERN NORTH AMERICA**
3, 3/0; DI14, NW14
Prerequisite: ANT 100 or permission of instructor. Way of life of the original inhabitants of Western North America: reconstructing life during the seventeenth, eighteenth, and nineteenth centuries using archaeology, historical documents, and oral tradition. Tribal nations of the Plains, Northwest Coast, Southwest, Great Basin, Plateau, and California. Effects of European exploration and colonization and the persistence of indigenous Western North American peoples in the modern world.

Here’s what it means:

**ANT 300**
INDIGENOUS PEOPLES OF WESTERN NORTH AMERICA
Name of course.
3, 3/0
Number of semester credit hours the course earns.
Number of lecture hours the class meets per week/Number of studio or lab hours per week.

**DI14, NW14**
This course satisfies two requirements in Intellectual Foundations: Diversity (DI14) and the Foundations of Civilizations Non-Western Civilizations (NW14).

Prerequisites:
Prerequisites or requirements you must fulfill before registering for a course. For this course, students must have taken ANT 100 first.
The remainder of the course listing describes the subject matter.
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. Offered Spring Only.

AAS 304 MODERN JAZZ 3, 3/0
Prerequisite: MUS 206 An explanation of the history and development of modern jazz from 1941 to the present. Offered Occasionally. Equivalent course: MUS305

AAS 305 PEOPLES OF AFRICA 3, 3/0
Cross-cultural comparisons of indigenous and modern African nations. Emphasis is placed upon regional, linguistic, social, political, religious, economic, and aesthetic characteristics, as well as historical and recent population migrations on the African continent and the surrounding islands. Offered Occasionally. Equivalent course: ANT305

AAS 306 HISTORY OF AFRICA TO 1919 3, 3/0
Indigenous development and early empires of Africa; the impact of Islam; Western contact and the slave trade; the development of European colonialism; the partition of Africa and colonial administrative policies of the European powers; the waning of European power as a result of World War I. Offered Occasionally. Equivalent course: HIS306

AAS 321 THE AFRICAN AMERICAN FAMILY 3, 3/0; DI14
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. Offered Spring Only. Equivalent course: SOC321

AAS 322 AFRICAN AMERICAN HISTORY 3, 3/0
Heritage of black Americans; African Americans' existence under slavery; their role in influencing historical events; activity in the Civil War period; the freed men during reconstruction; migration to the north and adjustment to urban life. African American leaders, institutions, and ideas, and their impact on modern America. Offered Every Semester. Equivalent course: HIS322

AAS 333 AFRICAN INTERNATIONAL RELATIONS 3, 3/0
African international politics vis-à-vis international relations theory, models, and concepts; power; multipolarity; bipolarity; pan-Africanism, North-South debate; approaches to international politics; and state and international organizations as international actors. Offered Occasionally. Equivalent course: PSC333

AAS 340 ETHNOMUSICOLOGY 3, 3/0
Prerequisite: MUS 303 or MUS 303W 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. Offered Occasionally. Equivalent course: MUS340

AAS 341 AFRICAN-AMERICANS AND CIVIL RIGHTS 3, 3/0
History of the landmark court decisions, laws, and governmental policies regarding the civil rights of African Americans. Examines some of the historic relationships among race, racism, law, and public policy in America. Focuses on resistance, protest, and the quest for equality in America. Offered Alternate Years. Equivalent course: HIS341

AAS 351 SOCIOLOGY OF RACE AND ETHNICITY 3, 3/0; DI14
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. Offered Every Semester. Equivalent course: SOC351

AAS 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. Offered Alternate Years. Equivalent course: FAR380

AAS 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. Offered Occasionally. Equivalent course: ANT411

AAS 421 BLACK DRAMA IN AMERICA 3, 3/0
Thematic and technical development of black American drama. Offered Occasionally. Equivalent course: THA421

AAS 425 RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE 3, 3/0
Prerequisite: CRJ 101 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. Offered Occasionally. Equivalent course: CRJ425

AAS 468 READINGS IN AFRICAN AMERICAN HISTORY 3, 3/0
Prerequisite: Upper-division status. Major historical writings on selected periods and topics in African American history. Readings, discussions, and writing book reviews and bibliographic essays. Offered Alternate Years. Equivalent course: HIS468

AAS 469 BLACK PROTEST AND LEADERSHIP IN THE U.S. IN THE TWENTIETH CENTURY 3, 3/0
The black protest movements and leaders in twentieth-century America. Offered Alternate Years. Equivalent course: HIS469

AAS 495 SPECIAL PROJECT 1-3, 0/0

AAS 499 INDEPENDENT STUDY 3-9, 0/0
Prerequisite: Faculty adviser permission must be secured prior to registration. Offered Occasionally.
AED 100 ESSENTIALS OF VISUAL ARTS
3, 2/2; AR14
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. Offered Every Semester. Equivalent course: AED100W

AED 200 FUNDAMENTALS OF ART INQUIRY
3, 3/0; AR14
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. Offered Every Semester. Equivalent course: AED200W

AED 300 FOUNDATIONS IN ART EDUCATION
3, 2/2
Prerequisites: Art education major or department chair permission and successful completion of English composition/basic communication and mathematics skills competency requirements. A writing-intensive introductory course that integrates instructional planning, learning theories, and teaching practices with the visual arts in education and society. Required for education majors. Offered Every Semester. Equivalent course: AED300W

AED 301 THEORETICAL CONSTRUCTS IN ART EDUCATION
3, 2/2
Prerequisites: Art education major, AED 300W, or department chair permission, and one course in psychology. AED 301 is a writing intensive course that examines traditional and contemporary theories and practices relevant to current art education environments, learners, and communities and is required for art education majors. Required for art education majors. Offered Every Semester. Equivalent course: AED301W

AED 302 FUNCTIONS AND PRACTICE IN ART EDUCATION
3, 2/2
Prerequisites: Art education major, AED 300W, AED 301W, and one course in sociology or anthropology. Studies of contemporary theories, functions, and practices in the visual arts including context, content, and processes necessary in the design of instructional planning, implementation, and evaluation of visual art teaching. Practicum experiences in local educational settings. Required for art education majors. Offered Every Semester. Equivalent course: AED302W

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. Students are assigned to a supervised elementary teaching placement for five full days a week for approximately seven consecutive weeks. Students are required to effectively demonstrate content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflective practice. Offered Every Semester.

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. Students are assigned to a supervised secondary teaching placement for five full days a week for approximately seven consecutive weeks. Students are required to effectively demonstrate content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflective practice. Offered Every Semester.

AED 310 ART MEDIA AND METHODS EXPLORATION
3, 2/2
Prerequisites: For ATS minors: ATS 320 and one visual arts studio course, or instructor permission; for AED majors: Junior or senior status, or instructor permission. Development of practical skill and knowledge in art media, methods, and resources for educational and/or therapeutic purposes. Hands-on exploration of culturally diverse traditional and nontraditional art tools and materials that are appropriate for school and community settings; media analysis for application to promoting developmental and/or therapeutic goals. Offered Occasionally.

AED 315 ARTS IN LIVING
3, 2/2; WC14
Contemporary and historic art forms as they apply to everyday living. Discussion and analysis of the individual significance and interrelatedness of architecture, industrial design, the graphic arts, painting, sculpture, music, and theater arts in the context of the history of Western civilization. Participation in creative activities related to the course. Offered Every Semester. Equivalent course: AED315W

AED 319 ART FOR ELEMENTARY AND EXCEPTIONAL EDUCATION CLASSROOM TEACHERS
3, 2/2
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. Offered Occasionally.

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. Offered Occasionally.

AED 398 ART AND CRITICISM
3, 2/2
Prerequisites: Art education major. Critical examination and uses of new media technologies in art education within socio-cultural contexts. Pedagogical tools for teaching media technologies to children and youth (pre-K through 12th grade). Offered Every Semester. Equivalent course: AED 198

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. Offered Every Semester.

AED 488 INTERNSHIP
1-12, 0/0
Prerequisites: Upper-division status and/or permission of instructor, minimum cumulative GPA of 2.5, and background coursework appropriate to the internship setting. Guided, supervised field experiences for qualified students in community-based agencies or settings. Interns apply and enhance knowledge gained through formal instruction demonstrating operational skills as practitioners in prospective specializations. Offered Occasionally.
## ALT - ARTS AND LETTERS

**ALT 495**
**SPECIAL PROJECT**
1-3, 0/0<br>Prerequisite: Upper-division status. Project undertaken and meeting hours arranged individually with instructor. Offered Occasionally.

**ALT 499**
**INDEPENDENT STUDY**
3-12, 0/0<br>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. Offered Occasionally.

## AMT - APPLIED MATHEMATICS

**AMT 495**
**APPLIED MATHEMATICS PROJECT**
3, 3/0<br>Prerequisites: Senior status or instructor permission. Independent research project in applied mathematics under the direction of the instructor. Composition of a written report and oral presentations of findings. Offered Spring Only. Equivalent courses: AMT495W, MAT495

## ANT - ANTHROPOLOGY

**ANT 100**
**HUMAN ORIGINS**
3, 3/0; NS14<br>Introduction to physical anthropology and archeology. Physical anthropology: evolutionary theory and genetics, the human fossil record, and the study of non-human primates. Archeology scientifically reconstructs past cultures: the basics of archeological data and dating methods. The transformation from a hunting and gathering lifestyle to one based on food production and the consequences of this transformation that include, in some instances, the development of complex sociopolitical institutions and state societies. Offered Every Semester.

**ANT 101**
**UNDERSTANDING CULTURE**
3, 3/0; NW14<br>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. Offered Every Semester.

**ANT 189**
**TOPICS COURSE**
1-3, 1-3/0<br>Offered Occasionally.

**ANT 220**
**CASE STUDIES IN PHYSICAL ANTHROPOLOGY**
3, 3/0<br>Introduction to physical anthropology through detailed examination of exemplary case studies covering a broad range of topics in physical anthropology. The process of inquiry in physical anthropology, including initial conception of the research question, methodology, results, and conclusions. Ethics of physical anthropology research. Offered Occasionally.

**ANT 244**
**FOLKLORE AND LIFE**
3, 3/0; SS14<br>Prerequisite: CWP 102. Introduction to the major genres of folklore and folk life and their function in contemporary society; including roots music, ethnic and occupational folklore, rites of passage and calendar customs, and traditional narratives. The relationship between folklore and popular culture. Offered Every Semester. Equivalent courses: ANT144, ANT244W

**ANT 250**
**HISTORICAL ARCHAEOLOGY**
3, 3/0; AH14<br>Prerequisite: ANT 100. Archaeology of the United States from 1500 through the American Civil War. Material life and diversity of sociocultural experiences in the United States during this period. Offered Spring Odd Years.

**ANT 300**
**INDIGENOUS PEOPLES OF WESTERN NORTH AMERICA**
3, 3/0; DI14, NW14<br>Prerequisite: ANT 100. Way of life of the original inhabitants of Western North America; reconstructing life during the seventeenth, eighteenth, and nineteenth centuries using archeology, historical documents, and oral tradition. Tribal nations of the Plains, Northwest Coast, Southwest, Great Basin, Plateau, and California. Effects of European exploration and colonization and the persistence of indigenous Western North American peoples in the modern world. Offered Fall Even Years.

**ANT 301**
**INDIGENOUS PEOPLES OF EASTERN NORTH AMERICA**
3, 3/0; DI14, NW14<br>Prerequisite: ANT 100. The way of life of the original inhabitants of Eastern North America. Reconstructing life during the sixteenth and seventeenth centuries using archeology, 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. Offered Fall Odd Years.

**ANT 303**
**THE ANTHROPOLOGY OF EUROPE**
3, 3/0; WC14<br>Prerequisite: ANT 101. Introduction to the anthropology of Europe and European culture. The course discusses the traits and development of distinctive cultural features of European peoples through cultural histories of Europe in general and ethnographic case studies. It related the development and influence of Western civilization to other regions of the world. Offered Alternate Years.

**ANT 305**
**PEOPLES OF AFRICA**
3, 3/0<br>Prerequisite: ANT 101. Cross-cultural comparisons of indigenous and modern African nations. Emphasis is placed upon regional, linguistic, social, political, religious, economic, and aesthetic characteristics as well as historic and recent population migrations on the African continent and the surrounding islands. Offered Occasionally. Equivalent course: AAS305

**ANT 306**
**PEOPLES OF ASIA**
3, 3/0<br>Prerequisite: ANT 101. Cross-cultural comparisons of indigenous and modern nations of Asia. Emphasis on regional, linguistic, social, political, religious, economic, and aesthetic characteristics as well as historic and recent population migrations on the Asian continent and surrounding islands. Offered Occasionally.

**ANT 307**
**URBAN ANTHROPOLOGY**
3, 3/0<br>Prerequisite: ANT 101. Study of the origins and evolution of cities around the world; their impact upon the human family and other social relationships, and the physical environment. Early and recent viewpoints on life in cities, suburbs and rural communities. Offered Occasionally.
ANT 308
ARCHAEOLOGICAL METHOD
6, 0/0
Prerequisite: ANT 100. Laboratory and field methods in archaeology. Opportunity for practical experience with various archaeological techniques. Offered Summer Only.

ANT 310
MESOAMERICAN ARCHAEOLOGY
3, 3/0; NW14
Prerequisites: ANT 100. Overview of ancient civilizations of Mesoamerica, including Olmecs, Maya, Monte Alban, Teotihuacan, Toltecs, and Aztecs using archaeological evidence, hieroglyphic texts, iconography, and ethnohistorical sources. Comparative analysis of art, architecture, religion, political structure, economic and social organization of societies in Mesoamerica from archaic foraging groups through Spanish contact. Offered Spring Even Years.

ANT 312
ARCHAEOLOGY OF NORTH AMERICA
3, 3/0
Prerequisite: ANT 100. Prehistory of North America beginning with earliest human presence, including the Paleo-Indian period; Archaic, Woodland, and Mississippian in the East; periods comparable in time in the West. Offered Spring Even Years.

ANT 315
RESEARCH METHODS IN CULTURAL ANTHROPOLOGY
3, 3/0
Prerequisite: ANT 101. Research methods in cultural anthropology covering fieldwork, participant-observation, sampling, measurements, documentation, statistical and cross-cultural methods. Offered Fall Even Years.
Equivalent course: ANT315W

ANT 321
PRIMATOLOGY
3, 3/0
Prerequisite: ANT 100. Study of living prosimians, monkeys, and apes, including taxonomy, social organization, feeding and ranging, community ecology, and conservation; field studies of natural populations. Offered Fall Odd Years.
Equivalent course: ANT321W

ANT 322
RESEARCH METHODS IN PRIMATOLOGY
3, 1/4
Prerequisite: ANT 321. Study and practice of behavioral observation techniques used in primatology. Independent research project on the primates at the Buffalo Zoo. Presentation of research results to the campus community (e.g., the Student Research and Creativity Celebration) and at the Buffalo Zoo.

ANT 323
ANTHROPOLOGY OF DISEASE
3, 3/0
Prerequisites: ANT 100. Study of ill health from an anthropological perspective. Biological anthropology; how cultural activities contribute to the spread of disease; how disease manifests itself in the archaeological record; how the language used for disease impacts thinking about disease; how anthropologists contribute to the fight against disease. Understanding epidemiological concepts via current events. Offered Spring Odd Years.

ANT 324
THE HUMAN SKELETON
3, 3/0
Prerequisite: ANT 100. Hands-on experience with natural human skeletons to learn all bones, landmarks, and features of the bones; how to determine the side of the body the bone came from, determine if a bone is from a male or female, estimate age at death, and estimate stature of the individual. Offered Fall Only.
Equivalent courses: ANT325, CRJ325

ANT 325
FORENSIC ANTHROPOLOGY
3, 3/0
Prerequisite: ANT 324. Forensic applications of the recovery and identification of human skeletal remains. Determination of age, sex, and ancestry. Also taphonomy, differentiating human from animal remains, analysis and significance of traumas, and search and recovery techniques. Offered Spring Only.
Equivalent course: CRJ325

ANT 326
THE HUMAN FOSSIL RECORD
3, 3/0
Prerequisite: ANT 100. Human evolution as derived from the fossil record examination of major fossil hominid discoveries, their interpretation, and their place in the development of the human species. Offered Spring Even Years.

ANT 327
INTRODUCTION TO MEDICAL ANTHROPOLOGY
3, 3/0; NW14
Prerequisite: ANT 101. An overview of the history and development of concepts and practices of medicine worldwide. Theories and procedures in illness, sickness, health and well-being in and from a variety of cultural perspectives, historical and contemporary, East and West. Stone Age, folk, shaman, traditional Western and herbal medicine, including healing and religion, homeopathy, and anthropological study of health-care institutions. Offered Fall Even Years.
Equivalent course: HEW327

ANT 329
WORLD PREHISTORY
3, 3/0; NW14
Prerequisite: ANT 100. An overview of the major developments in human culture as inferred from the archaeological record. Past cultures of hunter-gatherers, the first farmers, and early civilizations will be described as well as their legacy for the modern world. Offered Summer Odd Years.

ANT 330
PACIFIC ISLANDERS
3, 3/0
Prerequisite: ANT 101. Introduction to Pacific Islanders including origins, languages, ecology, cultural identity and agency, political struggles. Experience of indigenous communities. Representations of the Pacific originating inside and outside the region. Encounters and transformation by first inhabitants, explorers, missionaries, colonists, and recent global flows of people, culture, and capital. Offered Occasionally.

ANT 340
WOMEN IN ANTHROPOLOGICAL PERSPECTIVE
3, 3/0
Prerequisite: ANT 101. The study of women's position with attention to political, social, and cultural influences on female status in a cross-cultural perspective. Offered Occasionally.

ANT 341
INDIGENOUS ART OF NORTH AMERICA
3, 3/0
Prerequisites: ANT 100 or instructor permission. The study of art from an anthropological perspective using case studies from the Indigenous cultures of North America from the pre-contact period until today. Examination of art and material culture within Indigenous communities. How material culture and art can be used as evidence for human behavior, especially ritual behavior. Historical factors affecting the production and use of material culture and art. Continuity and change within material culture/artistic repertoires. Offered Spring Odd Years.
Equivalent course: ANT341W

ANT 344
FOLKLORE & FANTASY IN POPULAR CULTURE: FROM MIDDLE-EARTH TO HOGWARTS
3, 3/0
Prerequisites: CWP 102 or equivalent, upper class standing. How J. R. R. Tolkien, the creator of modern fantasy writing, based his mythology for England on the work of 18th and 19th century folklorists. Influence of the work of myth scholars, primarily Joseph Campbell, on George Lucas and other film makers in the Star Wars trilogies and similar films and television series. Creation of folk groups (fandoms) based on fantasy novels and films, especially since the rise of the Internet. Offered Spring Odd Years.
ANT 350  
GLOBAL MARRIAGE PRACTICES  
3, 3/0  
Prerequisite: ANT 101 or SOC 100. Cross-cultural and comparative study of marriage practices through an examination of kinship, gender, and economy. Interdisciplinary materials in anthropology, sociology, history, and popular culture. Offered Fall Odd Years.

ANT 362  
URBAN FOLKLORE  
3, 3/0  
Folklore in the urban environment. The role of folklore in the creation and preservation of ethnic, occupational and community identity. Folklore in the media and popular culture. Offered Fall Even Years. Equivalent course: ANT362W

ANT 365  
PRACTICING ANTHROPOLOGY  
3, 3/0  
Prerequisite: ANT 101. The application of anthropology and anthropological perspectives to contemporary community and world issues and problems. Focus on the practice of anthropology as a career outside academia, in social services, international relations, government positions, community organizing, etc. The relevance of anthropological principles in day-to-day life. Offered Occasionally.

ANT 367  
CULTURE AND ECOLOGY  
3, 3/0  
Prerequisite: ANT 101. Overview of the anthropological study of culture and ecology-environmental anthropology-the evolutionary and comparative study of various cultures’ relations, both biological and cultural, to their environments. Industrial and nonindustrial adaptations to and understandings of the environment. Human-to-nature relations, the study of place, and environmentalism. Offered Spring Odd Years.

ANT 370  
THE ANTHROPOLOGY OF CONTEMPORARY ISSUES  
3, 3/0  
Prerequisite: ANT 101. An anthropological perspective of some of the principal dilemmas of the contemporary world, including technological, demographic, ideological, and cultural problems, which provide much of the content of our daily news and have implications for the survival of our species. Offered Fall Even Years. Equivalent course: ANT370W

ANT 377  
ANCIENT CIVILIZATION  
3, 3/0; NW14  
Prerequisite: ANT 100. Examination of the nature of early civilizations; possible factors involved in both their rise and fall. Old World civilizations studied: Mesopotamia, Egypt, the Indus Valley, China, the Aegean Islands, and Europe (Greece and Italy). New World civilizations examined: Mesoamerica and the Andes region of South America. Similarities and differences considered. Offered Fall Even Years.

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. Offered Spring Odd Years.

ANT 381  
RELIGION, MAGIC, AND CULTURE  
3, 3/0; NW14  
Prerequisite: ANT 101. Descriptions and analysis of world religious beliefs and practices, universal phenomena with many manifestations. Examination of the place of religion and spirituality in widely diverse cultures, including discussion of magic, trance, altered states, cults, Wicca, Santeria, voodoo, and late-twentieth-century religions. Offered Spring Odd Years.

ANT 385  
VISUAL ANTHROPOLOGY  
3, 3/0  
Prerequisites: ANT 101 or SOC 100. How technology of the still camera transformed relationship to imagery, perception of time and movement through splitting and flattening of representations into “realistic” images. Basics of still cameras as a research tool; how to collect informants’ images as data. Meaning, use of images, representations, and power of visual data. Offered Fall Odd Years.

ANT 388  
FOLKLORE & TECHNOLOGY: AMERICAN ROOTS MUSIC  
3, 3/0  
Prerequisites: CWP 102 and upper class standing. The richness and diversity of American roots music, with emphasis on the relationship of roots music to folklore and popular culture. Ways in which mediated a transmission and technology have contributed to the development of and dissemination of roots music. Offered Fall Odd Years.

ANT 389  
TOPICS IN ANTHROPOLOGY  
3, 3/0  
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. Offered Every Semester. Equivalent course: ANT389W

ANT 400  
ANCIENT MATERIALS  
3, 3/0  
Prerequisite: ANT 329 or ANT 312. The study of technology and production in its broadest sense. Raw materials used to create material culture as defined archaeologically, such as stone, bone, wood, clay, and metal. Datasets from ethnographic and archaeological films and reports; hands-on experimental archaeology projects. How archaeologists use material culture as evidence for past human behavior, e.g., measurement of lithic flakes, creating typologies of ceramic sherds. Offered Spring Even Years.

ANT 405  
HISTORY OF ANTHROPOLOGICAL THOUGHT  
3, 3/0  
Prerequisite: ANT 101. Important contributions in the development of anthropological theory to the present. Includes theories of Boas, Kroeber, Lévi-Strauss, Malinowski, and Tylor. Offered Occasionally. Equivalent course: ANT405W

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. Offered Occasionally. Equivalent course: AAS 411

ANT 412  
SEMINAR IN SOCIAL-CULTURAL ANTROPOLOGY  
3, 3/0  
Prerequisite: ANT 101. The concept of culture and ethnographic research. Value of cultural anthropology and ethnographic research and their relevance to problems faced by people today. Intellectual, social, and political trends that have shaped the development of the field of cultural anthropology. Cultural anthropological theory, research design, research practice. Offered Fall Only.

ANT 415  
SEMINAR IN ARCHAEOLOGY  
3, 3/0  
Prerequisites: ANT 329 or ANT 312. Value of archaeology and its relevance to the problems faced by people today. Benefits from archaeology and how they are achieved. Intellectual, social, and political trends that have shaped the development of the field of archaeology. Archaeological theory and research design in depth. Negotiating between the different stakeholders in archaeological projects. Oral and written communication of archaeological findings. Offered Spring Only.
ANT 418
SEMINAR IN PHYSICAL ANTHROPOLOGY
3, 3/0
Prerequisites: CWP 102 and ANT 100. Value of physical anthropology and its relevance to the problems faced by people today. Benefits from physical anthropology and how they are achieved. Intellectual, social, and political trends that have shaped the development of the field of physical anthropology. Physical anthropology theory and research design in depth. Negotiating between the different stakeholders in physical anthropology projects. Written communication of physical anthropological findings. Offered Fall Only.

ANT 488
INTERNSHIP IN ANTHROPOLOGY
1-12, 0/0
Supervised fieldwork in community agencies, organizations, and milieus where students develop and apply practical and anthropological knowledge and skills. Students interact in diverse cultural settings, and experience and establish connections of potential use in the job market. Preparatory conferences, ongoing seminars with the faculty supervisor, a log/journal of the field experience, and a final report. Offered Spring Only.

ANT 498
HONORS RESEARCH
3, 0/0
Prerequisites: 3.5 Cumulative GPA, Majors/Minors Only. Offered Every Semester.
Equivalent course: ANT498W

ANT 499
INDEPENDENT STUDY
3-9, 0/0
Offered Every Semester.

ATS - ART THERAPY STUDIES

ATS 320
INTRODUCTION TO ART AND THERAPY
3, 3/0
Prerequisite: Junior or senior status. For ATS minors: two approved human service courses, or instructor permission. Introduction to the theory and practice of art therapy. Exploration of art as a means of assessment and treatment for child, teen, and adult populations in various therapeutic settings such as hospitals, mental health clinics, nursing homes, and developmental centers. Clinical case material presentations and exploration of personal creative processes. Offered Every Semester.

ATS 325
ART FOR CHILDREN WITH SPECIAL LEARNING NEEDS
3, 2/2; D14
Prerequisites: For ATS minors: ATS 320 and one approved human service course, or instructor permission. Examining the role of art as it relates to development of children with special learning needs due to disability and/or adverse environmental circumstances. Emphasis on differentiated instruction, therapeutic teaching, roles of the art educator and the art therapist, and cultural competence. 30 hours of supervised fieldwork takes place in approved settings that serve children with special learning needs. Offered Every Semester.

BIO - BIOLOGY

BIO 100
PRINCIPLES OF BIOLOGY
3, 3/0; NS14
Non-majors only. The unifying principles of modern biology with special emphasis on cell biology, metabolism, and genetics. Offered Every Semester.

BIO 101
HUMAN BIOLOGY
3, 3/0; NS14
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. Offered Every Semester.

BIO 104
ENVIRONMENTAL BIOLOGY
3, 3/0; NS14
Equivalent course: BIO104W

BIO 111
INTRODUCTION TO BIOLOGY
4, 3/0
The chemicals of life. Cell organelles. Metabolism and energy transformations. Cell division, gene expression, Mendelian and population genetics. Biotechnology as an approach to understanding life, human health. Emphasis will be placed on developing students' ability to understand and use biological concepts at the college level. Offered Every Semester.

BIO 210
MICROBIOLOGY
3, 2/2
Prerequisite: BIO 100 or BIO111. Non-majors only. Morphology and physiology of bacteria. General application to household science, sanitation, hygiene, and infectious disease. Offered Fall Only.

BIO 211
INTRODUCTION TO CELL BIOLOGY AND GENETICS
4, 3/3; NSIF

BIO 212
INTRODUCTION TO ORGANISMAL BIOLOGY AND DIVERSITY
4, 3/3
Prerequisite: BIO111 C or better. 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. Offered Occasionally.

BIO 213
INTRODUCTION TO ECOLOGY, EVOLUTION, AND BEHAVIOR
4, 3/3
Prerequisite: BIO111 C or better. 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. Offered Occasionally.

BIO 214
INTRODUCTION TO CELL BIOLOGY
4, 3/3
Prerequisites: CHE111 and CHE112. Structure of biological macromolecules; organization of eukaryotic and prokaryotic cells; and basic cell processes. Offered Occasionally.

BIO 300
BIOSTATISTICS
4, 3/3

BIO 301
CELL PHYSIOLOGY
4, 3/3
Prerequisites: BIO 211 or BIO214 and CHE 201. Basic concepts in cell physiology with an emphasis on transport across cell membranes, cell communication, and excitability of nerve and muscle cells. Labs introduce students to a variety of techniques employed to study cell physiology including biochemistry, cellular electrophysiology, and fluorescence microscopy. Offered Alternate Years.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 303</td>
<td>GENETICS</td>
<td>4, 3/3</td>
<td>BIO 211 or BIO214, CHE 111 and CHE 112. Principles of Mendelian, molecular and population genetics. Classic and molecular experimental methods for studying of gene structure, transmission, expression. Offered Occasionally. Equivalent course: BIO303W</td>
<td></td>
</tr>
<tr>
<td>BIO 305</td>
<td>MOLECULAR BIOLOGY</td>
<td>4, 3/1</td>
<td>BIO 214, CHE 201. Structure, organization, and function in living matter at the molecular level. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 308</td>
<td>HUMAN ANATOMY AND PHYSIOLOGY</td>
<td>3, 3/0</td>
<td>BIO 100 or BIO 111, 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. Offered Fall Only.</td>
<td></td>
</tr>
<tr>
<td>BIO 309</td>
<td>LABORATORY IN HUMAN ANATOMY AND PHYSIOLOGY</td>
<td>1, 0/3</td>
<td>BIO 100 or BIO 111 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. Offered Fall Only.</td>
<td></td>
</tr>
<tr>
<td>BIO 314</td>
<td>ADVANCED CELL BIOLOGY</td>
<td>4, 3/3</td>
<td>BIO 211 or BIO214, 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. Offered Spring Only. Equivalent course: BIO314W</td>
<td></td>
</tr>
<tr>
<td>BIO 315</td>
<td>ECOLOGY</td>
<td>4, 3/3</td>
<td>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. Offered Fall Only. Equivalent course: BIO315W</td>
<td></td>
</tr>
<tr>
<td>BIO 316</td>
<td>GENERAL MICROBIOLOGY</td>
<td>4, 2/6</td>
<td>BIO 211 or BIO214, CHE 111, CHE 112. Microorganisms and techniques of observing their morphology, growth characteristics, and distribution. The relationship of microorganisms to human activities. Offered Spring Only. Equivalent course: BIO316W</td>
<td></td>
</tr>
<tr>
<td>BIO 321</td>
<td>COMPARATIVE VERTEBRATE ANATOMY</td>
<td>4, 3/3</td>
<td>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.). Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 325</td>
<td>ICHTHYOLOGY</td>
<td>4, 3/3</td>
<td>BIO 212 and BIO 213. Study of the biology of fishes: structure and function (anatomy and physiology), systematics, evolution, diversity, zoogeography, and ecology. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 350</td>
<td>GENES IN POPULATIONS</td>
<td>4, 3/3</td>
<td>BIO 211 or BIO214, 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. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 402</td>
<td>COMPARATIVE ANIMAL PHYSIOLOGY</td>
<td>4, 3/3</td>
<td>BIO 211 or BIO214, 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. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 405</td>
<td>ORGANIC EVOLUTION</td>
<td>3, 3/0</td>
<td>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. Offered Every Semester. Equivalent course: BIO405W</td>
<td></td>
</tr>
<tr>
<td>BIO 408</td>
<td>PLANT PHYSIOLOGY</td>
<td>4, 3/3</td>
<td>BIO 212, BIO 214, CHE 112. Plant physiological processes including photosynthesis, respiration, transpiration, translocation, photomorphogenesis and tropisms; plant water potential, effects of hormones, soil nutrients, environmental stress; plant anatomy in relation to physiological function; use of instrumentation to measure physiological performance. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 414</td>
<td>MAMMALOGY</td>
<td>4, 2/3</td>
<td>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. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 418</td>
<td>LIMNOLOGY</td>
<td>4, 3/3</td>
<td>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. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 421</td>
<td>INVERTEBRATE STRUCTURE AND FUNCTION</td>
<td>3, 2/2</td>
<td>BIO 212 and BIO 213. Functional approach to the morphology, physiology, adaptation, ecology, reproduction, and evolution of invertebrates. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 426</td>
<td>MORPHOLOGY OF VASCULAR PLANTS</td>
<td>4, 3/3</td>
<td>BIO 212 and BIO 213. A study of the comparative structures, reproductive cycles, and phylogenetic relationships among the vascular plants. Interactions between structure and function and ecological adaptations will be considered. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>BIO 428</td>
<td>VERTEBRATE STRUCTURE AND FUNCTION</td>
<td>4, 3/3</td>
<td>BIO 212 and BIO 213. Comparative study of vertebrates with emphasis on their anatomy, adaptations, ecology, and phylogenetic relationships. Offered Alternate Years.</td>
<td></td>
</tr>
</tbody>
</table>
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. Offered Alternate Years.

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. Offered Alternate Years. Equivalent course: BIO430W

BIO 431 AQUATIC ENTOMOLOGY
4, 3/1
Prerequisites: Biology 212 and BIO 213. Survey of the classification, taxonomy, and identification of aquatic insects. Emphasis on aquatic insects of northeastern North America, their life histories, adaptations, and community structure in streams and wetlands. Offered Alternate Years.

BIO 433 ORNITHOLOGY
4, 3/3
Prerequisites: BIO 212, BIO 213. Introduction to the study of birds including a survey of the diversity of avian behaviors, life history strategies, mating systems, ecology, and physiological-morphological specializations of flight. Offered Alternate Years.

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. Offered Alternate Years.

BIO 488 BIOLOGY INTERNSHIP
1-15, 0/0
Prerequisites: Minimum cumulative and biology GPA of 2.5; BIO 111, BIO 212, BIO 213, BIO 214; faculty adviser and department chair permission. An opportunity to apply learned principles and methodologies in a workplace setting. Offered Every Semester.

BIO 495 SPECIAL PROJECT
1-3, 0/0
Prerequisites: Faculty adviser and department chair permission. Offered Every Semester.

BIO 498 HONORS RESEARCH
1-3, 0/0
Prerequisites: BIO 111, BIO 212, and BIO 213, BIO 214; completion of 70 or more credit hours; minimum GPA of 3.4 in biology major and minimum cumulative GPA of 3.0. Independent investigation of an original scientific problem, completed over two semesters with transition to the second semester dependent upon satisfactory completion of research proposal during the first semester. Submission of a final written report of investigation and an oral presentation of work at a scientific meeting. Offered Every Semester.

BIO 499 INDEPENDENT STUDY
3-12, 0/0
Prerequisites: Faculty adviser and department chair permission. Offered Every Semester.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 116</td>
<td>INTRODUCTION TO BUSINESS</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Every Semester.</td>
</tr>
<tr>
<td>BUS 117</td>
<td>INTRODUCTION TO RETAILING</td>
<td>3, 3/0</td>
<td></td>
<td>Role and function of retailing as a channel of distribution, the relationship and responsibilities to the producer and consumer. Offered Occasionally.</td>
</tr>
<tr>
<td>BUS 189</td>
<td>TOPICS COURSE</td>
<td>1-3, 0/0</td>
<td></td>
<td>Offered Occasionally.</td>
</tr>
<tr>
<td>BUS 201</td>
<td>FOUNDATIONS OF LEADERSHIP</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Every Semester.</td>
</tr>
<tr>
<td>BUS 212</td>
<td>INTRODUCTION TO ACCOUNTING</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Every Semester.</td>
</tr>
<tr>
<td>BUS 305</td>
<td>WORKFORCE DIVERSITY IN THE TWENTY-FIRST CENTURY</td>
<td>3, 3/0; D114</td>
<td></td>
<td>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. Offered Every Semester.</td>
</tr>
<tr>
<td>BUS 312</td>
<td>FINANCIAL ACCOUNTING</td>
<td>3, 3/0</td>
<td></td>
<td>Introduction to the fundamental accounting theories and methods underlying financial statements and the use of accounting information by decision makers. Offered Every Semester.</td>
</tr>
<tr>
<td>BUS 313</td>
<td>MANAGERIAL ACCOUNTING</td>
<td>3, 3/0</td>
<td>BUS 312</td>
<td>Managerial accounting focuses on accumulating, processing, reporting, and interpreting decision-relevant financial information which are used in managing an organization. Topics include cash flow analysis, time value of money, cost behavior, budgeting, and elements of cost accounting. Offered Every Semester.</td>
</tr>
<tr>
<td>BUS 320</td>
<td>PRINCIPLES OF MARKETING</td>
<td>3, 3/0</td>
<td></td>
<td>Survey course on concepts, policies, and marketing goods and services. Includes consumer behavior, target markets, marketing programs and ethics. Offered Every Semester.</td>
</tr>
<tr>
<td>BUS 321</td>
<td>MARKETING ON THE INTERNET</td>
<td>3, 3/0</td>
<td>BUS 320, business major. Foundations and rationale for Internet marketing. Marketing objectives and strategies for Web sites, online promotion, and advertising. Web site design tools, research on customers, and legal and ethical issues. Students evaluate Web sites and design their own online marketing sites. Offered Spring Only.</td>
<td></td>
</tr>
<tr>
<td>BUS 323</td>
<td>SALES METHODS AND TECHNIQUES</td>
<td>3, 3/0</td>
<td>BUS 320, business major. Foundation in sales principles and techniques. Emphasis on the personal development of sales skills, analysis of characteristics, behavior, and motivation of buyers, and the use of the selling process to achieve customer satisfaction. Offered Fall Only Equivalent course: BME323W</td>
<td></td>
</tr>
<tr>
<td>BUS 324</td>
<td>BUSINESS COMMUNICATION</td>
<td>3, 3/0</td>
<td>BUS 360, business major. Fundamental principles and tools for effective communication within organizations. Experiential exercises will be used to assist in developing written and oral communication skills. Offered Every Semester. Equivalent course: BUS324W</td>
<td></td>
</tr>
<tr>
<td>BUS 325</td>
<td>HUMAN RESOURCE MANAGEMENT</td>
<td>3, 3/0</td>
<td>Business major. Theoretical and practical knowledge in the major areas of human resource management including selecting, training, developing, evaluating and compensating employees. Offered Every Semester.</td>
<td></td>
</tr>
<tr>
<td>BUS 327</td>
<td>ADVERTISING CONCEPTS AND PRACTICES</td>
<td>3, 3/0</td>
<td>BUS 320, business major. Introduction to the field of advertising, including discussion of research, target marketing media selection and evaluation, goal setting and budgeting, and the development of advertising campaigns. Offered Every Semester.</td>
<td></td>
</tr>
<tr>
<td>BUS 329</td>
<td>SALES MANAGEMENT</td>
<td>3, 3/0</td>
<td>BUS 320, business major. Sales management function within modern organizations including sales-force operation, sales strategies, leadership, ethics, recruitment, selection, and motivation of staff. Sales management as a vital business function within the context of a global economy. Offered Spring Only.</td>
<td></td>
</tr>
<tr>
<td>BUS 330</td>
<td>MARKETING MANAGEMENT</td>
<td>3, 3/0</td>
<td>BUS 320, business major. Marketing-oriented thinking in today's competitive environment; analyzing needs, identifying opportunities, and bringing valued offers to targeted customer groups; analyzing, planning, implementing, and controlling marketing strategies. Includes recent themes: customer relationship management, technology/Internet revolution, brand building, and global marketing from a marketing manager's perspective. Offered Every Semester.</td>
<td></td>
</tr>
</tbody>
</table>
BUS 334  BUSINESS LAW I 3, 3/0  Legal principles applicable to business enterprises and operations including advisory and judicial systems; contracts and sales; commercial paper, secured transactions, property, torts, and appropriate sections of the Uniform Commercial Code. Offered Every Semester.

BUS 335  BUSINESS LAW II 3, 3/0  Prerequisite: BUS 334, business major. The nature of real and personal property; trusts, wills and estates; creditor’s rights and secured transactions; government regulation of business; administrative law; insurance, and evidence. Topics may include taxation of income, arbitration in resolving contract disputes, and Rule 10 b-5 of the Securities and Exchange Commission. Offered Every Semester.

BUS 340  SECURITIES 3, 3/0  Prerequisite: Junior/senior status. Securities and securities markets. Emphasis on investment markets and their interaction with the macroeconomics system. Offered Occasionally.  Equivalent course: BUS340W

BUS 341  COMMODITIES 3, 3/0  Prerequisite: Junior/senior status. Commodities futures trading. Special emphasis on terminology, hedging procedures, trading procedures, and price-making influences. Offered Occasionally.

BUS 347  RETAIL MANAGEMENT 3, 3/0  Prerequisite: BUS 320, business major. Introduction to trends and developments in retailing and to the operation of retail organizations. Strategic planning, financial control, merchandising, site selection, store organization, pricing and promotion. Offered Every Semester.

BUS 348  ELECTRONIC COMMERCE 3, 3/0  Prerequisite: BUS 320, business major. Introduction to the principles and practices of electronic commerce including EDI, electronic payment, online promotion, electronic shopping and distribution, online stores and malls, security, intellectual property rights, and legal issues. Select tools and skills required for navigating the Internet and creating a Web site. Offered Fall Only

BUS 350  CURRENT PRACTICES IN BUSINESS TECHNOLOGY 3, 3/0  Prerequisite: BUS 360, business major. Instruction in the use of information technology and business computer applications including spreadsheets, graphic presentations, networking, database management, word processing and office automation. Emphasis on using computers and computer-based information in the decision-making process. Offered Every Semester.

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. Offered Every Semester.  Equivalent course: BUS360W

BUS 363  BUSINESS IN THE WESTERN HEMISPHERE 3, 3/0  Prerequisite: BUS 360, business major. Survey of business practices in the Western Hemisphere including economic, cultural and political differences among countries, regional trade agreements, and trade practices. Select countries are compared in terms of management, marketing and human resources practices, organizational communications, and business ethics. Offered Fall Only

BUS 365  ENTREPRENEURSHIP 3, 3/0  Prerequisite: BUS 360, business major. The functions performed by entrepreneurs such as searching for opportunities and gathering resources to convert into growth-oriented, profitable ventures. Students conduct research, identify opportunities, and prepare a business plan. Offered Every Semester.

BUS 366  MANAGEMENT INFORMATION SYSTEMS 3, 3/0  Prerequisite: CIS 101 and BUS 360, business major. A balanced framework for the successful management of today’s increasingly complex array of information. Tools for dealing with and improving the management of information in a variety of business settings using application software such as Microsoft Office. Offered Every Semester.

BUS 367  STRATEGIC MANAGEMENT OF INNOVATION AND TECHNOLOGY 3, 3/0  Prerequisite: BUS 360, business major. Strategic management in newly created and established firms from the perspectives of various functional groups (e.g., research and development, manufacturing, management, and marketing) and levels of general management (business, project, corporate) involved in the process of technological innovation. Offered Occasionally.

BUS 368  SPORTS MANAGEMENT AND MARKETING 3, 3/0  Prerequisite: BUS 360, business major. The administration, coordination, and evaluation of event-related sports. Open to business and non-business majors. Provides professional and general education base for careers in sports and recreational management and marketing. Offered Every Semester.

BUS 369  ORGANIZATIONAL CHANGE AND DEVELOPMENT 3, 3/0  Prerequisite: BUS 360, business major. The process of organizational change; conceptual foundation, principles, and practical applications for use in the design and development of organizations to improve organizational effectiveness in dynamic and competitive environments.

BUS 378  BUSINESS PROFESSIONAL PRACTICE 1-12, 3/0  Business majors may elect to take up to 12 credit hours of field experience. Introductory, part-time experience usually generates 3 credit hours, whereas a full-time culminating experience could generate as many as 12 credit hours. Credit, training, and evaluation criteria to be arranged by business instructor in charge of field experience. Offered Every Semester.

BUS 403  CONSUMER BEHAVIOR 3, 3/0  Prerequisite: BUS 320, business major. Psychological, sociological, and cultural factors that influence consumer behavior and decision making. Emphasis on understanding consumer behavior in formulating marketing programs and marketing strategies. Offered Every Semester.

BUS 404  MARKETING RESEARCH 3, 3/0  Prerequisite: BUS 320, business major. Research methods and techniques used to collect data and provide information for solving marketing problems, design, sampling, data collection, analysis and interpretation, and report preparation. Orientation from the perspective of users of marketing research. Offered Every Semester.

BUS 410  ACCOUNTING ANALYSIS 3, 3/0  Prerequisites: BUS 313 and junior/senior status. Management fundamentals and economic concepts of the firm. Application of
accounting concepts and techniques in preparing, presenting, and interpreting the accounting information used by management in planning and controlling operations. Offered Occasionally.

**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. Offered Spring Only.

**BUS 413**
TAXATION OF CORPORATIONS
3, 3/0
Prerequisite: Junior/senior status. Federal taxation of corporate income and shareholders; includes organizing and capitalizing the corporate entity, determining tax liability, dividends and other non-liquidating distributions, stock redemptions, liquidations, and other corporate entities, such as S corporations and LLCs. Offered Occasionally.

**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. Offered Spring Only.

**BUS 420**
INTERNATIONAL MARKETING
3, 3/0
Prerequisite: BUS 320, business major. Concepts, theory, and practice of international marketing. Competitive global environment, trade issuers, cultural factors, and global marketing strategy formulation and implementation. Offered Every Semester.

**BUS 424**
INTERNATIONAL BUSINESS COMMUNICATION
3, 3/0
Prerequisite: BUS 324, business major. Preparation for the complex communication tasks encountered in the world of international business. Cultural aspects that influence communication including language, environment and technology, social organization, contexting, authority conception, nonverbal communication, and temporal conception. Emphasis on understanding social and cultural differences and developing effective communication strategies for the global corporation. Offered Fall Only.

**BUS 425**
INTERNATIONAL AND CROSS-CULTURAL TRAINING
3, 3/0
Prerequisite: Business major. Analysis, selection, design, implementation, and evaluation of training programs to increase functional capabilities in international and multicultural environments. Emphasis on communication strategies, human response to cultural settings, and procedures for increasing performance. Offered Spring Only.

**BUS 426**
CREATIVE OPPORTUNITIES IN LEADERSHIP AND MANAGEMENT PRACTICES
3, 3/0
Prerequisites: BUS 360 and BUS 325, junior/senior status. Detailed analysis of creative problem-solving techniques. Case problems and business projects that reinforce management functions and approaches. Places students in the role of an individual manager and team members in practical application of management theory. Offered Occasionally. Equivalent course: BUS426W

**BUS 428**
ADVANCED MERCHANDISING
3, 3/0
Prerequisite: BUS 326 or permission of instructor. Techniques of merchandising fashion apparel, accessories, housewares, major and minor appliances, and furniture. Major approaches used in planning and analyzing sales and stock records, and the use of operating and financial data to make profitable merchandising decisions as well as market planning. Offered Occasionally.

**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. Offered Every Semester.

**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. Offered Every Semester. Equivalent course: BUS440W

**BUS 460**
PRODUCTION AND OPERATIONS MANAGEMENT
3, 3/0
Prerequisite: BUS 360. Overview of the major concepts and models in the production and operations process in manufacturing and services organizations. Includes detailed examination of production systems, materials planning, project management, and quality. Offered Every Semester. Equivalent course: TEC460

**BUS 473**
INTERNATIONAL MANAGEMENT
3, 3/0
Prerequisite: BUS 360, business major. Through an approach that blends theory and practical exercises, students will learn the fundamentals of managing in a global economy. Offered Every Semester.

**BUS 490**
FIELD EXPERIENCE
1-3, 0/0
Prerequisites: Junior/senior status, permission of instructor. Provides non-business students the opportunity to have experience related to their majors in public or private agencies, business organizations, or educational institutions. Offered Occasionally.

---

### CHE - CHEMISTRY

**CHE 100**
CHEMISTRY AND SOCIETY
3, 3/0; NS14
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. Offered Every Semester and J Term.

**CHE 101**
GENERAL CHEMISTRY I
3, 2/3; NS14
Basic principles of chemistry, including atomic and molecular structure; gases, liquids, solids, and solutions; chemical reactions; acids and bases. Not open to chemistry majors. Offered Every Semester.

**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. Offered Spring Only.

**CHE 111**
FUNDAMENTALS OF CHEMISTRY I
4, 3/3; NS14
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. Offered Every Semester.

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. Offered Every Semester.

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. Offered Every Semester.

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. Offered Every Semester.

CHE 203
ORGANIC CHEMISTRY LABORATORY I
1, 0/3
Prerequisite: CHE 112. Laboratory techniques in organic chemistry including distillation, crystallization, extraction, sublimation, and chromatography are learned by application to the synthesis and purification of organic compounds. Experiments chosen from a variety of possible topics such as isolation of natural products, separation of mixtures, and synthesis. Offered Every Semester.

CHE 204
ORGANIC CHEMISTRY LABORATORY II
1, 0/3
Prerequisite: CHE 203. Prerequisite or concurrent registration: CHE 202. Continuation of CHE 203. Synthesis, isolation, purification, and identification of organic compounds with emphasis placed on spectroscopic methods of structure determination. Experiments chosen from a variety of possible topics such as multistep synthesis, mechanistic studies, and qualitative organic analysis. Offered Every Semester.

CHE 301
ANALYTICAL CHEMISTRY
4, 2/6
Prerequisite: CHE 112. Theory and laboratory applications of quantitative analytical chemistry. Gravimetric, volumetric, electrochemical, and spectrophotometric methods. Offered Every Semester.

CHE 305
PHYSICAL CHEMISTRY I
3, 3/0
Prerequisites: CHE 202 and PHY 112. Prerequisite or concurrent registration: MAT 263. The first semester of a two-semester sequence in physical chemistry. Topics include gas laws, laws of thermodynamics, state functions, thermochemistry, chemical equilibria, Maxwell relations, and chemical potential. Offered Fall Only.

CHE 306
PHYSICAL CHEMISTRY II
3, 3/0
Prerequisite: CHE 305, and MAT 263. The second semester of a two-semester sequence in physical chemistry. Topics include quantum chemistry, atomic and molecular structure, molecular and atomic spectroscopies, kinetic theory of gases, and kinetics. Offered Spring Only.

CHE 307
PHYSICAL CHEMISTRY LABORATORY I
1, 0/3
Prerequisites: CHE 204, CHE 301, and PHY 112, and MAT162, AND CWP/ENG 102. 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. Offered Fall Only
Equivalent course: CHE307W

CHE 308
PHYSICAL CHEMISTRY LABORATORY II
1, 0/3
Prerequisites: CHE 305 and CHE 307 and MAT 263 AND CWP/ENG 102. 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. Offered Spring Only. Equivalent course: CHE308W

CHE 310
LITERATURE OF CHEMISTRY
1, 1/0
Sources of chemical literature. Experiences in chemical information searching and retrieval, including examples of computer searching. Offered Fall Only

CHE 315
ENVIRONMENTAL CHEMISTRY AND TECHNOLOGY
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. Alternative energy sources, pollution-control methods and devices. Offered Occasionally.

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. Offered Fall Only.

CHE 322
BIOLOGICAL CHEMISTRY
4, 3/3
Prerequisite: CHE 202 or CHE 321. Structure and functions of the substances of biochemical interest found in living systems, supplemented by illustrative laboratory work. Not open to chemistry or forensic chemistry majors. Offered Spring Only.

CHE 331
PRINCIPLES OF INORGANIC CHEMISTRY
3, 3/0
Prerequisites: CHE 202, MAT 126 or MAT 162, PHY 108 or PHY 112, or permission of instructor. A one-semester survey course exploring the principles of physical chemistry, oriented toward the needs of forensic chemistry majors and students in environmental and health related sciences. Topics include thermodynamics, kinetics, quantum chemistry, and atomic and molecular spectroscopies. Offered Fall Only.

CHE 336
INTRODUCTION TO INORGANIC CHEMISTRY
3, 3/0
Prerequisites: CHE 202 and PHY 112. Descriptive inorganic chemistry of the main group and transition metal elements. Atomic structure and trends in the periodic table. Theories of chemical bonding. Introduction to crystal field, ligand field and molecular orbital theories. Inorganic chemistry of important industrial processes, including metallurgy. Role of metal ions in biological systems. Offered Fall Only.

CHE 399
INTERNSHIP IN CHEMISTRY
1-6, 0/0
Prerequisite: Permission of instructor. Hands on experience in approved research and/or development project of current interest to local chemical industry. Offered Every Semester.

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. Offered Every Semester.

CHE 406
ANALYTICAL TOXICOLOGY
2, 1/3
Prerequisites: MAT 311 and CHE 301. Introductory analytical toxicology for pharmaceutical, forensic, and clinical analysis. Exploration of the main categories of inorganic and organic toxins, sample collection and treatment, chromatographic separation, spectroscopic and mass spectral determination of various toxic compounds in clinical, forensic, and environmental samples. Offered Alternate Years.

CHE 390
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. Offered Alternate Years.

CHE 460
ADVANCED INORGANIC CHEMISTRY
3, 2/3
Prerequisites: CHE 202, CHE 204, CHE 305, CHE 360, and CHE 306 or concurrent. Physical inorganic and transition metal chemistry. Development of symmetry and its applications to the spectroscopy of inorganic systems. Crystal field, ligand field and molecular orbital theories. Organometallic chemistry, homogenous and heterogeneous catalysis. Metal ions in bioinorganic systems, inorganic materials. Advanced synthetic methods and methods of characterization. Offered Spring Only.

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. Offered Fall Only
Equivalent course: CHE 401

CHE 471
BIOCHEMICAL TECHNIQUES
2, 1/3
Prerequisites: CHE 204 and CHE 301. Prerequisite or concurrent registration: CHE 470. Techniques used in the collection and analysis of experimental data on biochemical systems. Participation in laboratory experiments illustrating biochemical techniques and general biochemical principles. Practice in recording and disseminating data collected in a modern biochemistry laboratory, including record keeping via a laboratory notebook, organizing and writing a scientific report, and giving an oral presentation on scientific results. Offered Fall Only

CHE 472
BIOCHEMISTRY II
3, 3/0
Prerequisites: CHE 202, CHE 470, BIO 211 or BIO 214A 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. Offered Spring Only.

CHE 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Faculty project adviser permission. Offered Every Semester.

CHE 497
CHEMISTRY MICORCOURSE
1-3, 1-3/0
Examination of significant disciplinary issues, topics, or practices; offered occasionally. Offered Occasionally.
Equivalent course: FOR 497

CHE 499
INDEPENDENT STUDY
2-12, 0/0
Prerequisite: Faculty project adviser permission. Offered Every Semester.

CHI - CHINESE

CHI 101
BEGINNING CHINESE I
3, 3/0; GE14
Fundamentals of Mandarin Chinese with an emphasis on the spoken and written language. Offered Fall Only.

CHI 102
BEGINNING CHINESE II
3, 3/0; GE14
Prerequisite: CHI 101 or equivalent. Continuation of CHI 101. Offered Spring Only.

CHI 201
INTERMEDIATE CHINESE I
3, 3/0
Prerequisite: CHI 102 or equivalent. Further development of Mandarin Chinese with an emphasis on reading and writing. Offered Fall Only.

CHI 202
INTERMEDIATE CHINESE II
3, 3/0
Prerequisite: CHI 201 or equivalent. Continuation of CHI 201. Offered Spring Only.

CHI 301
CHINESE CONVERSATION AND COMPOSITION I
3, 3/0
Prerequisites: CHI 202. Practice in spoken and written Mandarin Chinese. Offered Fall Only.

CHI 302
CHINESE CONVERSATION AND COMPOSITION II
3, 3/0
Prerequisites: CHI 301. Practice in spoken and written Mandarin Chinese. Offered Spring Only.

CHI 389
TOPICS COURSE
3-9, 0/0

CIS - COMPUTER INFORMATION SYSTEM

CIS 101
COMPUTER FUNDAMENTALS
3, 3/0
The character, organization, and use of the computer. The function of the basic components of the computer. A broad survey of application software, as well as its impact on society. Hands-on experience using common software applications such as word processing, spreadsheets, databases, and communications required. Offered Every Semester.

CIS 105
INFORMATION TECHNOLOGY AND SOCIETY
3, 3/0
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. Offered Every Semester.

CIS 151
COMPUTER-BASED INFORMATION PROCESSING I
3, 3/0
Description of computers, concepts of languages and programming. Basic properties of computer languages such as branching, looping, array handling, subprograms and functions and their application to the solution of a variety of problems. Emphasis on structured programming language with enhancement of programming skills through use of a contemporary
Computer programming language to write applications programs. Prospective CIS majors must earn a minimum grade of C in this course. Required for majors. Offered Every Semester.

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 using a high-level language. Required for majors. Offered Every Semester.

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. Required for majors. Offered Every Semester.

CIS 361 FUNDAMENTAL CONCEPTS IN OBJECT-ORIENTED PROGRAMMING 3, 3/0
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. Offered Fall Only.

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. Offered Every Semester.
Equivalent course: CIS370W

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. Offered Every Semester.

CIS 380 MICROCOMPUTER APPLICATIONS 3, 3/0
Prerequisite: CIS 370. Representative microcomputer software packages are used to solve advanced business application problems. Hands-on lab projects form a significant component of the course. Systematic design principles emphasized. Analytical features and data management techniques applied. Integration of data from different packages are practiced. Required for majors. Offered Every Semester.

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. Offered Spring Only.

CIS 400 VISUAL BASIC PROGRAMMING FOR THE WINDOWS ENVIRONMENT 3, 3/0
Prerequisite: CIS 251 or CIS 361. Students gain experience with an object-oriented, event-driven programming language using a modern integrated development environment. Students write programs utilizing basic data types, control structures, multiple forms, user-defined classes, arrays, and collections and access data from forms, files, and databases. Required for majors. Offered Every Semester.

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. Offered Occasionally.

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. Required for majors. Offered Every Semester.

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. Required for majors. Offered Every Semester.
Equivalent course: CIS411W

CIS 413 MULTIMEDIA WEB PROGRAMMING 3, 3/0
Prerequisites: CIS 251 or CIS 361, CIS 375. Integration of text, graphics, animation, and audio and video sources to create multimedia products deliverable via the World Wide Web. Programming with animation, data processing, dynamic content creation, and component manipulation. Emphasizes object-oriented capabilities of contemporary multimedia development tools, objects, methods, events, properties, and functions. Offered Spring Only.

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. Offered Spring Only.

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. Offered Fall Only.

CIS 427 E-COMMERCE SYSTEMS AND TECHNOLOGIES 3, 3/0
Prerequisites: CIS 370, CIS 375. Examines technological advancements along with business and organizational issues of electronic commerce. The technological context includes an understanding of tools and concepts such as Web servers, client/servers, communication networks, and e-commerce software. The business context includes components such as payment methods, fulfillment policies, privacy, security, and international issues. Offered Spring Only.
CIS 435
COMPUTER SEMINAR
3, 3/0
Prerequisite: Permission of instructor. Selected topics from subjects not covered in formal courses. Offered Occasionally.

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. Offered Occasionally.
Equivalent course: CIS442W

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. Offered Every Semester.

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 recovery and privacy. Offered Fall Only

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. Offered Spring Only.

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. Offered Fall Only

CIS 478
INFORMATION SYSTEM SECURITY
3, 3/0
Prerequisites: CIS 410, CIS470. A survey of essential topics pertinent to modern computer, network and information security. Topics include Fundamental security concepts; Organizational risk assessment and valuation; Attack strategies for operating systems, network and web services; Mitigation techniques, system strengthening (hardening), countermeasures and trade-offs. Offered Fall Only

CIS 488
INTERNSHIP
3-15, 3/0
Prerequisites: CIS 380, upper-division status, and permission of instructor. Qualified students are placed in functioning organizations to work as trainees, on special projects or studies, or in a relevant aspect of information systems. Offered Every Semester.

CIS 495
SPECIAL PROJECT
1-3, 0/0

CIS 499
INDEPENDENT STUDY
3-12, 0/0

COM 100
MEDIA LITERACY
3, 3/0; HU14
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. Offered Every Semester and Summer.
Equivalent course: COM100W

COM 210
CONVERGED MEDIA WRITING
3, 2/2
Prerequisites: CWP 101 and CWP 102. Writing lab with practice in organizing and writing for print and digital media; introduction to news, feature and advocacy writing; application to journalism, public relations and advertising. Offered Every Semester and Summer.

COM 215
INTRODUCTION TO VISUAL COMMUNICATION
3, 3/0
Prerequisites: COM 100 or SPC 103. 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. Offered Every Semester and Summer.

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. Offered Every Semester.
Equivalent course: COM301W

COM 302
PRINCIPLES OF JOURNALISM
3, 2/2
Prerequisites: GPA of 2.6 in a communication major; COM 210, COM 215. Overview of journalism and its historical, ethical, and professional base; focus on news sources, with practice in information-gathering techniques. Offered Every Semester.
Equivalent course: COM302W

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.
Offered Every Semester.
Equivalent course: COM303W

COM 304
WRITING FOR BROADCAST (TV, RADIO, FILM)
3, 2/2
Prerequisite: COM 210 or TFA 301. Practice in organizing and writing for radio, audio media, television, and other visual media; writing in various formats, including commercials, promotional announcements, documentaries, corporate video, and narrative scripts. Offered Every Semester and Summer.
Equivalent courses: COM304W, TFA304

COM 308
PUBLIC RELATIONS WRITING
3, 3/0
Prerequisites: GPA of 2.6 in a communication major; COM210. 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. Offered Every Semester.
Equivalent course: COM308W
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. Offered Fall Only.
Equivalent course: COM310W

COM 312
BASIC MEDIA PRODUCTION
3, 2/2
Prerequisite: COM 215 or TFA201. Exploration of basic concepts and processes of video and audio media production and editing, including hands-on experience in studio and field production, and both video and audio postproduction; Discussion of career options. Offered Every Semester.

COM 317
MEDIA MANAGEMENT
3, 3/0
Prerequisite: Junior/Senior standing. Theory and practice in broadcast management for radio and television stations, cable networks, online digital media; focus on structure, budget, sales, regulations, and audience-building aspect of programming and management. Offered Every Semester.

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. Offered Every Semester and Summer.

COM 325
FEATURE WRITING
3, 3/0
Prerequisites: GPA of 2.6 in a communication major; COM 210 or ENG 191. Theory and advanced practice in writing magazine articles, newspaper features, and similar stories for online publications; writing for specialized audiences; introduction to freelance procedures. Offered Every Semester.
Equivalent course: COM325W

COM 327
LITERARY JOURNALISM
3, 3/0
Prerequisites: COM 100 and COM 210. Exploration of literary excellence in journalistic writing; classic journalistic authors and their stories; relationship of journalism and literature, as well as television and radio scripts and online, long-form narrative. Offered Occasionally.
Equivalent course: HUM327

COM 328
INTERMEDIATE AUDIO PRODUCTION
3, 2/2
Prerequisite: COM 312. Continuing study of theory, aesthetics, and fundamentals of audio production; emphasis on commercial production for radio and other audio media; introduction to in-studio production setting. Offered Every Semester.
Equivalent course: JBS328

COM 329
INTERMEDIATE VIDEO PRODUCTION
3, 2/2
Prerequisite: COM 312 or TFA 301. Continue study of the theory, aesthetics, and fundamentals of video production; emphasis on visual, auditory, and motion elements of communication in television and video; practice in studio production setting. Offered Every Semester.
Equivalent course: JBS329

COM 335
TALK RADIO/TALK TELEVISION
3, 3/0
Prerequisite: Upper-division status. Introduction to various aspects of talk radio and talk television; differences between news reporters and talk-show hosts; relationship with sales and audience analysis; attention to roles of producer, program director, and promotions. Offered Fall Only.

COM 336
WEB AND SOCIAL MEDIA PRODUCTION
3, 2/2
Prerequisites: COM 215. Theory and practice of Web-based communication and social media; focus on strategy and design as well as writing for Web and social media. Offered Every Semester.
Equivalent courses: COM337W, JBS337

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. Offered Every Semester.
Equivalent courses: COM337W, JBS337

COM 338
ELECTRONIC NEWS II: REPORTING
3, 2/2
Prerequisite: COM 337. News reporting for electronic media in non-studio locations; practice in reporting, writing, and news presentation under deadline pressure; techniques of using cameras and editing equipment. Offered Every Semester.

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. Offered Occasionally.

COM 341
FUNDRAISING
3, 3/0
Theory and practice of fundraising and organizational philanthropy; focus on planning, organization, management, marketing, and practical approaches that nonprofit organizations use to raise money from private sources. Offered Fall Only.

COM 342
AUDIO AND MUSIC IN MEDIA
3, 3/0
Prerequisites: COM 300. Study of the role of audio and music in various media formats; hands on approach to music and sound effect selection, production, manipulation and integration in media.

COM 389
TOPICS COURSE
1-9, 0/0
Offered Occasionally.

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. Offered Every Semester.
Equivalent course: COM390W

COM 392
PUBLIC RELATIONS IN SPORTS
3, 3/0
Prerequisites: CWP 101, CWP 102, COM 210, 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. Offered Every Semester.
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. Offered Every Semester.
Equivalent courses: COM400W, JBS400

COM 401
APPLIED COMMUNICATION RESEARCH
3, 3/0
Prerequisites: GPA of 2.6 in a communication major; COM 301. Applied research techniques in communication fields; students do original research using content analysis, focus groups, and/or surveys. Offered Every Semester.
Equivalent course: JBS401

COM 405
ONLINE NEWSROOM
3, 2/1
Prerequisites: COM 303 and COM 337. Supervised reporting and editing experience through laboratory practice resulting in online publication; theory and practice in news gathering, writing, editing, capturing visual and audio elements of news stories, working under deadline pressure; emphasis on news judgment, research, accuracy, data gathering, interviewing, editing, diversity, legal issues and journalistic ethics. Offered Every Semester.

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. Offered Fall Only.
Equivalent courses: COM408W, JBS408

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. Offered Occasionally.
Equivalent courses: COM410W, JBS410

COM 418
CAMPAIGNS IN PUBLIC RELATIONS AND ADVERTISING
3, 2/2
Prerequisites: GPA of 2.6 in a communication major; COM 301, 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. Offered Every Semester.
Equivalent courses: COM418W, JBS418

COM 428
ADVANCED AUDIO PRODUCTION
3, 2/2
Prerequisite: COM328. Capstone experience in producing audio; emphasis on multi-track recording, mixing, music and voice editing. Offered Every Semester.

COM 429
ADVANCED MULTI-CAMERA STUDIO PRODUCTION
3, 2/2
Prerequisite: COM329. Capstone experience in studio television production using news and/or other genres requiring advanced skills; requires hands-on practice in studio-based productions. Offered Every Semester.
Equivalent course: JBS429

COM 431
ADVANCED FIELD PRODUCTION
3, 2/2
Prerequisite: COM312. Capstone experience in producing and directing field video productions for on-campus/off-campus viewing; students specialize in field productions in non-studio locations; use of portable cameras, lighting and sound equipment; production in remote studio settings. Offered Fall Only.

COM 432
ADVANCED POST-PRODUCTION
3, 2/2
Prerequisite: COM312. Capstone experience in video post-production; emphasis on post-production editing and editor's role in visual storytelling; hands-on approach to developing both artistic insight and practical skills in editing. Offered Every Semester.

COM 433
ADVANCED TV DOCUMENTARY PRODUCTION
3, 2/2
Prerequisite: COM312. Capstone experience in producing and directing television documentaries, with hands-on experience in planning, writing, shooting and editing; focus on analysis and evaluation of documentary productions. Offered Spring Only.

COM 434
ADVANCED VIDEO PRODUCTION PRACTICUM
3, 2/2
Prerequisite: COM329. Capstone experience in producing video programming for client- and college-generated on-campus/off-campus uses. Students staff a full production team for public affairs, community service, promotions, entertainment, and other types of programming. Offered Fall Only.

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. Offered Every Semester.
Equivalent course: COM450W

COM 488
INTERNSHIP
1-12, 3/0
Prerequisites: GPA of 2.6 in a communication major and permission of instructor. COM 301 and COM 308 for internships in public communication major. COM 304 and COM 328 or 329 for internships in media production major. COM 302 and COM 303 or 337 for internship in journalism major. Supervised field experiences in a professional setting for students who have completed extensive academic preparation in the discipline. Fifty hours of fieldwork per credit. Offered Every Semester.

COM 495
SPECIAL PROJECT
1-3, 3/0
Prerequisites: GPA of 2.6 in a communication major and permission of instructor. Offered Occasionally.

COM 499
INDEPENDENT STUDY
3-12, 3/0
Prerequisites: GPA of 2.6 in a communication major and permission of instructor. Offered Occasionally.

CRJ - CRIMINAL JUSTICE

CRJ 101
INTRODUCTION TO CRIMINAL JUSTICE
3, 3/0; SS14
An introductory analysis of the agencies and processes of the criminal justice system, including an examination of patterns of crime and victimization; underlying ideologies; procedures, functions and structure; fundamental legal concepts; interaction between various social groups and the criminal justice system; and organization, discretion and decision-making of police, criminal courts, and correctional services. Offered Every Semester.
CRJ 201
Criminal Law
3, 3/0
Prerequisite: CRJ 101. The study of substantive criminal law through the analysis of judicial opinions and textual material. In-depth coverage of the elements of crime, such as intent, actus reus, and concurrence, examined within the statutory definition of several different offenses and studied within the context of defenses such as justifications, among others. Offered Every Semester.

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. Offered Every Semester. Equivalent course: CRJ202W

CRJ 204
The Correctional Process
3, 3/0
The correctional process from sentencing to parole. Examines legal and administrative processes used in establishing postconviction remedies, criminal sanctions, and social controls on adult offenders. Emphasis on understanding the structure and function of the American correctional system and the processes in establishing correctional custody and treatment. Offered Every Semester.

CRJ 250
Introduction to Intelligence Analysis
3, 3/0
Survey course that introduces students to the discipline of intelligence in the areas of national security, business, and law enforcement. Provides students with an understanding of how intelligence systems function, how they are used by policymakers, and how they are managed and controlled. Covers such intelligence topics as history, ethics, psychology, and analytical techniques. Offered Every Semester.

CRJ 301
Police Organization and Management
3, 3/0
Prerequisite: 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. Offered Every Semester.

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. Offered Fall Only Equivalent course: CRJ302W

CRJ 303
Criminal Justice Theory and Ideology
3, 3/0
Prerequisites: CRJ 101 and CWP 102. Examination of the social, political, cultural, and economic forces that shape the historical and contemporary theories and ideologies of crime and their interactive influences with criminal justice policies and practices. Offered Every Semester. Equivalent courses: CRJ303W

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. Offered Every Semester.

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. Offered Every Semester.

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. Offered Fall Only Equivalent course: CRJ307W

CRJ 308
Crime Prevention
3, 3/0
Prerequisite: CRJ 101. The nature and effects of three levels of efforts at crime prevention: those administered by the formal justice system to prevent offenders from repeating offenses, those designed to deal with people identified as likely to commit crime, and those designed to modify the physical and social environments that foster crime. Offered Occasionally.

CRJ 310
Statistics in Criminal Justice
3, 3/0
Prerequisite: Majors Only. An introductory overview of statistical principles and statistical techniques in criminal justice research. Introduction of data measurement, data distributions, probability and the normal curve, samples and populations, testing differences between means, analysis of variance, nonparametric tests of significance, correlation, and regression analysis. Includes "hands-on" experience using SPSS for data analysis and interpretation.

CRJ 315
Research Methods in Criminal Justice
3, 3/0
Prerequisites: CRJ 101 and (ECO 305 OR MAT 311 OR PSY 306 OR SOC 301), 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. Offered Every Semester. Equivalent course: CRJ315W

CRJ 317
Constitutional Issues in Criminal Justice
3, 3/0
Prerequisites: CRJ 101 and upper-division status. Constitutional issues in criminal justice through a review of United States Supreme Court decisions regarding law enforcement, prosecution, defense, judicial process, corrections, and community supervision; additional constitutional issues related to the administration of justice. Offered Every Semester.

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. Offered Occasionally.

CRJ 355
Crime Analysis
3, 3/0
Prerequisite: Junior level status or instructor permission. Crime analysis terminology, techniques, and methodologies. The role and responsibilities of a crime analyst, including the need for analysts to utilize cross-jurisdictional data and provide objective results to policymakers and law enforcement decision-makers. Offered Every Semester.
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. Offered Spring Only.

CRJ 404 WHITE-COLLAR AND CORPORATE CRIME 3, 3/0
Prerequisites: CRJ 101, CRJ 303, and upper-division status. Physical and financial harm caused byward corporation, 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. Offered Spring Only.

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 correctional 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. Offered Occasionally.
Equivalent course: CRJ406W

CRJ 408 PROSEMINAR IN CRIMINAL JUSTICE 3, 3/0
Investigation, examination, and discussion of topics of current interest in criminal justice. Techniques and analysis of criminal justice research. Offered Occasionally.
Equivalent course: CRJ408W

CRJ 409 ADVANCED ISSUES IN LAW ENFORCEMENT 3, 3/0
Prerequisites: CRJ 101, CRJ 202, and upper-division status or permission of instructor. Advanced course on contemporary issues in law enforcement. Provides insight and depth into a broad range of topics and exposes students to experts and specialists from various relevant disciplines. Offered Spring Only.

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. Offered Fall Only

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. Offered Fall Only

CRJ 425 RACE, ETHNICITY, AND THE ADMINISTRATION OF JUSTICE 3, 3/0; DI14
Prerequisites: CRJ 101 and upper-division status. The current state of race relations in society and the criminal justice system; the historical experiences of different racial and ethnic groups in the United States and their relation to law and the criminal justice system as victims, offenders, and officials in criminal justice institutions. Offered Every Semester.
Equivalent course: AAS425

CRJ 430 GENDER AND THE ADMINISTRATION OF JUSTICE 3, 3/0; DI14
Prerequisites: CRJ 101 and upper-division status. The mutual effects between gender and aspects of criminal justice, including victimization, criminality, law, and the criminal justice process. Includes perspectives on the historical subordination of women, and how law and the criminal justice system can be used to ameliorate that subordination. Offered Every Semester.

CRJ 440 DRUGS, CRIME, AND DRUG POLICY 3, 3/0
Prerequisites: CRJ 101 and CWP 102. The nature and impact of drug abuse in America and the relationship to criminal behavior. The historical and ideological foundations of national drug-control policy as well as contemporary control and intervention strategies. Offered Occasionally.

CRJ 450 TERRORISM AND CRIMINAL JUSTICE 3, 3/0
Prerequisites: CRJ101 The phenomenon of terrorism from a criminal justice perspective. The history of the phenomenon and contemporary terrorism in both its domestic and international manifestations; theories about terrorism; analytic methods for investigating and combating it, whether perpetrated by state or non-state actors. Offered Every Semester.

CRJ 455 ADVANCED INTELLIGENCE ANALYSIS 3, 3/0
Prerequisite: CRJ 250. Advanced-level continuation of CRJ 250. Introduces a variety of analytical techniques; provides advanced knowledge, understanding, and application of these techniques; promotes critical thinking and report-writing skills. Offered Every Semester.
Equivalent course: CRJ350

CRJ 470 ADVANCED SEMINAR IN CRIMINAL JUSTICE 3, 3/0
Prerequisites: CWP 102, CRJ 101, CRJ 303, CRJ 315, upper division status, and at least 24 credit hours of criminal justice coursework. Integration of knowledge acquired throughout the criminal justice curriculum into a holistic conception of criminal justice theory, practice, research, and planning. Emphasis on developing advanced scholarship, conceptualization, and critical thinking through writing within the discipline. Offered Every Semester.
Equivalent course: CRJ470W

CRJ 485 MOOT COURT 3, 3/0
Prerequisite: Upper-division status. Simulation of a trial court or appellate court proceeding involving teams of students acting as prosecutor/plaintiffs’ attorneys, defense attorneys, and witnesses. Students develop case strategy, analyze evidence, integrate legal precedent, prepare a written brief, question witnesses, and present oral arguments to the court in opening and closing statements. Final project is a moot trial presentation held in a formal courtroom setting. Offered Every Semester.
Equivalent courses: PSC485, SOC485

CRJ 488 INTERNSHIP IN CRIMINAL JUSTICE 3-15, 3/0
Prerequisites: Senior-level standing, 3.0 GPA, and permission of instructor. A comprehensive, supervised field experience in criminal justice and related social service agencies. Requires a minimum of 10 hours of work in the agency during a 14-week period (140 total hours) and a weekly academic seminar on campus. The purpose of the internship is to integrate knowledge learned in the academic environment with the experience of day-to-day work in a professional environment. Offered Every Semester.
implications and applications. Guest speakers from a variety of disciplines will discuss how their work relates to everyday life. This interdisciplinary course examines major principles of creativity and their applications to everyday life. Personal creativity; 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. Offered Every Semester.

COURSE DESCRIPTIONS

CRS 201
FOUNDATIONS OF LEADERSHIP
3, 3/0
History of leadership and leadership as an ongoing process of challenge, growth, and development. Students learn the foundational concepts of leadership, assess their own leadership styles, and discuss issues relevant to leadership. Provides opportunities for personal awareness and promotes effective leadership-skills development. Includes opportunities for the practice of leadership skills in campus and community organizations. Offered Every Semester.

Equivalent courses: BUS201, UNC201

CRS 205
INTRODUCTION TO CREATIVE STUDIES
3, 3/0
Recognition and nurturing of creative potential. Focus on the creative person, the creative process, the creative product, and the creative environment. Further emphasis on the interactive nature of these elements and individual application in personal and professional settings. Offered Fall Only

Equivalent course: CRS302W

CRS 302
CREATIVE APPROACHES TO PROBLEM SOLVING
3, 3/0
Prerequisites: CRS 205 or CRS201, 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. Offered Fall Only

Equivalent course: CRS302W

CRS 303
CREATIVE LEADERSHIP THROUGH EFFECTIVE FACILITATION
3, 3/0
Learn and practice creativity concepts as they relate to leadership; examination of individual leadership styles and specific methods and techniques to apply concepts and skills. Offered Every Semester.

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. Offered Spring Only.

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. Offered Spring Only.

CRS 389
TOPICS IN CREATIVE STUDIES: APPLYING INTERDISCIPLINARY PRINCIPLES
3, 3/0
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. Offered Occasionally.

COURSE DESCRIPTIONS

CRS 435
EXPERIENCES IN LEADERSHIP
3, 3/0
As the culminating course in leadership, the capstone experience is designed to synthesize prior coursework and serve as a transition to professional leadership opportunities. This will be primarily achieved through an applied leadership experience in which students will be required to employ knowledge and skills gained from prior courses in the minor program. To enable students to develop an understanding of leadership in applied contexts, they will have the opportunity to interact with and learn from successful leaders in the Western New York region. Finally, students will be required to articulate a vision of themselves as future leaders in their respective professions and communities. Offered Alternate Years.

COURSE DESCRIPTIONS

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. Offered Every Semester.

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. Offered Every Semester.

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. Offered Every Semester.

Equivalent courses: BME301, BME301W, BUS301, FCS301

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. Offered Every Semester.

Equivalent courses: BME302, BUS302, FCS302

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. Offered Fall Only.

CTE 311
CAREER MENTORING INTERNSHIP
3, 1/2
Prerequisite: 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. Offered Every Semester.

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. Offered Spring Only.

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. Offered Fall Only.

CTE 404 APPLIED TEACHING METHODS IN BUSINESS/MARKETING 3, 3/0
Prerequisites: BME/CTE/FCS 301 and BME/CTE/FCS 302. Basic principles and methods of teaching business and marketing subjects. Prepares the student to effectively teach subjects in this area. Offered Every Semester.

Equivalent courses: BME411, BUS411, FCS404

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. Offered Every Semester.

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. Offered Fall Only. Equivalent courses: CTE415W

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. Offered Every Semester.

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. Offered Alternate Years.

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. Offered Alternate Years.

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. Offered Alternate Years.

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. Offered Alternate Years.

CTE 495 SPECIAL PROJECT 3, 0/0
Offered Alternate Years.

CTE 497 SPECIAL WORKSHOP 3, 0/0
Offered Summer Only.

CTE 499 INDEPENDENT STUDY 3-30, 0/0
Offered Every Semester.

CWP - COLLEGE WRITING PROGRAM

CWP 099 DEVELOPMENTAL COLLEGE WRITING 0, 3/0
A skill-building course designed to reinforce sentence and paragraph structure through emphasis on structure, unity, and coherence. Appropriate for both native students and non-native English-speaking students needing skill enhancement in Standard American English. Offered Every Semester.

CWP 101 COLLEGE WRITING I 3, 3/0; WO14
Initiation into all phases of the writing process. The study and writing of expository and analytic prose, patterns of organization, and the features of good writing. Writing assignments emphasize rhetorical strategies and essay structure. ESL sections are appropriate for non-native speakers of English. Offered Every Semester.

CWP 102 ARGUMENTATION AND RESEARCH 3, 3/0; WO14
Prerequisite: CWP 101 or its equivalent. (See College Writing Program Office, 130 South Wing for placement procedures.) Course focusing on
development of academic communication and research skills. Written and oral assignments emphasize argumentation and persuasion, advanced rhetorical strategies, analysis/synthesis, and critical thinking. Offered Every Semester.
DES 101
INTRODUCTION TO DESIGN TWO DIMENSIONAL I
3, 1/5
Basic skills and concepts in two-dimensional design. Logical and intuitive approaches to pure form and natural sources. Emphasis on development of individual solutions. Offered Every Semester.

DES 102
INTRODUCTION TO DESIGN TWO DIMENSIONAL II
3, 1/5
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. Offered Every Semester.

DES 103
INTRODUCTION TO DESIGN THREE DIMENSIONAL I
3, 1/5
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. Offered Every Semester.

DES 104
INTRODUCTION TO DESIGN THREE DIMENSIONAL II
3, 1/5
Prerequisite: DES 103. Advanced concepts and manipulation skills related to three-dimensional design. Conceptualization, visualization, and evaluation related to design objectives. Offered Occasionally.

DES 114
WORKSHOP IN CRAFTS
3, 1/5; AR14
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; AR14
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. Offered Every Semester.

DES 220
CERAMICS I
3, 1/5

DES 230
INTRODUCTION TO JEWELRY MAKING
3, 1/5
Prerequisite: DES 101. Exploration of materials and processes in jewelry making, emphasizing creative design. Offered Every Semester. Equivalent course: DES230

DES 242
FIBERS I
3, 1/5
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. Offered Every Semester. Equivalent courses: DES240, DES245

DES 250
WOOD DESIGN I
3, 1/5
Wood as a medium for expression and object design; technical and aesthetic problems. Offered Every Semester. Equivalent course: DES250

DES 270
VISUAL COMMUNICATION I
3, 1/5
Prerequisite: DES 277. 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. Offered Every Semester. Equivalent course: DES270

DES 271
LETTERING AND TYPOGRAPHY I
3, 1/5
Prerequisite: DES 277. 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. Offered Every Semester.

DES 277
COMPUTER GRAPHICS I
3, 1/5
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. Offered Every Semester.

DES 307
COLOR THEORY
3, 1/5
Prerequisite: DES 102. Origins, meaning, and dimensions of color; lectures and studio problems in various media, exploring the compositional effects of color. Offered Every Semester. Equivalent course: DES307

DES 312
HISTORY OF CRAFT: INDUSTRIAL REVOLUTION TO THE PRESENT
3, 3/0
Prerequisite: FAR104. 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. Offered Fall Only.
Equivalent course: DES312W

DES 314
HISTORY OF GRAPHIC DESIGN: INDUSTRIAL REVOLUTION TO THE PRESENT
3, 3/0
Prerequisite: FAR104 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. Offered Spring Only.
Equivalent course: DES314W

DES 320
CERAMICS II
3, 1/5
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. Course may be repeated up to six credits. Offered Every Semester.
Equivalent course: DES320

DES 321
CERAMICS: JUNIOR STUDIO
3-12, 1-4/5-20
Prerequisite: DES 320. Advanced study and experience in the total ceramic process through assigned problems according to individual personal interests. Course may be repeated up to six credits. Offered Every Semester.

DES 329
ENAMELING FOR JEWELRY
3, 1/5
Prerequisite: DES 230. Exploration of traditional and contemporary methods of enameling for jewelry design. Offered Occasionally.

DES 330
APPLIED JEWELRY TECHNIQUES
3, 1/5
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. Offered Every Semester.
Equivalent course: DES330

DES 331
JEWELRY: JUNIOR STUDIO
3-12, 1-4/5-20
Prerequisite: DES 330. Advanced exploration of materials and processes used in jewelry making with emphasis on design aspects. Individually selected projects. Course may be repeated up to nine credits. Offered Every Semester.
Equivalent course: DES331

DES 336
METALSMITHING
3, 1/5
Prerequisite: DES 235 or DES 330. Advanced concentration in metalworking as a continuation of forming techniques introduced in DES 235. Offered Spring Only.

DES 337
METALSMITHING: JUNIOR STUDIO
3-12, 1-4/5-20
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, craftsmen. Tutorial relationship with instructor. Extra class assignments, including minimum studio hours equal to class hours. Offered Spring Only.

DES 338
COMPUTER THREE-DIMENSIONAL MODELING AND RENDERING
3, 1/5
Prerequisites: DES 101 and DES 103. Exploration of the capabilities of computer modeling and rendering software, especially for craft area majors. Offered Spring Only.

DES 342
FIBERS II
3, 1/5
Prerequisite: DES 242. Intermediate exploration in traditional and experimental techniques of weaving and surface design, including floor-loom weaving and photographic silk screening printing with an emphasis on creative expression. Offered Every Semester.

DES 344
FIBERS: JUNIOR STUDIO
3, 1/5
Prerequisite: DES 342. Study and experience in complex weaving and surface design, including multiple-harness weaving and application of printing techniques; aesthetic and functional considerations. Course may be repeated up to six credits. Offered Every Semester.

DES 350
WOOD DESIGN II
3, 1/5
Prerequisite: DES 350. Design and creation of a major project in wood, approached from the viewpoint of the designer-craftsman, using a range of techniques and hand, power, and machine tools as needed. Course may be repeated up to six credits. Offered Every Semester.
Equivalent course: DES350

DES 351
WOOD DESIGN: JUNIOR STUDIO
3-12, 1-4/5-20
Prerequisite: DES 350. Design and creation of a major project in wood, approached from the viewpoint of the designer-craftsman, using a range of techniques and hand, power, and machine tools as needed. Course may be repeated up to six credits. Offered Every Semester.
Equivalent course: DES351

DES 374
ADVERTISING DESIGN
3-6, 1-2/5-10
Prerequisite: DES 377. Principles of advertising design as visual communication, motivation, and persuasion. Problems in advertising and publication design assignments; visual presentations, hands-on tutorials, and critiques of assignments. Offered Every Semester.

DES 377
COMPUTER GRAPHICS II
3, 1/5
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. Offered Every Semester.
Equivalent course: DES478

DES 378
WEB DESIGN 1
3, 2/4
Prerequisites: DES 377 and DES 380. 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. Offered Every Semester.

DES 379
MOTION DESIGN
3, 3/0
Prerequisites: DES 377, DES 380. Exploration and integration of animation methods including hand-drawn, stop motion, and digital. Motion and sound added to graphics, typography and image. History or motion design and animation. Integrates design aesthetics, sequential information presentation, and video preparation for various deployments, e.g. DVD, web/mobile and screen. Offered Every Semester.
Equivalent course: DES479
DES 380
ILLUSTRATION
3, 1/5
Prerequisite: DES 270. Creative problem solving illustration assignments. In-depth exploration of illustration media and techniques. Examination of professional practice and business issues. Offered Every Semester.

DES 382
DIGITAL 3D I
3, 2/0

DES 389
TOPICS COURSE
3, 0/0
Offered Occasionally.

DES 414
SENIOR SEMINAR/EXHIBITION
4, 3/3
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. Offered Every Semester.

DES 421
CERAMICS: SENIOR STUDIO
3-12, 1-4/5-20
Prerequisite: DES 321. Development and presentation of the student's personal direction in clay, culminating in a portfolio presentation and a final show. Course may be repeated up to nine credits.

DES 431
JEWELRY: SENIOR STUDIO
3, 1/5
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. Course may be repeated up to nine credits. Offered Every Semester.

DES 444
FIBERS: SENIOR STUDIO
3, 1/5
Prerequisite: 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. Course may be repeated up to nine credits.

DES 451
WOOD DESIGN: SENIOR STUDIO
3-12, 1-4/5-20
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. Course may be repeated up to twelve credits.

DES 472
WEB DESIGN II
3, 2/4
Prerequisites: Communication Design Major, Junior/Senior standing, DES 378. Intermediate concepts and skills involved in designing Internet-based interactive media. Builds on technical and theoretical concepts of DES 378, Web Design I. Current technical standards in web design and online publishing will be covered including multi-device interface design, content management, social media integration and accessibility.

DES 473
GRAPHIC DESIGN
3-9, 1-3/5-15
Prerequisites: DES 377 and 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. Offered Every Semester.

DES 475
GRAPHIC DESIGN PRACTICUM
1-6, 1-6/5-30
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. Offered Every Semester.

DES 478
3, 2/4

DES 479
MULTIMEDIA COMPUTER DESIGN
3, 0/6
Prerequisite: 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. Offered Every Semester. Equivalent course: DES379

DES 480
ILLUSTRATION II
3, 1/5
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. Offered Every Semester. Equivalent course: DES382

DES 488
INTERNSHIP
1-12, 0/0
Prerequisite: DES 421 or DES 431 or DES 444 or DES 451. 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. Offered Every Semester.

DES 489
MOTION DESIGN 2
3, 2/0
Prerequisites: DES 379, DES 378. Integrates type, graphics and image utilizing the language of motion, emphasizing story and ideation in time-based media. Real-world applications include title/credit sequences, product pre-visualization, interactive interfaces, advertising, and entertainment.

DES 495
SPECIAL PROJECT
1-3, 1-3/5-15
Offered Occasionally.

DES 499
INDEPENDENT STUDY
3-12, 1-4/5-20
Offered Every Semester.

DMP - DIGITAL MUSIC PRODUCTION

DMP 221
INTRODUCTION TO SOUND RECORDING AND REINFORCEMENT
3, 3/0
Prerequisite: Instructor permission. Introduction to the history, technology, and future of analog and digital audio systems and their application. The physics of sound and the art and science of live sound reinforcement and recording including acoustics, microphone selection and placement, signal processing, mixing, loudspeaker design, editing, digital audio workstation software, MIDI, and sound system design for live venues. Offered Fall Only.
**DMP 321**
RECORDING TECHNIQUES  
3, 3/0  
Prerequisite: DMP 221 or instructor permission. Examination of electronic audio systems and their application, including the art and science of sound recording and reinforcement of instrumental and vocal music in live and studio situations. Topics include practical applications of microphone selection and placement, signal processing, mixing, amplification, loudspeaker types, digital audio editing software, MIDI, and sound system design for live venues. Offered Spring Only. Equivalent course: MUS222

**DMP 331**  
INTERMEDIATE RECORDING  
3, 3/0  
Prerequisites: Acceptance into DMP minor, DMP 321. A hands-on approach to digital audio recording and production techniques including recording, microphone techniques, editing, and mixing using professional recording software. Student led recording sessions. Offered Fall Only.

**DMP 341**  
ADVANCED RECORDING  
3, 3/0  
Prerequisites: Acceptance into DMP Minor, DMP 331. In-depth study of recording techniques and tools used in the modern recording industry, advanced mixing techniques used in commercial music, critical listening and music analysis from contemporary recorded music. Student recording, performance and engineering. Offered Spring Only.

**DMP 350**  
ELECTRONIC MUSIC COMPOSITION I  
3, 2/2  
Prerequisite: Acceptance into DMP Minor. The creative use of sound and music through the exploration of technology, history, theory, and practice of electronic music since the 1920s. Provides students with a wide range of technical, theoretical, and aesthetic concepts aimed at developing and strengthening music composition skills. The technological nature of the class encompasses the learning of fundamental software tools while favoring a critical-thinking approach to the unique expressive power of electronic music composition. Offered Fall Only.

**DMP 351**  
ELECTRONIC MUSIC COMPOSITION II  
3, 3/0  
Prerequisites: Acceptance into DMP Minor, DMP 350. Focus on the creative use of sound, music and video through the exploration of key software tools for electronic music composition, music performance, mixed media, and sound installations. Advanced technical and theoretical knowledge of electronic music while developing music composition skills. Offered Occasionally.

**DMP 360**  
DIGITAL MUSIC ENSEMBLE  
1, 3/0  
Prerequisite: Instructor Permission. Electronic music performance in an ensemble setting with analog and digital musical instruments, portable computing devices and custom digital controllers. Emphasis on new approaches and skills for the performance and composition of electronic and computer music. Offered Every Semester.

**DMP 450**  
INTERACTIVE COMPUTER MUSIC  
3, 3/0  
Prerequisite: Acceptance into DMP Minor, DMP 351. Integrating computers with digital controllers, smart phones, tablets and off-the-shelf gaming devices; exploring real-time interactive music performance, sound synthesis and music composition; concepts and skills for analog and digital synthesis; theoretical and practical knowledge in real-time sound processing techniques. Offered Occasionally.

**DMP 491**  
CAPSTONE IN DIGITAL MUSIC PRODUCTION  
1-3, 0/0  
Prerequisite: DMP 350 and permission of the instructor. Independent capstone project under the direction of an instructor.
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. Offered Occasionally.

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. Offered Occasionally.

ECO 302
WOMEN IN THE ECONOMY
3, 3/0; DI14
Recommended Prerequisites: ECO 201 or ECO 202. Analysis of the economic status of women in the United States and other selected nations as compared to men's status and differentiated by age, race, ethnicity, and marital status. Offered Occasionally.
Equivalent course: ECO302W

ECO 304
MONEY AND BANKING
3, 3/0
Prerequisite: ECO 201. The nature and function of money. The American monetary system and the role of the banking system. The structure and functions of the Federal Reserve System. Fundamental monetary theory and its relation to monetary policy. Current problems relating to the impact of monetary policy on prices and employment. Offered Every Semester.

ECO 305
STATISTICS FOR ECONOMICS
3, 3/0; MQ14
Introduction to elementary statistical principles, descriptive statistics, and statistical inference. Applications in economics, business, and criminal justice. Required for majors. Offered Every Semester.

ECO 307
INTERMEDIATE MICROECONOMICS
3, 3/0
Prerequisites: ECO 202 and MAT 114 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. Offered Every Semester.
Equivalent course: ECO307W

ECO 308
INTERMEDIATE MACROECONOMICS
3, 3/0
Equivalent course: ECO308W

ECO 312
URBAN ECONOMICS
3, 3/0
Prerequisite: ECO 202 or permission of instructor. Application of economic analysis to urban growth, land use, poverty, housing, segregation, pollution, congestion, and urban public finance. Offered Alternate Years.
Equivalent course: ECO312

ECO 320
MANAGERIAL ECONOMICS
3, 3/0
Prerequisites: ECO 202, ECO 305, and MAT 114 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. Offered Alternate Years.

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. Offered Alternate Years.

ECO 350
PUBLIC FINANCE
3, 3/0
Prerequisites: ECO 202. The nature and growth of public expenditures; principles of taxation; federal, state, and local revenue; introduction to fiscal policy and theory; significance of public debt; selected problems in intergovernmental fiscal relations. Offered Alternate Years.
Equivalent course: ECO350W

ECO 355
THE ECONOMICS OF ENERGY AND THE ENVIRONMENT
3, 3/0
Prerequisite: ECO 202 or permission of instructor. Micro- and macroeconomic activity imposed by the availability of energy resources and by environmental considerations. Alter-native policy strategies relating to energy and the environment are evaluated in terms of their economic impact. Offered Alternate Years.

ECO 389
TOPICS COURSE
1-3, 1-3/0
Offered Occasionally.

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. Offered Fall Only.
Equivalent course: ECO401W

ECO 403
COMPARATIVE ECONOMIC SYSTEMS
3, 3/0
Prerequisites: ECO 201 and ECO 202 or permission of instructor. Essential characteristics of different market economies as they have evolved to the present, their strengths and weaknesses, increasing social control, trading and monetary unions, contrast with socialist systems. Offered Occasionally.
Equivalent course: ECO403W

ECO 404
ECONOMIC DEVELOPMENT
3, 3/0
Prerequisite: Minimum of two economics courses. The difficulties of economic development, industrialization, and worldwide poverty. Competing theories of economic growth and structural change. Problems of population, natural resources, and environment. The growing interdependency of the U.S. and lesser-developed countries' (LDCs) economies. The crucial role of women in development, as well as ethnic and other social and cultural relationships. LDCs debt crisis and international finance. Macro- and microeconomic planning models. The policy-making process, development strategies, and specific case studies of LDCs in Africa, Asia, and Latin America. Offered Occasionally.
Equivalent course: ECO404W
ECO 405
HISTORY OF ECONOMIC THOUGHT
3, 3/0
Prerequisites: ECO 201 and ECO 202 or permission of instructor. The attempts of key economic thinkers from Aristotle to the present to analyze economic phenomena and provide guidance for economic policy. Offered Fall Only.
Equivalent course: ECO405W

ECO 407
POLITICAL ECONOMY CLASSICS
3, 3/0
Prerequisite: ECO 201 or ECO 202. In-depth study of classic political economic thought, including Adam Smith's Wealth of Nations; David Ricardo's Principles of Political Economy and Taxation; Karl Marx's Das Kapital, Volume I; and John Maynard Keynes's General Theory. Relationships between these classics and modern economic thought and socioeconomic phenomena. Offered Occasionally.

ECO 411
REGIONAL ECONOMIC ANALYSIS
3, 3/0
Prerequisites: ECO 201 and ECO 202 or permission of instructor: college-level algebra 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. Offered Occasionally.
Equivalent courses: ECO411W, GEG411

ECO 412
URBAN ECONOMICS
3, 3/0
Prerequisite: ECO 201 or ECO 202 or permission of instructor. Application of economic analysis to urban growth, land use, poverty, housing, segregation, pollution, congestion, and urban public finance. Offered Occasionally.
Equivalent course: ECO412W

ECO 424
ECONOMETRICS
3, 3/0
Prerequisites: MAT 126, ECO 201 or ECO 202, and ECO 305 or equivalent statistics course. Introduction to applied statistical analysis, with primary emphasis on business and economic applications. Provides quantitative background for graduate study in economics, business, public administration, and related social science, as well as for many types of employment. Offered Every Semester.
Equivalent course: ECO424W

ECO 488
INTERNSHIP
3-12, 0/0
Prerequisites: ECO 201, ECO 202, and one relevant elective; minimum cumulative GPA of 2.75; upper-division status. Application and integration of economic concepts and methodologies in an off-campus field setting, under the direction of a faculty sponsor, with the cooperation of a designated field supervisor. A maximum of 3 credit hours of ECO 488, ECO 495, or ECO 499 may be applied toward the major. Offered Every Semester.

ECO 490
SENIOR SEMINAR
3, 3/0
Prerequisites: ECO 305, ECO 307, ECO 308, and senior standing. ECO 424 recommended. Capstone course required of all senior economics and finance majors. Investigation and oral presentation of findings of selected advanced topics in economics and finance. Senior thesis on a topic in economics or finance required. Offered Every Semester.

ECO 493
APPLIED ACTUARIAL THEORY
3, 3/0
Prerequisites: MAT 381 and ECO 424. Advanced consideration of actuarial studies and models with an emphasis on applied modeling of actuarial activity and current actuarial processes. Major areas and theories in actuarial sciences as used by companies, government and not-for-profits. Mathematical, statistical, economic and finance models used by actuaries in the field. Analysis of different types of data to understand the financial risks facing different groups. The capstone course for majors in actuarial sciences. Offered Occasionally.

ECO 495
SPECIAL PROJECT
1-3, 0/0
Prerequisites: ECO 307 and ECO 308 and permission of instructor. A maximum of 3 credit hours of ECO 488, ECO 495, or ECO 499 may be applied toward the major. Offered Every Semester.

ECO 498
HONORS RESEARCH
3, 0/0
Prerequisite: Admission to honors program in economics. A review of the literature and development of the theoretical issues relevant to the research topic. Offered Occasionally.

ECO 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisites: Permission of instructor. A maximum of 3 credit hours of ECO 488, ECO 495, or ECO 499 may be applied toward the major. Offered Every Semester.

EDU 121
TUTING STUDENTS WITH A DIVERSE LANGUAGE BACKGROUND
3, 3/0
Prerequisite: Completion of all GE2K general education/IF cognates in math and English with a minimum grade of C. Develops socio-cultural awareness and trains tutors for community-based experiences. Prepares students for experiences in and unique interactions between culture and education while providing strategies to help second-language learners access the core curriculum. Offered Occasionally.

EDU 201
INTRODUCTION TO EDUCATION
3, 3/0
Prerequisite: Majors; SPF 202. Introduction to elementary school teaching. Application of major theories, consideration of developmentally appropriate practices relative to New York State and Common Core Learning Standards. Introduction to classroom organization, classroom management, and multi-cultural education; participation in the reflective writing process emphasized. Field experience required, approximately 12 hours. Offered Every Semester.
Equivalent course: SPF201

EDU 211
INTRODUCTION TO LITERACY
3, 3/0
Prerequisite: Majors, EDU 201 or equivalent. Current literacy theories and practices supportive of diverse populations and congruent with New York State Learning Standards. School-based or field placement activities that support course objectives are required, approximately 12-15 hours. Offered Every Semester.

EDU 220
PROGRAMS FOR INFANTS AND TODDLERS
3, 3/0
Prerequisites: Majors; EDU201, SPF202, EDU211. 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 fifty hour field placement. Offered Every Semester.
Equivalent course: ECS405

EDU 310
TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL
3, 3/0; DI14
Prerequisites: Majors, EDU 211 with a C or higher. Overall GPA of 2.5 or higher. Provides teacher candidates with culturally sensitive pedagogy for selecting, organizing, presenting, and evaluating elementary level social studies curriculum. The arts are used to enhance social studies...
EDU 311
THE TEACHING OF READING AND THE OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL
6, 6/0
Prerequisite: Majors; Overall cumulative GPA of 2.5 in these courses: SPF 202, SPF 203, SPF 302, EDU 201, EDU 211 (exceptional education students will substitute EXE 360 for EDU 201). EDU 211 must have a C or higher. Builds methodological practice from the theoretical scaffold of literacy knowledge and teaching established in EDU 211 and the survey course EDU 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 and Common Core 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. Orientation required. Offered Every Semester.
Equivalent course: EDU311W

EDU 312
THE TEACHING OF SCIENCE AND MATHEMATICS
6, 6/0
Prerequisites: Majors; overall cumulative GPA 2.5 or higher; cumulative GPA of 2.5 in the professional sequence, and a C or higher in EDU 311W. Basic curriculum course for elementary teachers. Students participate in classroom practice while exploring in-depth curricular, theoretical, and practical educational frameworks. Students plan, implement, and evaluate lessons incorporating the NYS and professional organization 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. Offered Every Semester.

EDU 313
TEACHING SCIENCE IN EARLY CHILDHOOD AND CHILDHOOD SETTINGS
3, 3/0
Prerequisites: Grade of C or better in EDU 211. Explore the teaching of science to elementary students guided by learning theory and current practices. Effective science instruction strategies guided by current standards, will be developed and practiced. Offered Every Semester.

EDU 316
TEACHING ELEMENTARY SCHOOL MATHEMATICS
6, 3/0
Pre-requisites: Full majors only; overall minimum GPA of 2.5; professional sequence minimum GPA of 2.5; EDU 311 with a grade of C or better; Math 122 or higher. 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. Offered Every Semester.

EDU 326
EARLY LITERACY AND LANGUAGE DEVELOPMENT
3, 3/0
Prerequisites: ECE or ECC Majors; Overall and Professional Sequence GPAs of 2.5 or higher, EDU 220, C or higher in EDU 311W. May be taken concurrently with EDU 329. Exploration of principles, practices and materials for providing children, Birth-III, with strong foundation to support early literacy skills and language development. Examines theoretical influences on language development, relationship between oral language and early literacy, children's literature, curriculum and assessment. Consideration of implications for enhanced literacy and language outcomes for all children. Offered Every Semester.
Equivalent course: EDU426

EDU 329
INTEGRATED THEMATIC INSTRUCTION FOR YOUNG CHILDREN
6, 6/0
Prerequisites: ECE or ECC Majors; Overall and Professional Sequence GPAs of 2.5 or higher, EDU 211, EDU 220, EDU 311W with a grade of C or higher. Use of knowledge of child development and learning to provide opportunities that support the physical, social, emotional, cognitive, and aesthetic development of preschool, kindergarten, and primary-grade children. Lessons are taught in a Professional Development School. Offered Every Semester.
Equivalent course: ECS329

EDU 375
INTEGRATION OF TECHNOLOGY IN EDUCATION
3, 3/0
Prerequisites: Majors; EDU 211. Provides the pre-service teacher with an awareness of the current range of instructional and adaptive technologies. Emphasis on curricular integration of technology within the general and special education classroom, and connections between instructional technology and the broader role of technology in society. Offered Every Semester.
Equivalent course: EXE375

EDU 400
PRACTICUM IN ELEMENTARY TEACHING I
6, 0/6
Prerequisites: Majors; Minimum overall cumulative GPA of 2.5; minimum grade of C in teaching methods courses related to specific major (EDU 311, EDU 312, or EDU 329). Minimum GPA of 2.5 in major courses. Successful completion of English composition/basic communication and mathematics competency requirements. Intended as the teacher candidate's culminating experience. This is the first supervised teaching experience of two school settings at two developmental levels five full days a week for approximately seven to eight consecutive weeks. Teacher candidates are required to effectively demonstrate content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflective practice. Extension teacher candidates will take EDU 404 and their extension student teaching course. Exceptional Education majors will take EDU 405 and their EXE student teaching course. Early Childhood and Combined Early Childhood/Childhood majors will take EDU 400 and EDU 410. Offered Every Semester.

EDU 401
PRACTICUM IN TEACHING: INTERMEDIATE
6, 0/6
Prerequisites: Majors; Minimum cumulative GPA of 2.5; minimum grade of C in methods courses related to respective major (EDU 310W, EDU 311W, EDU 312); minimum cumulative 2.5 GPA in major courses; successful completion of English composition/basic communication and mathematics competency requirements. Intended as the teacher candidate's culminating experience. Supervised teaching in elementary grades five full days a week for approximately seven to eight consecutive weeks. Individual conferences and seminars with college supervisor. Tutorial and group instruction. Daily and long-range planning, teacher-pupil planning, unit teaching, audiovisual aids, classroom management, record keeping, evaluation techniques. Offered Every Semester.

EDU 402
SEMINAR IN EDUCATION
1-3, 1-3/0
Nature and function of a philosophy of education. Teaching research methods and techniques, crucial issues in education, problems of 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. Offered Every Semester.
Equivalent course: EDU402W

EDU 404
PRACTICUM IN ELEMENTARY TEACHING FOR EX ED & MIDDLE SCHOOL EX STUDENTS
6, 0/0
Prerequisites: Extension and Exceptional Education majors only. Minimum cumulative GPA of 2.5; minimum grade of C in teaching methods courses (EDU 310W, EDU 311W, and EDU 312). Minimum GPA of 2.5 in professional sequence/major courses. For elementary education teacher candidates seeking certification in
EDU 410
PRACTICUM IN EARLY CHILDHOOD TEACHING
6, 0/6
Prerequisites: Early Childhood and Combined Education Majors only. Minimum cumulative GPA of 2.5; minimum grade of C in methods courses related to respective major (EDU 220, EDU 310W, EDU 311W, EDU 312, or EDU 329); minimum cumulative 2.5 GPA in major courses; successful completion of English composition/basic communication and mathematics competency requirements. Intended as the teacher candidate's culminating experience. Provides supervised teaching experience in an early childhood classroom five full days per week for approximately seven to eight consecutive weeks. Effective demonstration of content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflective practice. Offered Every Semester.

EDU 411
PARENTS, SCHOOLS, AND COMMUNITY
3, 3/0
Prerequisite: Early childhood and combined childhood/early childhood majors only; this course may be taken concurrently with student teaching or in a previous semester. Designed to assist students in building 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. Offered Every Semester. Equivalent courses: EDU420, EXE411

EDU 416
TEACHING LITERACY IN MIDDLE AND SECONDARY SCHOOLS
3, 3/0
Majors. Upper division status. Special problems in reading encountered in middle and secondary schools. Includes the reading process, reading skills, and techniques for assessing developing reading skills. Special emphasis on critical reading in content areas. Offered Every Semester. Equivalent course: SED305

EDU 417
ADOLESCENT LITERACY
3, 3/0
Prerequisites: EDU 416 or equivalent; upper division status. Literacy development of adolescents in multiple contexts. Topics will include adolescents' multiple literacies, assessing literacy abilities, use of technology and materials other than textbooks, integration of literacy across disciplines, and strategies for working with struggling students, English learners, students with disabilities, and advanced students. Offered Every Semester. Equivalent course: EDU417W

EDU 499
INDEPENDENT STUDY
3-12, 0/0
Offered Occasionally.

ELS
ENGLISH LANGUAGE SECONDARY PROGRAM
0-3, 3/0
ELS is a non-degree, non-credit developmental course designed to help students with varying levels of English proficiency through course interaction with native speakers of English, and Individualized language practice. This program consists of six levels of English Language study. Each level has 30 hours of class time per week, plus an additional 3 hours of small conversation group practice.

ENG - ENGLISH

ENG 130
BIBLICAL AND CLASSICAL LITERATURE
3, 3/0; WC14
Works selected from Biblical literature and from Latin and Greek literature before Constantine. Offered Every Semester.

ENG 131
MEDIEVAL AND RENAISSANCE LITERATURE
3, 3/0
Major European writers before 1600. Offered Occasionally.

ENG 151
INTRODUCTION TO POETRY
3, 3/0; HU14
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. Offered Every Semester. Equivalent course: ENG151W

ENG 160
INTRODUCTION TO LITERATURE AND FILM
3, 3/0; HU14
Analysis of film as the creative and critical interpretation of fiction or drama; how such films respond to aesthetic, cultural, technological, political, and ideological influences, both in the source text and in the contemporary moment. Offered Summer Only.

ENG 190
INTRODUCTION TO LITERARY INTERPRETATION
3, 3/0
Prerequisites: CWP 101 and CWP 102, or the equivalent. The basic types of responses to literature; the defining characteristics of poetry, fiction, and drama; as well as the skills of close reading of literary texts. Students should take this class immediately after completing the freshman writing requirement or within the first year of transferring into the English major. Offered Every Semester. Equivalent course: ENG190W

ENG 200
FIELD EXPERIENCE IN SECONDARY ENGLISH EDUCATION
3, 3/0
Prerequisites: Standing in the English Education Major or Post Baccalaureate Certification Program. Introduction to the secondary school as an institution and to the teaching of English as a profession. Required observations of teaching English and other areas, 7-12. Limited experimentation with teaching secondary English. Offered Every Semester.

ENG 201
THE CRAFT OF WRITING
3, 3/0
Prerequisite: CWP 102. Demystifying the act of writing by studying, discussing, and practicing models of the composing process. Offered Every Semester.

ENG 205
HISTORY OF CINEMA I
3, 3/0; HU14
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. Offered Every Semester.

ENG 206
HISTORY OF CINEMA II
3, 3/1; HU14
This course provides the student with an understanding of cinema history since 1960. Students will examine representive trends in cinema's aesthetic form, technical breakthroughs, key innovators, cultural antecedents and cultural impact. Offered Every Semester. Equivalent course: ENG206W
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 210</td>
<td>BRITISH LITERATURE TO 1700</td>
<td>3, 3/0</td>
<td>HU14</td>
</tr>
<tr>
<td></td>
<td>A study of selected topics, themes, and authors in British literature before 1700. Offered Every Semester. Equivalent course: ENGI10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 211</td>
<td>BRITISH LITERATURE 1700-1914</td>
<td>3, 3/0</td>
<td>HU14</td>
</tr>
<tr>
<td></td>
<td>A study of selected topics, themes, and authors in British literature from 1700 to 1900. Offered Every Semester. Equivalent course: ENGI11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 212</td>
<td>BRITISH LITERATURE SINCE 1914</td>
<td>3, 3/0</td>
<td>HU14</td>
</tr>
<tr>
<td></td>
<td>An overview of important movements in British literature from the late Victorian period through contemporary literature, such as Fabianism, Modernism, Marxism, Aestheticism, The Movement and the Angry Young Men, postmodernism, post-Empire writing, Black British writing, and women's and queer literature. Offered Fall Only. Equivalent course: ENGI10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 220</td>
<td>AMERICAN LITERATURE TO 1865</td>
<td>3, 3/0</td>
<td>HU14</td>
</tr>
<tr>
<td></td>
<td>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. Offered Every Semester. Equivalent course: ENGI140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 221</td>
<td>AMERICAN LITERATURE SINCE 1865</td>
<td>3, 3/0</td>
<td>HU14</td>
</tr>
<tr>
<td></td>
<td>A study of topics, themes, and authors in American literature after the Civil War. Offered Every Semester. Equivalent course: ENGI141</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 230</td>
<td>COMPARATIVE LITERATURE</td>
<td>3, 3/0</td>
<td>HU14</td>
</tr>
<tr>
<td></td>
<td>Prerequisites: None. Compareative analyses of the ways in which literary periods, genres, movements, and social forms are shaped by the languages and cultural contexts through which they come into being. Offered Every Semester.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 231</td>
<td>WOMEN IN LITERATURE</td>
<td>3, 3/0</td>
<td>D114, HU14</td>
</tr>
<tr>
<td></td>
<td>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. Offered Every Semester. Equivalent course: ENG231W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 240</td>
<td>AFRICAN AMERICAN LITERATURE TO 1940</td>
<td>3, 3/0</td>
<td>D114, HU14</td>
</tr>
<tr>
<td></td>
<td>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. Offered Fall Only. Equivalent course: AAS240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 241</td>
<td>AFRICAN AMERICAN LITERATURE SINCE 1940</td>
<td>3, 3/0</td>
<td>D114, HU14</td>
</tr>
<tr>
<td></td>
<td>Realism, naturalism, modernism, and postmodernism in African American literature; black revolutionary thought and artistry in the 1960s and 1970s; neo-slave narratives; African American poetry, fiction, essays, and drama from 1940 to the present; influence of spirituals, gospel, the blues, jazz, sermons, and folktales on contemporary African American writing. Offered Spring Only.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 243</td>
<td>INTRODUCTION TO LATINO/A LITERATURE</td>
<td>3, 3/0</td>
<td>D114, HU14</td>
</tr>
<tr>
<td></td>
<td>Introductory study of themes, ideas, and movements in Latino/a literature from the mid-nineteenth century to the present. Offered Every Semester.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 245</td>
<td>WRITING ABOUT THE ARTS</td>
<td>3, 3/0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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. Offered Alternate Years.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 247</td>
<td>NATURE WRITING</td>
<td>3, 3/0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: CWP 102Students 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. Offered Alternate Years. Equivalent course: ENG247W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 252</td>
<td>BRITISH MODERNISM</td>
<td>3, 3/0</td>
<td>HU14</td>
</tr>
<tr>
<td></td>
<td>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. Offered Spring Only.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 253</td>
<td>TWENTIETH-CENTURY LITERATURE II</td>
<td>3, 3/0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Literature in English from 1945 to the present. Offered Alternate Years.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 255</td>
<td>THE SHORT STORY</td>
<td>3, 3/0</td>
<td>HU14</td>
</tr>
<tr>
<td></td>
<td>Various examples of influential short fiction produced around the world since the nineteenth century. Familiarizes students with various literary techniques involved in the craft of short fiction. Offered Every Semester. Equivalent course: ENG355</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 260</td>
<td>CHILDREN'S LITERATURE</td>
<td>3, 3/0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Sophomore, junior, or senior status. Types of children's literature, with attention to the principles of book selection and reading interests of children. Offered Every Semester.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 266</td>
<td>THE PERSONAL ESSAY</td>
<td>3, 3/0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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. Equivalent course: ENG266W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 300</td>
<td>WRITING FOR THE PROFESSIONS</td>
<td>3, 3/0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: CWP 102 Practice for students who wish to improve their competence in writing and editing for a variety of professions. Offered Every Semester. Equivalent course: ENG300W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 301</td>
<td>ADVANCED COMPOSITION</td>
<td>3, 3/0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisites: CWP 102 Practice in writing academic papers. Writing assignments emphasize stylistic strategies, diction, disciplinary conventions, revision and research. Offered Every Semester. Equivalent course: ENG301W</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ENG 303  LITERATURE IN FILM  3, 3/1
The motion picture as a vehicle for literature. Analysis and comparison of
verbal and pictorial forms. Offered Every Semester.
Equivalent course: ENG303W

ENG 304  FORMS OF FILM  3, 3/1
Breadth and depth of selected film forms. Emphasis on the film as art,
medium of communication, and social document. May be taken for credit
more than once when content varies. Offered Every Semester.
Equivalent course: ENG304W

ENG 305  CREATIVE WRITING: NARRATIVE  3, 3/0
Prerequisite: CWP 102. The writing of narrative. Offered Every Semester.
Equivalent course: ENG305W

ENG 306  CREATIVE WRITING: POETRY  3, 3/0
Prerequisites: CWP 102, or permission of the instructor. The craft of
writing poetry, blending theoretical and practical approaches. Explores a
variety of established genres and experimental poetic forms, such as the
sonnet, sestina, haiku, cynghanedd, concrete poetry, etc. Considers how
such forms change across different cultures and eras.
Equivalent course: ENG306W

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. Offered Occasionally.
Equivalent course: ENG307W

ENG 308  PEER TUTORING PRACTICUM  1-3, 0/0
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. Offered Every Semester.
Equivalent course: ENG308W

ENG 309  TEACHING AND EVALUATING WRITING  3, 3/0
Prerequisite: CWP 102. 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. Offered Every Semester.
Equivalent course: ENG309W

ENG 311  METHODS IN TEACHING LANGUAGE  3, 3/0
Prerequisite: CWP 102. 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. Offered Every Semester.
Equivalent course: ENG311W

ENG 313  MILTON  3, 3/0
Prerequisite: ENG 190 or permission of instructor. A study of Milton's
oeuvre with emphasis on Paradise Lost. Offered Spring Only.

ENG 314  CHAUCER  3, 3/0
Prerequisite: ENG 190 or permission of instructor. A selection of
Chaucer's works, including some Canterbury Tales. Offered Fall Only.
Equivalent courses: ENG314W, ENG411

ENG 315  SHAKESPEARE I  3, 3/0
Prerequisite: ENG 190 or THA 316 or permission of instructor.
Shakespeare's works to 1600: the sonnets, early tragedies, histories, and
comedies. Offered Fall Only.
Equivalent course: ENG315W

ENG 316  SHAKESPEARE II  3, 3/0
Prerequisite: ENG 190 or THA 316 or permission of instructor.
Shakespeare's works after 1600: the problem plays, major tragedies, and
romances. Offered Spring Only.
Equivalent course: ENG316W

ENG 317  SHAKESPEARE FOR FUTURE TEACHERS  3, 3/0
Prerequisite: ENG 190 or permission of instructor. Intensive study of the
Shakespeare plays most often taught in high school English classes.
Emphasis on strategies for teaching Shakespeare and on particular needs
of high school teachers in multicultural settings. Offered Summer,
Alternate Years Only.

ENG 320  AUTOBIOGRAPHY AND MEMOIR  3, 3/0
Prerequisite: ENG 201 or permission of instructor. A study of the genres
of autobiography and memoir with an emphasis on developing mastery in
producing written products of the forms. Students read and discuss
examples of both autobiography and memoir, write informal and
processed examples of the genres, and learn about the process of writing
in the genres for publication. Offered Alternate Years.
Equivalent course: ENG320W

ENG 322  REPRESENTATIVE WRITERS  3, 3/0
Prerequisite: ENG 190 or instructor permission. Selected works of a
single writer or group of related writers. Supplemental readings of other
writers of the period. Offered Occasionally

ENG 325  CREATIVE NON-FICTION  3, 3/0
Prerequisite: ENG 201 or permission of instructor. Reading and writing
creative nonfiction, an essay form that consciously uses the stylistics
features of fiction and poetry. Offered Alternate Years.

ENG 330  LITERATURE OF THE BIBLE  3, 3/0
Prerequisite: ENG 190 or permission of instructor. The Bible as literature.
Equivalent course: ENG330W

ENG 331  FRENCH LITERATURE IN TRANSLATION  3, 3/0
Prerequisite: ENG 190 or permission of instructor. Selected masterpieces
of contemporary French literature in translation. Knowledge of French not
required. French majors must obtain permission of department chair and
course instructor. Offered Alternate Years.
Equivalent course: FRE331
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 332</td>
<td>RUSSIAN LITERATURE IN TRANSLATION</td>
<td>3, 3/0</td>
<td>Prerequisite: ENG 190 or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Knowledge of Russian not required. Offered Alternate Years. Equivalent course: RUS332</td>
</tr>
<tr>
<td>ENG 335</td>
<td>MEDIEVAL AND RENAISSANCE EUROPEAN LITERATURE</td>
<td>3, 3/0</td>
<td>Prerequisite: ENG 190 or permission instructor. A study of selected themes, ideas, and movements of European literature in the medieval and Renaissance periods. Offered Alternate Years.</td>
</tr>
<tr>
<td>ENG 337</td>
<td>MODERN EUROPEAN LITERATURE</td>
<td>3, 3/0</td>
<td>Prerequisite: ENG 190 or permission instructor. Selected themes, ideas, and movements of European literature from the Renaissance to postmodernity. Offered Alternate Years. Equivalent course: ENG310</td>
</tr>
<tr>
<td>ENG 345</td>
<td>WORLD LITERATURE AFTER 1945</td>
<td>3, 3/0</td>
<td>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. Offered Every Semester. Equivalent course: ENG345W</td>
</tr>
<tr>
<td>ENG 346</td>
<td>NON-WESTERN LITERATURE AFTER 1945</td>
<td>3, 3/0</td>
<td>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.</td>
</tr>
<tr>
<td>ENG 350</td>
<td>TWENTIETH-CENTURY DRAMA I</td>
<td>3, 3/0</td>
<td>Prerequisite: ENG 190 or permission of the instructor. Drama from the 1800s to 1950 in Europe and America. Offered Alternate Years.</td>
</tr>
<tr>
<td>ENG 351</td>
<td>TWENTIETH-CENTURY DRAMA II</td>
<td>3, 3/0</td>
<td>Prerequisite: ENG 190, Exploration of selected works from the extensively-varied ethnicities, nationalities, and styles of world drama in their literary and theatrical contexts since the absurdism of the 1950’s into the present. Offered Alternate Years.</td>
</tr>
<tr>
<td>ENG 353</td>
<td>AMERICAN INDIAN LITERATURE</td>
<td>3, 3/0; D114, NW14</td>
<td>Prerequisites: Three credit hours of literature or permission of the instructor. Selected aspects of traditional sacred and secular tales and contemporary American Indian literature in its cultural, historical and aesthetic contexts. Offered Every Semester.</td>
</tr>
<tr>
<td>ENG 354</td>
<td>ETHNIC AMERICAN MINORITY LITERATURE</td>
<td>3, 3/0; D114</td>
<td>Prerequisites: CWP 102 and three credit hours of literature or permission of the instructor. The background, development, and contemporary contribution of ethnic American minority literature (folklore, 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. Offered Every Semester. Equivalent course: ENG354W</td>
</tr>
<tr>
<td>ENG 356</td>
<td>FUTURISTIC FICTION</td>
<td>3, 3/0</td>
<td>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. Offered Alternate Years. Equivalent course: ENG356W</td>
</tr>
<tr>
<td>ENG 357</td>
<td>LITERARY PUBLISHING</td>
<td>3, 3/0</td>
<td>Prerequisites: ENG 102. The applied and historical study of all stages literary publishing from the founding of Poetry: A Magazine of Verse in 1912 to present, including an understanding of both the function of the magazine as a literary force and the interaction of design and text. Practical application via lab hours devoted to editing, designing, and distributing Elm Leaves Journal, SUNY-Buffalo State’s literary magazine.</td>
</tr>
<tr>
<td>ENG 361</td>
<td>CONTEMPORARY LITERATURE</td>
<td>3, 3/0</td>
<td>Prerequisite: ENG 190 or permission of instructor. Reading, discussion, and analysis of literature written in the last 25 years. Literary features and literary theories. Offered Alternate Years.</td>
</tr>
<tr>
<td>ENG 370</td>
<td>FOUNDATIONS OF LANGUAGE</td>
<td>3, 3/0</td>
<td>Prerequisites: CWP 102. Analysis of the printed book as a physical, historical, social, and literary object. Course requires original bibliographical research. Offered Alternate Years.</td>
</tr>
<tr>
<td>ENG 380</td>
<td>THE HISTORY OF THE PRINTED BOOK</td>
<td>3, 2.5/0</td>
<td>Prerequisite: ENG 102. The applied and historical study of all stages literary publishing from the founding of Poetry: A Magazine of Verse in 1912 to present, including an understanding of both the function of the magazine as a literary force and the interaction of design and text. Practical application via lab hours devoted to editing, designing, and distributing Elm Leaves Journal, SUNY-Buffalo State’s literary magazine.</td>
</tr>
<tr>
<td>ENG 385</td>
<td>GENDER AND SEXUALITY IN LITERATURE</td>
<td>3, 3/0; D114</td>
<td>Prerequisite: ENG 190 or instructor permission. Elements of gender and sexuality in British, American, or world literature: themes, historical periods, philosophies, theories, and movements. May be taken for credit up to three times when content varies. Offered Occasionally.</td>
</tr>
<tr>
<td>ENG 390</td>
<td>LITERARY CRITICISM AND THEORY</td>
<td>3, 3/0</td>
<td>Prerequisite: 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. Offered Every Semester.</td>
</tr>
<tr>
<td>ENG 402</td>
<td>ADVANCED CREATIVE WRITING: NARRATIVE</td>
<td>3, 3/0</td>
<td>Prerequisite: CWP 102; ENG 305; or permission of the instructor. A study of prose narrative and the craft of its writing. Offered Alternate Years. Equivalent course: ENG402W</td>
</tr>
<tr>
<td>ENG 403</td>
<td>ADVANCED CREATIVE WRITING: POETRY</td>
<td>3, 3/0</td>
<td>Prerequisite: CWP 102; ENG 306; or permission of instructor. Creative workshop for students experienced and/or talented in the writing of poetry. Offered Alternate Years. Equivalent course: ENG403W</td>
</tr>
<tr>
<td>ENG 410</td>
<td>COMPOSITION AND RHETORICAL THEORY</td>
<td>3, 3/0</td>
<td>Prerequisite: ENG 201. Trends in contemporary composition and rhetorical theory with an emphasis of the theory of discourse</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits/Hours</td>
<td>Prerequisites</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ENG 415</td>
<td>SEVENTEENTH-CENTURY BRITISH LITERATURE</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG415W</td>
</tr>
<tr>
<td>ENG 416</td>
<td>EIGHTEENTH-CENTURY ENGLISH LITERATURE</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 hours of literature or instructor permission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG416W</td>
</tr>
<tr>
<td>ENG 417</td>
<td>BRITISH NOVEL TO 1800</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG417W</td>
</tr>
<tr>
<td>ENG 418</td>
<td>THE BRITISH NOVEL, 1800-1900</td>
<td>3, 3/0</td>
<td>ENG 190, or permission of the instructor. An exploration of British novels written between 1800 and 1900.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG418W</td>
</tr>
<tr>
<td>ENG 419</td>
<td>ROMANTIC MOVEMENT IN BRITISH LITERATURE</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG419W</td>
</tr>
<tr>
<td>ENG 420</td>
<td>EARLY VICTORIAN LITERATURE</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG420W</td>
</tr>
<tr>
<td>ENG 421</td>
<td>LATER VICTORIAN LITERATURE</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG421W</td>
</tr>
<tr>
<td>ENG 422</td>
<td>JAMES JOYCE AND HIS CONTEMPORARIES</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG422W</td>
</tr>
<tr>
<td>ENG 441</td>
<td>THE ROMANTIC MOVEMENT IN AMERICAN LITERATURE</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 hours of English literature, or permission of the instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG441W</td>
</tr>
<tr>
<td>ENG 442</td>
<td>THE AMERICAN NOVEL TO 1900</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature or instructor permission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG442W</td>
</tr>
<tr>
<td>ENG 443</td>
<td>AMERICAN POETRY AFTER 1900</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or instructor permission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG443W</td>
</tr>
<tr>
<td>ENG 444</td>
<td>THE AMERICAN NOVEL AFTER 1900</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or instructor permission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG444W</td>
</tr>
<tr>
<td>ENG 445</td>
<td>AMERICAN REALISM</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG445W</td>
</tr>
<tr>
<td>ENG 450</td>
<td>STUDIES IN POETRY</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG450W</td>
</tr>
<tr>
<td>ENG 451</td>
<td>STUDIES IN FICTION</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 hours of literature, or permission of the instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG451W</td>
</tr>
<tr>
<td>ENG 452</td>
<td>STUDIES IN DRAMA</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 hours of literature, or instructor permission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG452W</td>
</tr>
<tr>
<td>ENG 454</td>
<td>TWENTIETH-CENTURY NOVEL 1</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG454W</td>
</tr>
<tr>
<td>ENG 455</td>
<td>THE BRITISH NOVEL AFTER 1900</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG455W</td>
</tr>
<tr>
<td>ENG 461</td>
<td>YOUNG-ADULT LITERATURE</td>
<td>3, 3/0</td>
<td>ENG 190 and 3 credit hours of literature, or permission of instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Equivalent course: ENG461W</td>
</tr>
</tbody>
</table>
ENG 463 METHODS, MATERIALS, AND PROFESSIONAL DEVELOPMENT FOR TEACHERS OF ENGLISH
6, 6/0
Prerequisites: SPF 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. Offered Every Semester.

ENG 464 STUDENT TEACHING IN MIDDLE SCHOOL/JUNIOR HIGH SCHOOL ENGLISH
6, 0/0
Prerequisites: ENG 200, ENG 309, ENG 462 or ENG 463, SPF 303, SPF 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. Offered Every Semester.

ENG 465 STUDENT TEACHING IN SENIOR HIGH SCHOOL ENGLISH
6, 0/0
Prerequisites: ENG 200, ENG 309, ENG 462 or ENG 463, SPF 303, SPF 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. Offered Every Semester.

ENG 488 INTERNSHIP
1-15, 0/0
Prerequisites: Minimum cumulative GPA of 2.0; upper-division status. Field experiences that supplement departmental academic offerings; geared to students' interests. Faculty intern supervisor and department chair permission necessary. Offered Occasionally.

ENG 490 SENIOR SEMINAR
3, 3/0
Prerequisites: ENG 190 and 3 credit hours of literature, or permission of instructor. Advanced study of a literary theme, genre, author, period, or theoretical approach. Offered Every Semester. Equivalent course: ENG490W

ENG 491 WRITING SEMINAR FOR WRITING MAJORS
3, 3/0
Prerequisites: ENG 201 and three hours of literature/writing classes. Senior standing. Writing major. Advanced study of writing, publishing, and literary markets with particular attention to improving and reflecting on literary craft as a dynamic process. Each student will develop a major body of work as a demonstration of individual writing processes, identified points of personal progress, and potential contributions to the literary market.

ENG 495 SPECIAL PROJECT
3, 0/0
Offered Occasionally.

ENG 499 INDEPENDENT STUDY
3-12, 0/0
Prerequisites: ENG 390. Substantial research project in literary criticism, literary history, textual studies, or a related field. Offered Occasionally.

ENS - ENVIRONMENTAL SCIENCE

ENS 100 URBAN ENVIRONMENT SCIENCE
3, 3/0; NSIF, TSIF
Survey of environmental science exploring the consequences to Buffalo from environmental and technological changes over the past century. Strong interdisciplinary focus with emphasis on the connections between our urban environment and human health. Topics include air and water quality, environmental stresses in the urban ecosystem, and environmental exposure to urban pollution and human health.

ENS 300 ENVIRONMENTAL CASE STUDIES
3, 3/0
Prerequisites: Completion of IF natural science requirement and upper division standing. BIO104 D AND (CHE100 D OR SCT231 D) Examines environmental literature and case studies on historically important and current environmental issues. Distinctions between facts, opinions and value judgments to evaluate and judge real situations. Global in scope; social contexts and national and global environmental policies. Equivalent course: ENS410

ENT - ENGINEERING TECHNOLOGY

ENT 100 THE AGE OF ENERGY
3, 3/0
Energy needs of society and the drive to use renewable energy sources and more efficient forms of transportation; technological, societal, ethical, and economic impact of societies' energy needs; impact on quality of life issues; hands-on student team projects focusing on solar, wind, hydro; increased efficiency topics such as hybrid/electrical vehicles and house lighting. Offered Occasionally.

ENT 101 TECHNICAL DRAWING
3, 0/0
Survey of projection theory, multi-view projection, spatial relationships, and visualization of point, lines, planes and solids; size and shape description through sketching, and computer-aided drawing; standards and conventions, auxiliary views, revolutions, tolerance, dimensions, geometric tolerances, and pictorials. Offered Occasionally.

ENT 102 INTRODUCTION TO EQUATION-SOLVING SOFTWARE
1, 1/0
Use of current industry-standard computer software programs that allow users to enter and manipulate mathematical equations; perform calculations; and analyze, plot, and document data. These engineering software programs are invaluable tools to technology majors, who combine engineering principles with mathematics to describe physical phenomena. Offered Fall Only

ENT 104 ESSENTIALS OF ELECTRICAL ENGINEERING TECHNOLOGY
3, 2/3
Introduction to the field of Electrical Engineering Technology for majors and non-majors. Introduction to basic electricity, mathematical modeling of circuits, circuit breadboards, electrical instrumentation, computer analysis/circuit simulation and technical reporting. Emphasizes projects, project management and the need for teamwork by conducting projects in the areas of design, simulation and test. Required of all freshmen electrical engineering technology majors. Junior-transfer students will substitute a technical-elective course for ENT104. Offered Fall Only

ENT 202 INTRODUCTION TO ENGINEERING ECONOMICS AND PROJECT MANAGEMENT
1, 1/0
Prepares students to estimate, plan, and manage projects. Provides exposure to techniques to better prepare students for problems seen in industry. Offered Fall Only
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 300</td>
<td>ANALYTICAL METHODS FOR TECHNOLOGISTS</td>
<td>3, 3/0</td>
<td>Prerequisite: MAT 127 or MAT 162 OR MAT 164Application of calculus and analytic geometry to problems in technology. Introduction to ordinary differential equations used to analyze mechanical and electrical quantities in technology. Offered Every Semester.</td>
</tr>
<tr>
<td>ENT 301</td>
<td>MECHANICS I</td>
<td>3, 2/3</td>
<td>Prerequisites: MAT 126 or MAT 161 and PHY 107 or PHY 111 or equivalent. 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. Offered Every Semester.</td>
</tr>
<tr>
<td>ENT 302</td>
<td>MECHANICS II</td>
<td>3, 2/3</td>
<td>Prerequisites: ENT 300 or MAT 315Principles 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. Offered Every Semester.</td>
</tr>
<tr>
<td>ENT 303</td>
<td>KINEMATICS</td>
<td>3, 2/3</td>
<td>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. Offered Spring Only.</td>
</tr>
<tr>
<td>ENT 311</td>
<td>THERMODYNAMICS</td>
<td>3, 2/3</td>
<td>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. Offered Fall Only</td>
</tr>
<tr>
<td>ENT 312</td>
<td>FLUID MECHANICS</td>
<td>3, 2/3</td>
<td>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. Offered Spring Only.</td>
</tr>
<tr>
<td>ENT 314</td>
<td>SOLID MODELING</td>
<td>3, 2/3</td>
<td>Prerequisites: TEC 101 or ENT 101Three-dimensional (3-D) parts and assembly creation; defining high-level features like cuts and holes in addition to low-level geometry; using parametric modeling; 3-D solid modeling; introduction to finite element concepts for stress and heat testing. Offered Fall Only</td>
</tr>
<tr>
<td>ENT 321</td>
<td>ANALYSIS OF MANUFACTURING PROCESSES</td>
<td>3, 2/3</td>
<td>Prerequisites: TEC 201 or ENT 201 and MAT 126 or MAT 161 (or equivalent)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. Offered Occasionally.</td>
</tr>
<tr>
<td>ENT 332</td>
<td>ELECTRICAL CIRCUITS AND DEVICES II</td>
<td>3, 3/2</td>
<td>Prerequisite: ENT 331. Study of electromechanical energy conversion, magnetic fields and circuits, magnetic materials, single and polyphase circuits, AC and DC machines and electrical power distribution.</td>
</tr>
<tr>
<td>ENT 331</td>
<td>ELECTRICAL CIRCUITS AND DEVICES I</td>
<td>3, 3/2</td>
<td>Prerequisite: PHY 108 or PHY 112. Basic concepts and components used in electrical circuits, both DC and AC, including resistors, capacitors, inductors, transformers; Electrical circuit theorems and their applications in industry; Electrical instrumentation and computer analysis tools used in performing laboratory experiments; Required for engineering technology majors. Offered Every Semester.</td>
</tr>
<tr>
<td>ENT 335</td>
<td>INDUSTRIAL ELECTRONICS</td>
<td>3, 2/3</td>
<td>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. Offered Fall Only</td>
</tr>
<tr>
<td>ENT 341</td>
<td>ELECTRONICS</td>
<td>3, 2/2</td>
<td>Prerequisite: ENT 331.Introductionary analysis of electronic circuits, with emphasis on semiconductor devices. Offered Spring Only.</td>
</tr>
<tr>
<td>ENT 342</td>
<td>NETWORKS</td>
<td>3, 3/0</td>
<td>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. Offered Spring Only.</td>
</tr>
<tr>
<td>ENT 345</td>
<td>DIGITAL SYSTEMS</td>
<td>3, 2/3</td>
<td>Prerequisite: ENT 341. This course analyzes digital logic systems and their components that are a major part of modern electrical technology including applications in computers, manufacturing, communication, control, and other engineering systems. Equivalent course: ENT431</td>
</tr>
<tr>
<td>ENT 346</td>
<td>MICROCONTROLLERS</td>
<td>3, 2/3</td>
<td>Prerequisite: ENT 345. This course introduces the theory and application of microprocessors and microcontrollers and develops proficiency in programming Assembly and C languages, interfacing, as well as prototyping and troubleshooting. Equivalent course: ENT432</td>
</tr>
<tr>
<td>ENT 351</td>
<td>ANALOG ELECTRONICS</td>
<td>3, 2/3</td>
<td>Prerequisites: ENT 341.Analysis and design of electronic circuits (discrete and integrated) with emphasis on linear analog applications and use of computer simulation software. Offered Fall Only</td>
</tr>
<tr>
<td>ENT 352</td>
<td>DIGITAL ELECTRONICS</td>
<td>3, 3/2</td>
<td>Prerequisite: ENT 351.Analysis and design of electronic circuits, discrete and integrated, with emphasis on pulse and digital applications. Offered Spring Only.</td>
</tr>
<tr>
<td>ENT 361</td>
<td>PROGRAMMABLE LOGIC CONTROLLERS (PLCS)</td>
<td>3, 2/3</td>
<td>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. Offered Occasionally.</td>
</tr>
</tbody>
</table>
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. Offered Occasionally.

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. Offered Every Semester.

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. Offered Occasionally.

ENT 401
STRESS ANALYSIS
3, 2/3
Prerequisites: ENT 300 or MAT 315. 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. Offered Fall Only.

ENT 402
SHOCK AND VIBRATION ANALYSIS
3, 2/3
Prerequisites: ENG 302, AND ENT 401 AND junior or senior status. 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. Offered Spring Only.

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. Offered Occasionally.

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. Offered Fall Only.

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. Offered Occasionally.

ENT 420
PROFESSIONAL EXPERIENCE IN MECHANICAL ENGINEERING TECHNOLOGY
1, 1/0
Corequisites/Prerequisites: ENT 411, ENT 421, ENT 335. Prerequisites: ENT 401, ENT 331, ENT 311, ENT 312, ENT 301, ENT 302, TEC 311 and TEC 201. Exposure to professional engineering design concepts/methodologies; MET portfolio development and evaluation of MET subject matter necessary for the senior design project; senior design project proposal development. Required for mechanical engineering technology program. Offered Fall Only.

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. Offered Fall Only. Equivalent course: ENT421W

ENT 422
MACHINE DESIGN II
3, 2/3
Prerequisite: ENT 420. Advanced topics in machine design. Students design a major project involving preliminary analysis, working drawings, fabrication, and testing of a prototype. Required for mechanical engineering technology majors. Offered Spring Only. Equivalent course: ENT422W

ENT 431
DIGITAL SYSTEMS I
3, 3/2
Prerequisite: ENT 331. Boolean algebra, combinational circuit analysis and design, gates, sequential circuits, flip-flops, counters, logic types, interfacing, A/D converters, encoders/decoders, mux/demux, and memory devices. Experiments are designed to develop facility in analyzing, testing, troubleshooting, and designing digital circuits. Offered Fall Only. Equivalent course: ENT345

ENT 432
MICROPROCESSORS
3, 2/3
Prerequisite: ENT 431. An introduction to the theory and application of microprocessors and microcontrollers, including interfacing, prototyping and troubleshooting. Offered Spring Only. Equivalent course: ENT346

ENT 433
MICROPROCESSOR APPLICATIONS AND ROBOTICS
3, 3/2
Prerequisite: ENT 432. Theoretical and practical background of the technology used in the application of microprocessors. Programming hardware, interfacing, and application of microprocessors. The elements of robotics with emphasis on the construction and programming of robots. Offered Occasionally.

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. Offered Occasionally.

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. Offered Spring Only.
ENT 445
POWER ELECTRONICS
3, 3/0
Prerequisites: ENT 331, ENT 341 (could be taken as corequisite). The operation of modern, high-power electronic devices as applied to controls, electric machines, and power systems; power diodes, silicon-controlled rectifiers, thyristors, BJTs, MOSFETs, and IGBTs; applications to rectifiers, inverters, controlled rectifiers, AC voltage control, DC step-up and step-down systems, high-voltage DC (HVDC), and flexible AC transmission systems (FACTS); perform laboratory experiments using electrical instrumentation and computer analysis tools; required for power/ machines option of electrical engineering technology majors. Offered Fall Only

ENT 461
CONTROL SYSTEMS I
3, 3/2
Prerequisites: ENT 341, ENT 342, ENT 302, and senior status. Applies frequency domain techniques to open-loop and closed-loop systems with emphasis on stability and performance. Classical methods of control engineering are presented: Laplace transforms and transfer functions, root locus analysis, Routh-Hurwitz stability analysis, steady-state error for standard test signals, and second-order system approximations. MATLAB is introduced and utilized extensively for computer-aided analysis. Laboratory exercises provide practical application of the control-system theory. Offered Fall Only

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. Offered Spring Only. Equivalent course: ENG462W

ENT 465
ELECTRICAL DESIGN
3, 2/3
Advanced topics in electrical and system design, the design process, and project management; a major design project that includes preliminary analysis, working drawings or schematics, fabrication, and testing of a prototype. Offered Spring Only. Equivalent course: ENT465W

ENT 471
POWER SYSTEMS I
3, 2/3

ENT 472
POWER SYSTEMS II
3, 2/3

ENT 481
RENEWABLE DISTRIBUTED GENERATION AND STORAGE
3, 2/3
Prerequisites: ENT 331 Electric Circuits or equivalent, and ENT 471 or instructor’s permission. This course introduces renewable and efficient electric power systems. It encourages self-teaching by providing numerous practical examples requiring quantitative analysis. Topics include historical, regulatory, and utility industry perspectives of the electric system as well as most of the electricity, thermodynamics, and engineering economics background needed to understand new power technologies. Offered Occasionally.

ENT 482
SMART GRID FROM SYSTEMS PERSPECTIVE
3, 2/1
Prerequisites: ENT 331 or equivalent, and ENT 471 or instructor’s permission. A comprehensive understanding of smart grid is needed for stakeholders to enable them to develop systems prospective of Smart Grid and its technologies, increase modeling of Smart Grid from multiple perspectives, to increase economic understanding and decision making around current and future technologies, to understand the role of policy and politics in the advancement of Smart Grid over time, to understand how to educate others in Smart Grid, and to understand basic subsystems of the Smart Grid

ENT 491
OPERATIONS AND MANAGEMENT OF MODERN GRID
3, 3/0
Prerequisites: Senior status or instructor’s permission. This course introduces and explains operations of electric utilities including generation, transmission, distribution, and consumption of electric power, defines system operations and their drivers; discusses impact of deregulation and impact of smart grid technologies on systems operations; introduces concepts of business of system operations, and discusses various management systems used by modern utilities.

ENT 495
SPECIAL PROJECT
1-3, 0/0
Offered Spring Only.

ENT 497
WORKSHOP
1-3, 0/0
Offered Occasionally.

ENT 499
INDEPENDENT STUDY
3-12, 0/0
Offered Every Semester.

ESL - ENGLISH SECOND LANGUAGE

ESL 303
FOUNDATIONS OF ESL AND BILINGUAL EDUCATION
3, 3/0
Prerequisites: Instructor Permission. Introduction to the historical, psychological, social and philosophical foundations of ESL and Bilingual instruction.

ESL 401
METHODS OF TEACHING ESL
3, 2/0
Prerequisites: ESL303 or Instructor Permission. Exploration of the research, standards, and pedagogical practices that inform professional English as a Second Language teaching.

ESL 403
CONTENT AREA ESL INSTRUCTION
3, 3/0
Prerequisites: ESL401 or Instructor Permission. Methods and materials used to teach core subject areas in English to limited proficiency students, including those with disabilities.

ESL 404
ASSESSMENT IN THE ESL AND BILINGUAL CLASSROOM
3, 3/0
Prerequisites: ESL 401. Exploration of assessment protocols employed in ESL and Bilingual classrooms.

ESL 407
MIDDLE SCHOOL ESL TEACHING
6, 0/0
Prerequisites: ESL401 and Instructor Permission. Supervised foreign language teaching in a middle school five days per week for seven weeks with additional participation in school programming required.
**ESL 408 HIGH SCHOOL ESL TEACHING**
6, 0/0
Prerequisites: completion of all program requirements; completion of Oral Proficiency Interview; instructor permission. Supervised foreign language teaching in a high school five days per week for seven weeks with additional participation in school programming required.

---

### EWS - EDUCATION WORKSHOPS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWS 094</td>
<td>HARASSMENT, BULLYING, AND DISCRIMINATION PREVENTION AND INTERVENTION (DASA)</td>
<td>0, 3/0</td>
<td>This workshop is designed to fulfill the harassment, bullying, and discrimination prevention and intervention training required under the Dignity for All Students Act (DASA). The workshop objective is to address the social patterns of harassment, bullying, and discrimination. It will also cover the identification and mitigation of harassment, bullying, and discrimination; and strategies for effectively addressing problems of exclusion, bias, and aggression in educational settings. Successful completion of this workshop will meet the certificate requirements in §14(5) of Chapter 102 of the Laws of 2012. Offered Every Semester.</td>
</tr>
<tr>
<td>EWS 095</td>
<td>SCHOOL ANTI-VIOLENCE EDUCATION (SAVE)</td>
<td>0, 3/0</td>
<td>School Anti-Violence Education (SAVE)/Workshop: All Education students are required to take a SAVE Workshop The objective of this training initiative will explain the SAVE legislation and its impact on New York State School. Offered Every Semester.</td>
</tr>
<tr>
<td>EWS 096</td>
<td>AIDS/HIV Exposure Workshop: This workshop is required for Childhood, Early Childhood, and Exceptional Education students. The objective of this training initiative is to provide an overview of HIV and AIDS, transmission and Prevention, statistics, classroom issues and preventing infection in the classroom. Offered Every Semester.</td>
<td>0, 3/0</td>
<td></td>
</tr>
<tr>
<td>EWS 097</td>
<td>FIRE AND ARSON SAFETY</td>
<td>0, 3/0</td>
<td>Fire and Arson Safety Workshop: Required for all students who graduate/complete programs AFTER December 2003. The objective of this training initiative is to provide general knowledge on fire safety, arson, juvenile fire setters and prevention. Offered Every Semester.</td>
</tr>
<tr>
<td>EWS 098</td>
<td>CHILD ABUSE IDENTIFICATION</td>
<td>0, 3/0</td>
<td>Child Abuse Identification Workshop: All Education Students are required to take a Child Abuse Identification Workshop The objective of this training initiative is to provide every New York State mandated reporter with the knowledge and skills to be able to: Effectively report child abuse or maltreatment/neglect to the NYS Child Abuse and Maltreatment Register. Evaluate situations to determine whether there is reasonable cause to suspect child abuse or maltreatment. Identify the physical and behavioral indicators commonly associated with child abuse. Offered Every Semester.</td>
</tr>
<tr>
<td>EWS 099</td>
<td>ALCOHOL AND OTHER DRUGS</td>
<td>0, 3/0</td>
<td>Alcohol and Other Drugs Workshop: Required for all students who graduate/complete programs AFTER December 2003 The objective of this training initiative is to provide general knowledge about alcohol and other drugs and their effects, addiction, dependency, recovery, statistics, and a framework in prevention. Offered Every Semester.</td>
</tr>
</tbody>
</table>

---

### EXE - EXCEPTIONAL EDUCATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXE 100</td>
<td>NATURE AND NEEDS OF INDIVIDUALS WITH SPECIAL NEEDS</td>
<td>3, 3/0</td>
<td>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. Offered Every Semester.</td>
</tr>
<tr>
<td>EXE 245</td>
<td>COMMUNITY SERVICE WITH INDIVIDUALS WITH SPECIAL NEEDS</td>
<td>1-9, 0/1-9</td>
<td>Service in community agencies with individuals who are exceptional. May be taken for 1, 2, or 3 credit hours. Offered Every Semester.</td>
</tr>
<tr>
<td>EXE 360</td>
<td>FOUNDATIONS OF TEACHING INDIVIDUALS WITH DISABILITIES</td>
<td>3, 3/0</td>
<td>Prerequisite: EXE 100, Exceptional Education Major Status, at least 2.6 overall GPA. 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. Offered Every Semester.</td>
</tr>
<tr>
<td>EXE 361</td>
<td>FIELD EXPERIENCE IN FOUNDATIONS OF TEACHING INDIVIDUALS WITH DISABILITIES</td>
<td>1, 0/1</td>
<td>Prerequisite: EXE 100, Exceptional Education Major Status, at least 2.6 overall GPA. Application of adaptations and instructional procedures learned in EXE 360. Must be taken concurrently with EXE 360. Offered Every Semester.</td>
</tr>
<tr>
<td>EXE 362</td>
<td>BEHAVIOR AND CLASSROOM MANAGEMENT</td>
<td>3, 3/0</td>
<td>Prerequisite: Exceptional Education OR Elementary Education Major Status. Managing the classroom environment to facilitate effective instruction. Various models of behavior management. Exceptional education majors must take this course concurrently with EXE 363. Offered Every Semester. Equivalent courses: SPF362, EXE306</td>
</tr>
<tr>
<td>EXE 363</td>
<td>FIELD EXPERIENCE IN BEHAVIOR MANAGEMENT</td>
<td>1, 0/1</td>
<td>Prerequisite: Exceptional education major; 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. Offered Every Semester.</td>
</tr>
<tr>
<td>EXE 364</td>
<td>EDUCATING STUDENTS WITH SEVERE DISABILITIES</td>
<td>3, 3/0</td>
<td>Prerequisites: EXE 100; Exceptional Education Major Status, at least 2.6 overall GPA. Characteristics and needs of individuals with severe disabilities and those of their families. Methods to teach and support individuals and families. Offered Every Semester.</td>
</tr>
<tr>
<td>EXE 365</td>
<td>EVALUATION AND ASSESSMENT IN SPECIAL EDUCATION</td>
<td>3, 3/0</td>
<td>Prerequisites: Completed EXE 100, EXE 360, EXE 361, EXE 362, and EXE 363 with grade of C or higher, Exceptional Education Major Status, at least 2.6 overall GPA. Corequisite: EXE 366. Introduction to the educational evaluation and assessment of students with disabilities. Offered Every Semester. Equivalent course: EXE365W</td>
</tr>
<tr>
<td>EXE 366</td>
<td>FIELD EXPERIENCE IN EVALUATION AND ASSESSMENT</td>
<td>1, 0/1</td>
<td>Prerequisites: Completed EXE 360, EXE 361, EXE 362, and EXE 363 with a grade of C or higher, Exceptional Education Major Status, at least</td>
</tr>
</tbody>
</table>
EXE 367 CURRICULUM FOR CHILDREN WITH MILD DISABILITIES
3, 3/0
Prerequisites: Completed EXE 360, EXE 361, EXE 362, and EXE 363 with a grade of C or better. Exceptional Education Major Status, at least 2.6 overall GPA. Corequisite: EXE 368. Description and discussion of curricular design and implementation for children with disabilities. Offered Every Semester. Equivalent course: EXE367W

EXE 371 FOUNDATIONS OF TEACHING CHILDREN WITH DISABILITIES
3, 3/0
Prerequisite: EDU 211, Elementary Education Major Status. Adaptations, procedures, and management systems necessary for effective instruction of children with disabilities in general education settings. Offered Every Semester.

EXE 372 INTEGRATION OF TECHNOLOGY IN EDUCATION
3, 3/0
Prerequisite: SPF 202 or SPF 202, Exceptional Education Major Status, at least 2.6 overall GPA OR other education majors by permission. 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. Offered Every Semester. Equivalent course: EDU375

EXE 375 TOPICS COURSE
1-3, 0/0
Offered Occasionally.

EXE 378 PRACTICUM IN CURRICULUM FOR CHILDREN WITH MILD DISABILITIES
2, 0/2
Prerequisites: Completed EXE 360, EXE 361, EXE 362, and EXE 363 with a grade of C or higher, Exceptional Education Major Status, at least 2.6 overall GPA. Corequisite: EXE 367. Application of curricular design and implementation for children with disabilities. Offered Every Semester.

EXE 389 TOPICS COURSE
1-3, 0/0
Offered Occasionally.

EXE 420 INTRODUCTION TO FINE ARTS
3, 1/5; AR14
The critical bases of procedures in the fine arts. Introductory problems in studio performance. Lecture and studio experience. Non-art majors only. Offered Every Semester.

EXE 421 DRAWING I
3, 1/5; AR14
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. Offered Every Semester.

EXE 422 DRAWING II
3, 1/5
Prerequisite: FAR 101. Drawing the nude using various media with an emphasis on proportion, anatomy, and pictorial structure. Lecture and studio experience. Offered Every Semester.

EXE 423 MODELING
3, 1/5
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. Offered Every Semester.

EXE 424 THEMES AND ISSUES IN THE CONTEMPORARY ARTS
3, 3/0
Introduction to important figures, movements, and concepts in recent art, architecture, and design. Develops students' abilities to visually analyze works of art and to think critically about the role of art and the artist/designer in society. To be taken by all visual arts majors during their first year attending Buffalo State College. Offered Every Semester.

EXE 425 TOPICS COURSE
3-6, 3/0
Offered Every Semester.

EXE 426 INTRODUCTORY PAINTING
3, 1/5
Prerequisite: FAR 101. Introduction to the methods, techniques, standards, and values of painting. Exploration of color, form, and compositional problems. Lecture and studio experiences. Offered Every Semester.

EXE 427 INTRODUCTORY PHOTOGRAPHY
3, 1/5
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. Offered Every Semester.

EXE 428 INTRODUCTORY PRINTMAKING
3, 1/5
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. Offered Every Semester.

EXE 429 INTRODUCTORY SCULPTURE
3, 1/5
Prerequisite: FAR 101. The fundamentals of sculptural form. Additive, subtractive, and constructive approaches to sculpture through lecture and studio experiences. Offered Every Semester.
FAR 250
ART HISTORY I
3, 3/0; AR14
World history of painting, sculpture, architecture, and related arts from the Paleolithic period to the end of the medieval period. Offered Every Semester.

FAR 251
ART HISTORY II
3, 3/0; AR14
World history of painting, sculpture, architecture, and related arts from the thirteenth to the twentieth centuries. Offered Every Semester.

FAR 300
DRAWING III
3, 1/5
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. Offered Every Semester.

FAR 311
INTERMEDIATE PAINTING I
3, 1/5
Prerequisite: FAR 210. Continuation of FAR 210, working toward a greater awareness of a personal statement. Lecture and studio experience. Offered Every Semester.

FAR 312
INTERMEDIATE PAINTING II
3, 1/5
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. Course may be repeated three times. Offered Every Semester.

FAR 313
ADVANCED PAINTING
3-9, 1-3/5-15
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. Offered Every Semester.

FAR 316
PAINTING IN SIENA
3, 1/5
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. Offered Every Semester.

FAR 321
INTERMEDIATE PHOTOGRAPHY I
3, 1/5
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. Offered Every Semester.

FAR 322
INTERMEDIATE PHOTOGRAPHY II
3, 1/5
Prerequisite: FAR 321. Intermediate use of computer, Photoshop, film scanning, ink jet printing, and color management to make creative pictures. Builds upon intermediate skills and introduces digital camera use for computer-based imagemaking in photography. Introduces large format ink jet printing. Includes lectures, equipment demonstrations, and fieldwork. Note: Digital camera (5 mega-pixel or better), 35mm camera, electronic flash, and tripod required. Offered Every Semester.

FAR 323
ADVANCED PHOTOGRAPHY
3-9, 1-3/5-15
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. Offered Every Semester.

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. Offered Alternate Years.

FAR 328
STUDIO PHOTOGRAPHY
3, 1/5
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. Offered Occasionally.

FAR 331
INTERMEDIATE PRINTMAKING I
3, 1/5
Prerequisite: FAR 230. Continuation of FAR 230. Emphasis on personal expression and creative possibilities. Includes lecture, demonstrations, and studio experience. Offered Every Semester.

FAR 332
INTERMEDIATE PRINTMAKING II
3, 1/5
Prerequisite: FAR 331. Continued exploration of printmaking with emphasis on personal expression and creative possibilities. Includes lecture, demonstrations, and studio experience. Offered Every Semester.

FAR 333
ADVANCED PRINTMAKING
3-9, 1-3/5-15
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. Offered Every Semester.

FAR 335
PAPERMAKING
3-9, 1-3/5-15
Prerequisite: One studio course in fine arts or design. Advanced papermaking. Includes lecture, demonstrations, and studio experience. Offered Every Semester.

FAR 341
INTERMEDIATE SCULPTURE I
3, 1/5
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. Offered Every Semester.

FAR 342
INTERMEDIATE SCULPTURE II
3, 1/5
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. Offered Every Semester.
FAR 343 
ADVANCED SCULPTURE
3, 3/0
Pre-requisite: FAR 250. Concentration on individually selected areas of development in sculpture based on personal interest, needs, and experience. May be repeated three times. Offered Every Semester.

FAR 345 
FIGURE MODELING
3, 1/5
Pre-requisite: FAR 240. Figure modeling as a basic sculptural discipline. Portrayal and interpretation of the human form. Anatomy lectures and work with live models. Offered Alternate Years.

FAR 346
SCULPTURE IN SIENA
3, 1/5
Pre-requisite: FAR 240 (for art credit); no pre-requisite 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. Offered Every Semester.

FAR 352
ART AND CULTURE OF ISLAM
3, 3/0
Pre-requisites: 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 Near East and the Near East. Offered Alternate Years.
Equivalent course: FAR352W

FAR 353
ART AND CULTURE OF EGYPT AND THE NEAR EAST
3, 3/0
Pre-requisites: 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. Offered Alternate Years.
Equivalent course: FAR353W

FAR 354
ART AND CULTURE OF GREECE
3, 3/0
Pre-requisites: 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. Offered Alternate Years.
Equivalent course: FAR354W

FAR 355
ART AND CULTURE OF ROME
3, 3/0
Pre-requisites: FAR 250 and FAR 251. The history of Roman art during its two main periods, the Republican period and the Roman Empire, 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. Offered Alternate Years.
Equivalent course: FAR355W

FAR 356
EARLY MEDIEVAL ART
3, 3/0
Pre-requisites: 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. Offered Alternate Years.
Equivalent course: FAR356W

FAR 357
LATE MEDIEVAL ART
3, 3/0
Pre-requisites: FAR 250 and FAR 251. Architecutre, 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. Offered Alternate Years.
Equivalent course: FAR357W

FAR 358
ITALIAN RENAISSANCE ART, 1200-1480
3, 3/0
Pre-requisites: FAR 250 and FAR 251. Introduction to stylistic, technical and iconographical developments in Italian art and architecture, leading up to and including the Renaissance period, 1200-1400. Examination of the aspirations, achievements and disappointments of major artists within their historical, social and cultural contexts. Offered Alternate Years.

FAR 359
HIGH RENAISSANCE AND MANNERISM
3, 3/0
Pre-requisites: FAR 250 and FAR 251. Introduction to stylistic changes and developments in Italian High Renaissance and Mannerist art. Examination of the aspirations, achievements and disappointments of major artists within their historical, social and cultural contexts. Offered Alternate Years.
Equivalent course: FAR359W

FAR 361
ITALIAN BAROQUE ART
3, 3/0
Pre-requisites: 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. Offered Alternate Years.

FAR 362
NINETEENTH-CENTURY ART
3, 3/0
Pre-requisites: 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. Offered Fall Only.

FAR 363
TWENTIETH-CENTURY ART
3, 3/0
Pre-requisites: 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. Offered Spring Only.
Equivalent course: FAR363W

FAR 364
ART SINCE 1940
3, 3/0
Pre-requisites: FAR 250 and FAR 251. Introduction to art since 1940 within its historical, social, political, and cultural contexts. Offered Alternate Years.

FAR 365
AMERICAN ART I
3, 3/0
Pre-requisites: FAR 250 and FAR 251. Architecture, painting, and sculpture in the United States from the seventeenth century to World War I. Offered Alternate Years.

FAR 366
AFRICAN AMERICAN ART
3, 3/0
Pre-requisites: FAR 250 and FAR 251. Survey of African American Art. Examines African American art as well as the relationship of art to politics and the formation of racial/cultural identity. Offered Alternate Years.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Offered</th>
<th>Prerequisites</th>
<th>Description</th>
<th>Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAR 367</td>
<td>BAROQUE OF NORTHERN EUROPE</td>
<td>3, 3/0</td>
<td></td>
<td></td>
<td>Emphasis on development in France, Holland, and Germany. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>FAR 369</td>
<td>ART OF THE MIDDLE AGES</td>
<td>3, 3/0</td>
<td></td>
<td></td>
<td>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. Offered Alternate Years.</td>
<td>FAR367W</td>
</tr>
<tr>
<td>FAR 371</td>
<td>ART CRITICISM AND THEORY</td>
<td>3, 3/0</td>
<td></td>
<td></td>
<td>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 &quot;&quot;Other&quot;&quot; and Institutional Critique. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>FAR 372</td>
<td>MASTERWORKS OF ARCHITECTURE</td>
<td>3, 0/0</td>
<td></td>
<td></td>
<td>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. Offered Alternate Years. Equivalent course: FAR372W</td>
<td></td>
</tr>
<tr>
<td>FAR 373</td>
<td>VENETIAN ART AND CULTURE, 1300-1800</td>
<td>3, 3/0</td>
<td></td>
<td></td>
<td>Prerequisites: Art History I (FAR 250) and II (FAR 251)The history of Venetian architecture, sculpture, and painting considered within historical, geographical and cultural contexts from the fourteenth through the eighteenth century. Students will undertake original research and will carry out individual projects. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>FAR 374</td>
<td>THE HISTORY AND CULTURE OF ART COLLECTING AND THE PUBLIC MUSEUM</td>
<td>3, 3/0</td>
<td></td>
<td></td>
<td>Prerequisites: FAR 250 and FAR 251. Study of the history and theory of art collecting in Europe and America within historical, cultural and intellectual contexts. Examination of specific collectors and collections, cultural practices associated with collecting, methods of displaying art and approaches to viewing art. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>FAR 375</td>
<td>INTRODUCTION TO ASIAN ART</td>
<td>3, 3/0</td>
<td></td>
<td></td>
<td>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. Offered Alternate Years.</td>
<td></td>
</tr>
<tr>
<td>FAR 376</td>
<td>INDIAN ART</td>
<td>3, 3/0</td>
<td></td>
<td></td>
<td>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. Offered Alternate Years.</td>
<td></td>
</tr>
</tbody>
</table>
FAR 469  
ART AND ARCHITECTURE IN SIENA  
3, 0/0  
Firsthand study of Gothic and Renaissance art in Siena, Italy. Includes classroom lectures and visits to the city's major monuments and collections. Offered Every Semester.

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. Offered Every Semester. Equivalent course: FAR470W

FAR 471  
SENIOR SEMINAR IN ART HISTORY  
3, 3/0  
Prerequisites: FAR 454, FAR 457, and FAR 459; senior status; art history major; or permission of instructor. Readings, discussions, and research on selected problems in the history of art from antiquity to the twentieth century. Emphasis on gathering and interpreting source material.

FAR 488  
INTERNSHIP  
1-15, 0/0  
Prerequisites: Permission of faculty supervisor; minimum cumulative GPA of 2.0; background of courses or experiences within area of interest; permission of student adviser or major department chair and supervising faculty member and chair of credit-granting department. Guided, supervised field experiences (experiential learning). Offered Every Semester.

FAR 495  
SPECIAL PROJECT  
1-3, 0/0  
Offered Occasionally.

FAR 497  
WORKSHOP  
3, 0/0  
Offered Occasionally.

FAR 499  
INDEPENDENT STUDY  
3-12, 0/0  
Offered Every Semester.

AAS - AFRICAN AND AFRICAN AMERICAN STUDIES

FCS 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. Offered Every Semester. Equivalent courses: BME301, BME301W, BUS301, CTE301

FCS 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. Offered Every Semester. Equivalent courses: BME302, BUS302, CTE302, VTE302

FCS 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. Offered Every Semester. Equivalent courses: BME303, BUS303

FCS 404  
APPLIED TEACHING METHODS IN BUSINESS/MARKETING  
3, 3/0  
Prerequisites: BME/CTE/FCS 301 and BME/CTE/FCS 302. Basic principles and methods of teaching business and marketing subjects. Prepares the student to effectively teach subjects in this area. Offered Every Semester. Equivalent courses: BME411, BUS411, CTE404, VTE404

FCS 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. Offered Every Semester. Equivalent courses: BME415, BUS415

FCS 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. Offered Every Semester. Equivalent courses: BME416, BUS416

FCS 499  
INDEPENDENT STUDY  
3-30, 0/0  

FIN - FINANCE

FIN 110  
PERSONAL FINANCE  
3, 3/0  
Prerequisite: Successful completion of mathematics basic skills competency requirement. Basics of personal and household finance. Saving, debt reduction, home and automobile financing, retirement planning, investment, and insurance. Offered Alternate Years. Equivalent course: ECO110

FIN 189  
TOPICS COURSE  
1-3, 1-3/0

FIN 314  
CORPORATION FINANCE  
3, 3/0  
Prerequisites: ECO 201, or ECO 202 and BUS 312. Introduction to analytical techniques and terminology of corporate financial management. Includes the financial environment, yield-curve analysis, ratio analysis, the DuPont system, proforma balance sheets and income statements, the Capital Asset Pricing Model, the intrinsic value of stocks and bonds, the time value of money, capital budgeting, and working capital management. Offered Every Semester. Equivalent course: ECO314
FIN 345  
**ESTATE PLANNING**  
3, 3/0  
Prerequisite: Upper-division status. Provides financial security during retirement years and facilitates the intended and orderly disposition of property upon disability or death. Addresses concepts and techniques of lifetime financial planning that may lead to increases in one's estate and the conservation of existing assets. Includes a critical evaluation of traditional planning techniques and analysis of major advanced methods, including various living trusts, irrevocable life insurance trusts, charitable remainder trusts, and family-limited partnerships. Offered Fall Only.  
Equivalent course: ECO345

FIN 370  
**TECHNICAL ANALYSIS OF FINANCIAL MARKETS**  
3, 3/0  
Prerequisites: ECO 202 or ECO 201 or ECO 101. 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. Offered Fall Only.

FIN 389  
**TOPICS COURSE**  
1-3, 1-3/0

FIN 400  
**INTERNATIONAL FINANCE**  
3, 3/0  
Prerequisites: ECO 201 and ECO 202 and FIN 314. 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. Offered Fall Only.  
Equivalent course: ECO400

FIN 414  
**INVESTMENT MANAGEMENT**  
3, 3/0  
Prerequisite: FIN 314. Operating and efficiency characteristics of security markets. The application of institutional, technical, and theoretical approaches to security analysis and evaluation of investment portfolios. Offered Spring Only.  
Equivalent course: ECO414

FIN 415  
**CASES IN CORPORATION FINANCE**  
3, 3/0  
Prerequisite: FIN 314; ECO 307 recommended. Application of the case approach to problems in business finance. Includes working capital financing, term borrowing, capital budgeting, and mergers and acquisitions. Offered Occasionally.  
Equivalent course: ECO415

FIN 416  
**ADVANCED CORPORATION FINANCE**  
3, 3/0  
Prerequisites: 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. Offered Occasionally.  
Equivalent course: ECO416

FIN 417  
**DERIVATIVE SECURITIES**  
3, 3/0  
Prerequisite: FIN 314. How modern securities are created from their basic components. Includes circus swaps, artificial Treasury bills, artificial cash, synthetic puts, and portfolio insurance products. Offered Spring Only.  
Equivalent course: ECO417

FIN 418  
**BOND MARKETS**  
3, 3/0  
Prerequisite: FIN 314. Introduction to bond management. Includes bond pricing, yield measurements, return measurements, duration, convexity, Treasury securities, agency securities, corporate debt, municipal bonds, the term structure of interest rates, mortgage loans, pass-through securities, CMOs, return characteristics of derivative products, and bond hedging using options and futures. Offered Fall Only.  
Equivalent course: ECO418

FIN 419  
**MERGERS AND ACQUISITIONS**  
3, 3/0  
Prerequisites: FIN 314. Identification of firm valuation through mergers and acquisitions; drivers of successful and unsuccessful corporate restructurings; design and evaluation of structured transactions. Strategic planning, investment decisions, and other factors underlying mergers - deal tactics, law, accounting and taxation. Capital market reactions to control transactions; defensive measures against takeover bids. Offered Spring Only.

FIN 499  
**INDEPENDENT STUDY**  
3-12, 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. Offered Occasionally.  
Equivalent course: SED200

FLE 201  
**INTRODUCTION TO TECHNOLOGY IN FOREIGN LANGUAGE EDUCATION**  
3, 3/0  
Prerequisite: Official enrollment in French or Spanish foreign language education program. Introduction to the uses and limitations of technology in language instruction with particular emphasis on the principled use of computer-assisted instruction, situated within standards- and research-based language pedagogy. Offered Occasionally.

FLE 240  
**INTRODUCTION TO LINGUISTICS**  
3, 3/0  
A general introduction to the study of language, including syntax, morphology, phonetics, phonology, semantics, sociolinguistics, discourse analysis, and language change. Offered Fall Only.

FLE 300  
**INTRODUCTION TO THE FOREIGN LANGUAGE CLASSROOM**  
3, 3/0  
Prerequisites: FRE/SPA 302; consent of foreign language education coordinator. Introduction to the research and standards that inform professional foreign language teaching. Thirty-five clock hours in a middle, high, or senior high school in a variety of field-based tasks. Conducted by school and college staff. Offered Fall Only.

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. Offered Fall Only.  
Equivalent course: SED316
FLE 340  
SECOND LANGUAGE ACQUISITION AND LITERACY  
3, 3/0  
Prerequisites: Consent of foreign language education coordinator.  
Introduction to the main components that underpin second-language  
acquisition and literacy theory, including inter-language systems and  
sociocultural, psychological, and personality factors. Classroom  
observations in a middle, high, or senior high school. Conducted by  
school and college staff. Required for all B.S. French and Spanish  
Education majors (BS-AH-FRS/SPS) and Foreign Language Education  
Postbaccalaureate Teaching Certification (PBC-AH-FRS/SPS) students.  
Offered Spring Only.

FLE 401  
TEACHING FOREIGN LANGUAGE IN MIDDLE AND HIGH SCHOOLS  
3, 3/0  
Prerequisites or corequisites: Completion of the ACTFL Oral Proficiency  
Interview. FLE 300, SPF 303, and SPF 403. Exploration of the research  
and standards that inform professional foreign language teaching.  
Students in modern and classical languages teacher certification programs  
should take this course immediately before FLE 407 and FLE 408  
(student teaching). Conducted by school and college staff. Offered Every  
Semester.  
Equivalent course: FLE401W

FLE 403  
FOUNDATIONS OF FOREIGN AND SECOND LANGUAGE EDUCATION  
3, 3/0  
Prerequisites: FLE 300. May be taken concurrently with instructor  
permission. Introduction to the historical, psychological, social and  
philosophical foundations of foreign and second language instruction.  
Offered Occasionally.

FLE 405  
METHODS AND MATERIALS FOR TEACHING FOREIGN LANGUAGES IN HIGH SCHOOLS  
3, 3/0  
Prerequisites: SPF 303, SPF 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.  
Offered Occasionally.  
Equivalent course: SED405

FLE 406  
TECHNIQUES FOR TEACHING AND EVALUATING FOREIGN LANGUAGES IN MIDDLE SCHOOLS  
3, 3/0  
Prerequisites: SPF 303, SPF 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. Offered Occasionally.  
Equivalent course: SED406

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  
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. Offered Every Semester.  
Equivalent course: SED407

FLE 408  
STUDENT TEACHING OF FOREIGN LANGUAGES IN THE HIGH SCHOOL  
6, 0/0  
Prerequisites: Minimum GPA of 2.5 for all requirements in language  
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. Offered Every Semester.  
Equivalent course: SED408

FLE 497  
WORKSHOP  
3, 0/0  
Offered Occasionally.

FLE 499  
INDEPENDENT STUDY  
1-12, 0/0  
Offered Every Semester.

---

FOR - FORENSIC SCIENCE

FOR 122  
SCIENTIFIC CRIMINAL EVIDENCE ANALYSIS  
3, 3/0  
Scientific techniques that have been adapted and applied to the detection  
and investigation of crimes. Collection techniques, analytical processes,  
and value of scientific evidence from the point of view of forensic  
scientists. Different disciplines, specialties, and careers available in  
forensic science. Offered Spring Only.

FOR 312  
CHEMISTRY AND CRIMINALISTICS  
4, 3/3  
Prerequisites: FOR 122, MAT311 and CHE 201. Chemistry as an  
 investigative aid in the process of criminal justice. Basic chemical,  
physical, and microscopic techniques used in criminal investigations.  
Relevant laws and legal issues that impact on scientific evidence.  
Professional practice and ethics in the field of forensic science. The  
overall function of the criminalist from the gathering of evidence to the  
final presentation of expert testimony. Offered Fall Only.  
Equivalent course: CHE312

FOR 412  
INTERNSHIP IN CRIMINALISTICS  
3, 0/0  
Prerequisites: FOR312, 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. Offered Every Semester.  
Equivalent course: CHE412

FOR 414  
FORENSIC CHEMISTRY LABORATORY  
3, 2/3  
Prerequisites: FOR 312 and CHE 403; BIO 303 or BIO 350 (or  
concurrently). Instruction and laboratory experiences in a wide range of  
forensic chemistry topics, including experiments in DNA for human  
identification, identification of illicit drugs, determination of blood  
alcohol, materials analysis, and arson. Students also receive instruction  
on the practice of presenting scientific evidence in a courtroom setting.  
Offered Spring Only.  
Equivalent course: CHE414

FOR 416  
OPTICAL MICROSCOPY  
2, 1/2  
Prerequisites: FOR 312 and PHY 112. Introductory optical microscopy  
for forensic physical analysis; fundamental theory of microscopy;  
physical properties of materials (refractive index, density, etc.); basic  
topics in optics (electromagnetic radiation, refraction, reflection,  
interference, etc.); operation, varieties, and capabilities of optical  
microscopes; and applications in analysis of physical evidence, such as  
pattern analysis, hair, fiber, and minerals. Offered Spring Only.

FOR 495  
SPECIAL PROJECT  
1-3, 0/0  
Prerequisite: Faculty project adviser permission. Offered Every Semester.
FRE 101
BEGINNING FRENCH I
3, 3/0; GE14
Fundamentals of French with an emphasis on the spoken and written language. Offered Every Semester.

FRE 102
BEGINNING FRENCH II
3, 3/0; GE14

FRE 201
INTERMEDIATE FRENCH I
3, 3/0
Prerequisite: FRE 102. Further development of basic skills with emphasis on reading and writing. Offered Every Semester.

FRE 202
INTERMEDIATE FRENCH II
3, 3/0
Prerequisite: FRE 201. Continuation of FRE 201. Further development of basic skills with emphasis on reading and writing. Offered Every Semester.

FRE 203
WORKPLACE FRENCH I
3, 3/0
Prerequisite: FRE102. Taught in French. Common written and oral interactions in the French-speaking workplace. Language skills and proficiency practice at the intermediate-low level of the ACTFL (American Council on the Teaching of Foreign Languages) scale. Offered Fall Only.

FRE 204
WORKPLACE FRENCH II
3, 3/0
Prerequisite: FRE 203. Taught in French. Common written and oral interactions in the French-speaking workplace. Language skills and proficiency practice targeted toward the intermediate-mid level of the ACTFL (American Council on the Teaching of Foreign Languages) scale. Offered Spring Only.

FRE 301
INTRODUCTION TO FRANCOPHONE CULTURE
3, 3/0

FRE 302
INTRODUCTION TO FRANCOPHONE MEDIA
3, 3/0

FRE 305
PHONETICS AND ORTHOGRAPHY
3, 3/0
Prerequisites: FRE 301 and FRE 302. Introduction to French phonetics and applied linguistics. Offered Occasionally.

FRE 306
FRENCH CULTURE: 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. Offered Spring Only, Alternate Years.

FRE 307
FRENCH CULTURE: RENAISSANCE TO REVOLUTION
3, 3/0
Prerequisites: FRE 301 and FRE 302. Taught in French. Introduction to key historical, social, cultural, and literary figures, works, ideologies, and events in France from 1515 to 1789. Offered Fall Only, Alternate Years.

FRE 308
FRENCH CULTURE: REVOLUTION TO BELLE EPOQUE
3, 3/0
Prerequisites: FRE302. Taught in French. Introduction to key historical, social, cultural, and literary figures, works, ideologies, and events in France from 1789 to 1890. Offered Spring Only, Alternate Years.

FRE 309
LITERATURE AND CULTURE OF FRANCE IN THE TWENTIETH CENTURY
3, 3/0
Prerequisite: FRE 301 or FRE 302. Survey of the literature of France in the twentieth century and its relationship to French history and culture. Offered Fall Only, Alternate Years.

FRE 310
ISSUES IN PROFESSIONAL COMMUNICATION
3, 3/0
Prerequisites: FRE302. Taught in French. Strategies for bicultural, bilingual communication in the workplace. Examination of communication and miscommunication commonly experienced by U.S. nationals in Francophone workplace settings. Oral, written, and reading skill-building practice at the advanced-mid level of the ACTFL (American Council for the Teaching of Foreign Language) scale. Offered Fall Only.

FRE 321
ISSUES AND THEMES IN THE FRANCOPHONE WORLD
3, 3/0
Prerequisites: FRE 302 or equivalent; instructor permission. In French. Development and practice of French language skills through exploration of current issues facing the Francophone world. Offered Spring Only.

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. Offered Occasionally. Equivalent courses: ENG331, FRE331W

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. Offered Occasionally. Equivalent course: FRE341W

FRE 389
TOPICS COURSE
3-9, 0/0
Offered Every Semester.
FRE 402
PEDAGOGICAL FRENCH
3, 3/0
Prerequisites: FRE301 and FRE302 or equivalents. Instruction in classroom use of French and exploration of research in French pedagogy. Prepares candidates for the American Council on the Teaching of Foreign Languages (ACTFL) Advanced-Low proficiency interview. Taught in French. Offered Occasionally.

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. Offered Occasionally.

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. Offered Occasionally.

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. Offered Occasionally.

FRE 420
LITERATURE AND SOCIETY OF FRANCOPHONE CANADA: 1700 TO THE PRESENT
3, 3/0
Prerequisites: One 300-level FRE literature course and instructor permission. Taught in French. Study of the lasting impact of French colonialism on the society, literature, and self-identity of Francophone North America. Offered Fall Only, Alternate Years.

FRE 435
FRANCOPHONE AFRICAN LITERATURE IN POST-COLONIAL CONTEXT
3, 3/0
Prerequisites: One 300-level FRE literature course and instructor permission. Taught in French. Study the effects of colonialism on the society, culture, and self-identity of Francophone Africa. Offered Fall Only.

FRE 440
ORIGINS OF MODERN FRANCE
3, 3/0
Prerequisites: FRE 306 or FRE 307 or FRE 308 or FRE 309, and instructor permission. Taught in French. An examination of the 19th-century intellectual trends, scientific advances, and social welfare initiatives that made France what it is today, as portrayed in the novels of key authors of the period 1850-1890. The industrial Revolution and its impact on daily life. The influence of contemporary developments in germ theory, urban planning, and social welfare reform on the urban renewal campaign of Emperor Napoleon III. Evolutionary theory and its impact on the ideology and novels of key authors of the naturalist school or literature. Offered Fall Only, Alternate Years.

FRE 455
MOULIERE’S COMEDIES IN SOCIO-CULTURAL CONTEXT
3, 3/0
Prerequisites: Instructor permission. Taught in French. Analysis of the life and works of Moliere, the milieu for which he wrote, the conventions of 17th-century French drama, the influence of contemporary political rivalries, social conditions, and court practices on his work and career. Offered Fall Only, Alternate Years.

FRE 460
FRANCO-CARIBBEAN LITERATURE, HISTORY & CULTURE
3, 3/0
Prerequisites: At least one previous upper-level, undergraduate literature course in French. History, social issues, syncretic aspects of the French Caribbean culture in literary context. Characteristic literary themes, conflicts, and symbolism in key works of major Franco-Caribbean authors. Taught in French. Offered Spring Only, Alternate Years.

FRE 495
SPECIAL PROJECT
1-3, 0/0

FRE 496
SEMINAR I
3, 3/0
Prerequisite: Permission of instructor. Topic chosen by instructor. Offered Every Semester.

FRE 497
SEMINAR II
1-3, 3/0
Prerequisite: Permission of instructor. Topic chosen by instructor. Offered Every Semester.

FRE 499
INDEPENDENT STUDY
3-12, 0/0
Offered Every Semester.

FTT - FASHION AND TEXTILE TECHNOLOGY

FTT 100
CONSTRUCTION FUNDAMENTALS
1, 1/1
Fundamental construction techniques used in the apparel industry; proficiency in basic construction details using both domestic and industrial sewing equipment. Offered Occasionally.

FTT 109
FUNDAMENTALS OF APPAREL CONSTRUCTION
3, 2/2
Basic beginning techniques of apparel construction using commercially available patterns; introduction to sewing equipment, measuring techniques, fabric selection, fit, and alterations; evaluation and comparison of garments completed as assignments to similar apparel available through retail sources. Offered Every Semester.

FTT 110
SURVEY OF THE TEXTILE AND APPAREL INDUSTRY
3, 3/0
Introductory survey course of the global textile and fashion industry; overview of the textile/apparel design product development process; design principles and elements; quality of the finished product; how fashion designers, consumer groups, and marketing researchers influence design. Offered Every Semester. Equivalent courses: FST107, FTT107

FTT 150
INTRODUCTION TO FASHION MERCHANDISING
3, 3/0
An introduction to fashion merchandising, including basic market structure, operational patterns in merchandising, and the marketing of fashion. Offered Every Semester.

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. Offered Occasionally.

FTT 206
INTRODUCTION TO TEXTILES
3, 3/0
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. Offered Every Semester.  
Equivalent course: FST208

FTT 224  
PATTERN DRAFTING AND GRADING FOR INDUSTRY  
3, 2/2  
Prerequisites: FTT 109 or instructor permission. Introduction to technical patternmaking skills; emphasis on the development of basic traditional and computer drafting and grading skills; students produce a drafted sloper manually and on the computer that will be graded on the computer into a nested pattern. Offered Every Semester.  
Equivalent course: FITT325

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. Offered Every Semester.

FTT 300  
KNIT TECHNOLOGY I  
3, 2/2  
Prerequisite: FTT 206 or permission of instructor. Basic principles of computerized machine weft knitting; understanding the relationships of yarn, color, stitch types, and gauge; charting and producing stitch designs by machine. Offered Occasionally.  
Equivalent course: FITT414

FTT 303  
FASHION ILLUSTRATION/DRAWING I  
3, 2/2  
Foundation skills in fashion illustration; the fashion figure, poses, and garment and fabric sketching; includes illustration of a garment collection for professional portfolio development. Offered Every Semester.  
Equivalent course: THA303

FTT 304  
SURFACE PATTERN DEVELOPMENT FOR INDUSTRY  
3, 2/2  
Prerequisites: FTT 208 or instructor permission. Creation of original motifs for prints that are targeted for the fashion products markets; professional methods for transforming original motifs into commercial digital surface patterns and/or graphic prints (using Adobe Photoshop & Illustrator); color reduction and cleaning; basic repeat development; colorway development based on manufacturer requirements, awareness of current color and graphic trends, marketability, and industry standards. Offered Every Semester.

FTT 306  
TEXTILE EVALUATION  
3, 2/2  
Prerequisites: FTT 110, FTT 206. Advanced-level course in textiles; provides an understanding of fabric-performance evaluation; emphasis on standard test methods used by textile/apparel industry; equipment and techniques used in determining selected physical and aesthetic properties of textile products. Offered Every Semester.  
Equivalent course: FITT336

FTT 308  
FASHION CAD (COMPUTER AIDED DESIGN)  
3, 2/2  
Prerequisites: FTT 208 or instructor permission. Intermediate multi-faceted skill expansion for fashion product design, technical development, using Adobe Photoshop & Illustrator, Fashion product design line/collection development; electronics and Web-based portfolio presentation. Offered Every Semester.

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. Offered Every Semester.  
Equivalent course: FITT310W

FTT 324  
INDUSTRIAL APPAREL ASSEMBLY  
3, 2/2  
Prerequisite: FTT 109. Focus on design room techniques utilized in both couture and mass production of apparel. Emphasis on equipment; appropriate selection of style, color, and fiber content of construction materials; alteration techniques used to achieve proper-fitting garments and mastery of selected couture; and industrial construction processes. Offered Every Semester.

FTT 326  
TRADITIONAL/COMPUTER FLAT PATTERN  
3, 2/2  
Prerequisite: FTT 224 or instructor permission. Introduction to traditional and computer flat pattern method of pattern making; emphasis placed on design and completion of selected items of apparel developed from a basic sloper. Offered Every Semester.

FTT 327  
COMPUTER PATTERNMAKING  
3, 2/2  
Prerequisites: FTT 326 or instructor permission. Apparel patterns are modified and graded in 2D and simulated in 3D through the use of an industrial multidimensional software; hand pattern drafting techniques are adapted to the computer by creating a virtual custom dress from a body scan and applying pattern modifications in order to create a variety of intermediate to advanced garment style patterns that are simulated in 3D on a virtual avatar. Offered Every Semester.

FTT 328  
APPAREL DESIGN III: DRAPING  
3, 2/2  
Prerequisites: Prerequisites: FTT 109 and FTT 224 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. Offered Every Semester.

FTT 329  
DESIGNING KNIT APPAREL  
3, 2/2  
Prerequisites: FTT 109, FTT 224, 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. Offered Fall Only.

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. Offered Fall Only.

FTT 349  
HISTORY OF TEXTILES  
3, 3/0; NW14  
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. Offered Alternate Years.  
Equivalent courses: FITT349W, FITT449

FTT 350  
FASHION MERCHANDISING APPLICATIONS  
3, 3/0  
Prerequisite: FTT 250. Hands-on experience with spreadsheet package used in the retailing industry for tasks, such as inventory management, pricing, assortment planning, etc. Strategies for next season/year based on
analysis and evaluation of data. Preparation of profit/loss and presentation of financial report using PowerPoint. Offered Every Semester.

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. Offered Every Semester.

FTT 358
FASHION FORECASTING AND CONSUMER ISSUES
3, 2/2
Prerequisite: Prerequisite: FTT 110, FTT208 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. Offered Every Semester.

FTT 359
VISUAL MERCHANDISING
3, 3/0
Prerequisites: FTT 250 or Instructor’s permission. Importance of visual merchandising in the landscape, with an emphasis on the principles and techniques needed to create strong, impactful visual presentations. Topics include a history of window display and its transition to visual merchandising; design and composition; tools and materials used in the field; mannequins and use of props; lighting and signing; installation of presentations; visual merchandising’s place in store and corporate hierarchy; store design and planning; computers and visual planning; safety. Offered Fall Only.

FTT 410
ADVANCED PRODUCT DEVELOPMENT
3, 3/0
Prerequisite: Prerequisite: FTT 306, 310, 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. Offered Spring Only.

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. Offered Fall Only.

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 harness looms; designs are applied to end products for merchandising collections targeting specific markets; advanced portfolio-quality presentations. Offered Spring Only.

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. Offered Every Semester. Equivalent course: FTT450W

FTT 451
SENIOR PROJECT
3, 3/0
Prerequisites: FTT 308 and instructor permission. Fashion students must have completed: 1) up to and including all FTT 300 level core courses, and 2) all their 300 level required courses for their respective areas of concentration-apparel design and product development. Offered Spring Only.

FTT 452
FASHION SHOW PRODUCTION
3, 2/2
Prerequisite: Upper-division status or permission of instructor. Planning and production of a fashion-promotion event. Utilization of fashion skills to participate in individual and group activities leading to the presentation of a major fashion show. Offered Spring Only.

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. Offered Every Semester.

FTT 461
SENIOR SEMINAR IN FASHION PRODUCT DEVELOPMENT
3, 2/4
Prerequisites: FTT 310 and FTT 326 or instructor permission. Capstone experience for Product Development students which requires the integration of design, production and marketing of a fashion related product. The class will utilize a team approach and emphasize decision-making skills. Offered Spring Only.

FTT 475
SENIOR SEMINAR IN FASHION MERCHANDISING AND MARKETING
3, 3/0
This course provides an in-depth examination of the strategies for writing a successful grant funding application in the field of education. Students participate in all aspects of the grant development process, including identifying agency strengths, researching potential funding sources and opportunities, writing application materials, developing budgets, and creating evaluation plans. Offered Spring Only.

FTT 488
INTERNSHIP/FIELD EXPERIENCE
1-6, 0/0
Prerequisites: Upper-division status and permission of instructor. Provides an opportunity to integrate academic knowledge in guided and supervised field experiences (experiential learning) with institutions, businesses and educational organizations, social and/or government agencies in an 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. Offered Every Semester.

FTT 495
SPECIAL PROJECT
1-3, 0/0
Offered Occasionally.

FTT 497
WORKSHOP
1-3, 0/0
Offered Occasionally.

FTT 499
INDEPENDENT STUDY
3-12, 0/0
Offered Occasionally.
GEG 101
WORLD NATURAL ENVIRONMENTS
3, 3/0; NS14
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. Offered Every Semester.

GEG 102
HUMAN GEOGRAPHY
3, 3/0; SS14
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. Offered Every Semester.

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. Offered Fall Only.

GEG 199
INTRODUCTION TO COMPUTER USE IN THE SOCIAL SCIENCES
3, 3/0
Hands-on introduction to the application of computers to applied social research problems. Includes review of past practices, current uses, and future trends. Students analyze data using computers to develop insight into the use of computers for social improvement.
Equivalent courses: SOC199, S1T199

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. Offered Every Semester.

GEG 241
Meteorology
3, 3/0; NS14
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. Offered Every Semester.
Equivalent course: GES241

GEG 246
Watershed Pollution
3, 3/0
Pre-requisites: CHE 101 or equivalent. Important pollutants and toxic chemicals generated by anthropogenic activities and their transport, transformation, and fate within watersheds. Impacts of these pollutants on soil, forest, and aquatic ecosystems using specific case studies. Offered Occasionally.

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. Offered Alternate Years.

GEG 307
CONSERVATION AND ENVIRONMENTAL MANAGEMENT
3, 3/0
Prerequisites: One natural science course. Globalization, recent technological advancement, and effects on resource conservation and environmental management in the face of increased pressure from society. Current resources, globalization of environmental issues and pollution, new technologies and economic impacts. Offered Every Semester.
Equivalent course: GEG307W

GEG 309
Urban Geography
3, 3/0; DI14
Prerequisite: One social science course. Internal spatial structure of American metropolitan areas and their relationships. Spatial arrangements of land uses; ethnic, 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. Offered Every Semester.
Equivalent course: GEG309W

GEG 310
Urban Transportation Planning
3, 3/0
Prerequisite: GEG 309 or PLN 315. Comparative study of the modes of transportation, transportation planning, and the benefits and effects of transportation. Emphasis on application to urban transportation. The importance of accessibility to the development of a modern metropolitan transportation system. Offered Alternate Years.
Equivalent course: PLN310

GEG 316
Watershed Pollution
3, 3/0
Pre-requisites: CHE 101 or equivalent. Important pollutants and toxic chemicals generated by anthropogenic activities and their transport, transformation, and fate within watersheds. Impacts of these pollutants on soil, forest, and aquatic ecosystems using specific case studies. Offered Occasionally.

GEG 325
Maps and Mapmaking Using GIS
3, 3/0
Maps as essential form of communication. Geographic information systems (GIS) tools for creating digital and hardcopy maps. Spatial thinking, concepts, principals and methods of mapmaking; map development and display using technology. Offered Every Semester.
Equivalent course: PLN325

GEG 330
Land Resource Analysis and Planning
3, 3/0
Prerequisite: PLN 315. The principles of land resource management with emphasis on land-use patterns, controls, and policies. Attention to urban, suburban, and rural land-use situations. Offered Alternate Years.
Equivalent course: PLN330

GEG 345
Bahamas Field Experience
3, 1/4
Prerequisites: Sophomore or higher standing. A 10-day field study of San Salvador, Bahamas. Coral reefs, sand flats, karst landscapes, vegetation, dunes, caves, indigenous peoples, Columbus’ landfall, historic sites, island culture. Emphasis on lab and field activities. Offered Spring Only.

GEG 359
Arctic Geography from an Inuit Perspective
3, 3/0; NW14
Prerequisite: One Social Science course. A study of the physical, political, economic and cultural environments of Arctic regions from an
Inuit perspective. Topics focus on interaction between the Arctic environment and its peoples before and after Euro-American contact. Students will also study contemporary issues in today's Arctic. Offered Fall Only.

GEG 360
GEOGRAPHY OF ASIA
3, 3/0; NW14
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. Offered Every Semester.
Equivalent course: GEG205

GEG 362
GEOGRAPHY OF THE UNITED STATES AND CANADA
3, 3/0
Prerequisite: One Social Science course. Basic geographic elements of North America including the natural environment, natural resources, economic activities, population, and urbanization. Offered Alternate Years.
Equivalent course: GEG202

GEG 364
GEOGRAPHY OF EUROPE
3, 3/0; WC14
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. Offered Every Semester.
Equivalent course: GEG252

GEG 365
SOIL SCIENCE AND MANAGEMENT
3, 3/0
Prerequisite: GEG 101 or GES 101. Introduction to the study of soils, including physical and chemical properties, weathering and soil formation, productivity and management for agriculture, soil erosion and conservation, engineering properties, soil classification. Includes regular laboratory assignments and fieldwork to enhance understanding of soil properties. Offered Occasionally.

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. Offered Alternate Years.

GEG 382
WEATHER FORECASTING
3, 3/0
Prerequisites: Upper-division status and GEG 101 or GEG 240 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. Offered Alternate Years.
Equivalent course: GES445

GEG 383
SEVERE AND UNUSUAL WEATHER
3, 3/0
Prerequisites: GEG 101 or GEG 241 or GES 241 or equivalent. In-depth look at meteorological phenomena related to severe and unusual weather-related events and patterns, weather-analysis tools, climate-change outlooks, and social implications; planning and management strategies to prepare and respond to severe and unusual weather. Offered Alternate Years.

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. Offered Alternate Years.

GEG 385
PALEOClimATOLOGY
3, 3/0
Prerequisite: GEG 101. Methods and theories used in reconstructing and dating past climates. Focus on the past 2 million years, including proxies such as ice cores, sediment sequences, packrat middens, tree rings, corals, and historical data. Causes of climate change and human interactions emphasized. Offered Alternate Years.

GEG 386
APPLIED CLIMATOLOGY
3, 3/0
Prerequisites: Upper-division status; GEG 101, GEG 241 or GES 241. Use of climatic information in various aspects of our lives to solve practical problems with environmental, social, and economic implications. The importance of climate on agriculture, human health, severe weather management, litigation, commerce, architecture, and city planning. Offered Alternate Years.

GEG 390
QUANTITATIVE METHODS IN GEOGRAPHY AND PLANNING
3, 3/0
Prerequisites: Upper-division status and GEG199 or CIS101 or competence in computing. 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. Offered Spring Only.
Equivalent course: PLN390

GEG 396
RESEARCH METHODS
3, 3/0
Prerequisites: CIS101 OR GEG 199 OR Competency in Computing Exam, GEG 390 or PLN390, and 6 upper division credits in GEG/PLN courses. Research theories, designs, and methods relevant to conducting research in geography and planning. Research designs and methodologies for approaches with human subjects, human/social geography, physical geography, field-based research, and planning projects. Development of a research project proposal. Offered Fall Only.
Equivalent courses: GEG396W, PLN396, PLN396W

GEG 405
URBAN ANALYSIS USING GIS
3, 3/0
Prerequisite: GEG or PLN 325. 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. Equivalent course: PLN 405. Offered Alternate Years.
Equivalent course: PLN405

GEG 409
INDUSTRIAL GEOGRAPHY
3, 3/0
Prerequisites: Upper-division status. The manufacturing sector, firms, and industrial location process and activities that have taken place in the United States; production methods and processes; industrial districts and the principal factors that affect the locations of firms; local and regional development; globalization. Offered Alternate Years.
Equivalent courses: ECO409, GEG409W

GEG 415
PROSEMINAR
3, 3/0
Investigation, examination, and discussion of topics of current interest in geography. Techniques and analysis of geographic research. Offered Occasionally.
GEG 416
GEOGRAPHIES OF DEVELOPMENT
3, 3/0
Prerequisites: Upper division status. Development theories, progress, issues, and challenges in developing regions around the globe. In-depth analyses of factors influencing development policies and outcomes; impact of globalization on development efforts and practices in developing areas around the world. Offered Alternate Years.

GEG 418
REMOTE SENSING
3, 3/0
Prerequisites: GEG or PLN 325. Concepts of remote sensing and its applications. Principles and methods of electromagnetic radiation, aerial and space remote sensing. Basics of digital image processing, spatial data capture and interpretations from remote sensors. Offered Alternate Years.

GEG 419
GLOBALIZATION, TECHNOLOGY, COMPETITION, AND SERVICE ECONOMIES
3, 3/0
Prerequisite GEG 101. Examination of globalization, technological advancements in recent years, and their effects on the service industry and competitiveness of firms and nations. In-depth studies of the U.S. service sector, competitive strategies, globalization, and new technologies. Offered Alternate Years.

GEG 421
WATERSHED ANALYSIS
3, 3/0
Prerequisites: Upper-division status; GEG 101 or GES 101. Introduction to the systematic analysis of stream dynamics of watersheds and the 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. Offered Alternate Years.

GEG 423
BIOGEOGRAPHY
3, 3/0
Prerequisite: Upper-division standing. Global patterns of species distributions and the historic, environmental, and biological processes underlying these patterns. Spatial patterns of nature’s geographic variation at multiple levels, from individuals to ecosystems to biomes. Impacts of humans and climate change on biogeography. Offered Alternate Years.

GEG 425
FUNDAMENTALS OF GIS
3, 3/0
Prerequisite: GEG 199 or CIS 101 or competency in computing and GEG 325 or PLN 325. 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. Offered Every Semester.

GEG 427
CORPORATE APPLICATIONS IN GIS
3, 3/0
Prerequisites: GEG or PLN 325. 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. Offered Alternate Years.

GEG 428
ENVIRONMENTAL ASSESSMENT AND PLANNING APPLICATIONS IN GIS
3, 3/0
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. Offered Alternate Years.

GEG 429
ADVANCED TOPICS IN GIS
3, 3/0
Prerequisites: GEG 425 or equivalent course with permission of instructor. Builds from the topics covered in GEG 425 Fundamentals of GIS, focusing more on digital representation of the human and physical environment, including location referencing from a human perspective, database design, data quality issues (how to identify and document errors), spatial statistical analysis using GIS, the fourth dimension (time) in GIS, and understanding spatial analysis algorithms and models. Introduces programming in a GIS environment. Offered Spring Only.

GEG 430
SENIOR THESIS
3, 3/0
Prerequisites: GEG/PLN 390 and GEG/PLN 396 C or better and senior geography or planning major. Research in geography or planning and presentation of selected research-related topics. Offered Spring Only. Equivalent courses: GEG430W, PLN430, PLN430W

GEG 461
ISSUES IN SOUTHEAST ASIA ENVIRONMENT AND SUSTAINABLE DEVELOPMENT
3, 3/0
Prerequisite: GEG 360 and Junior or senior standing. Geography, environmental problems, and solutions using a sustainable development framework for countries of Southeast Asia. Sustainable development and environmental management theory in the context of case studies for the region. Offered Alternate Years.

GEG 478
GLOBAL CHANGE
3, 3/0
Prerequisite: GEG 101. Interdisciplinary study of the principles needed to understand human impacts on the natural environment. Climate variability and global warming; nutrient cycling; land-use issues; connections and feedbacks among climate, ecosystems, and biogeochemistry; impacts of global change on society; policy measures; potential solutions. Offered Alternate Years.

GEG 480
AIR POLLUTION APPLICATIONS
3, 3/0
Prerequisites: Upper-division status; GEG 101; GEG 199 or an equivalent course, GEG 384, and GEG 390 or an equivalent course. Receptor, dispersion, and risk assessment modeling techniques to determine the source, fate, and impact of air pollutants. Overview of atmospheric deposition, regional transport, and global circulation models. Offered Occasionally.

GEG 485
INTERACTIVE AND WEB-BASED MAPPING
3, 3/0
Prerequisite: GEG or PLN 325. Different approaches to communicating with maps on the Internet. How to create Web-based mapping applications. Offered Occasionally.

GEG 488
INTERNSHIP
1-12, 0/0
Prerequisites: GEG 101 and 6 credit hours of geography or planning coursework at the upper-division level; minimum cumulative GPA of 2.5; background of courses or experience within area of interest; adviser and department chair permission. Guided, supervised field experiences that complement the academic program. Offered Every Semester.

GEG 495
SPECIAL PROJECT
1-3, 0/0
Offered Occasionally.

GEG 499
INDEPENDENT STUDY
3-12, 0/0
Offered Occasionally.
The role of continental drift, seafloor spreading, and plate tectonics in its development. The evolution of life as shown in the fossil record. Offered Every Semester.

GES 103
INTRODUCTORY GEOLOGY LABORATORY
1, 0/2
Identification of rocks and minerals. Map and aerial photograph interpretation. Offered Occasionally.

GES 111
GENERAL OCEANOGRAPHY
3, 3/0; NS14
Introduction to the science of the sea, including biological, physical, chemical, geological, and environmental aspects of oceanography. Offered Fall Only.
Equivalent course: GES111W

GES 131
INTRODUCTORY ASTRONOMY
3, 3/0; NS14
Non-mathematical survey of the astronomical universe. Survey of the sun, planets, ns, comets, stars, and galaxies. Observation, planetarium, and laboratory sessions supplement lectures. Offered Every Semester.

GES 201
GEOSCIENCES I
4, 3/3
First of a two-course sequence introducing the physical processes that formed Earth and shaped our planet through time. Topics include Earth materials; plate tectonics; climate, ocean, and atmosphere; and deep time. Student experiences through skill-building activities and experiments. Field trips required.

GES 223
ENVIRONMENTAL EARTH SCIENCE
3, 3/0; NS14
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. Offered Every Semester.

GES 224
GEOLOGIC HAZARDS
3, 3/0; NS14
Catastrophic geologic events, with an emphasis on earthquakes, volcanism, and landslides. Includes causes, physical effects, prediction, and social implications. Offered Alternate Years and J Term.

GES 232
THE SOLAR SYSTEM
3, 3/0; NS14
Makeup and characteristics of our solar system; formation hypotheses; geologic processes acting on solar system bodies; comparison of the planets; the search for other solar systems and life elsewhere. Expansion of solar system exploration due to advances in technology and its effect on society. Offered Every Semester.

GES 241
METEOROLOGY
3, 3/0; NS14
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. Offered Spring Only.
Equivalent course: GEG241

GES 300
SEDIMENTOLOGY
3, 2/2
Prerequisites: GES 101 and GES 103. Introduction to the dynamics of erosion, transport, deposition of sedimentary particles, modern and ancient sedimentary environments. Offered Fall Only.
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. Offered Spring Only.

GES 302
INVERTEBRATE PALEONTOLOGY
4, 4/2
Prerequisite: GES 101. Prerequisite or corequisite: GES 102. Invertebrate fossils and their stratigraphic distribution. Offered Fall Only.

GES 303
MINERALOGY AND PETROLOGY
4, 3/3
Prerequisites: GES 101 and GES 103; one semester chemistry recommended. Crystals, minerals, and rocks, emphasizing description, identification, and origin. Offered Fall Only.

GES 307
GEOMORPHOLOGY
4, 3/3; OCIF, TSIF
Prerequisite: GES 101 or GEG 101. Internal and external processes and structural controls that shape the surface of Earth and other solid solar system bodies. Emphasis on selected geologic environments. Field trips required. Offered Spring Only.

GES 310
GREAT LAKES ENVIRONMENTAL ISSUES
3, 3/0
Prerequisite: Upper-division status or permission of instructor. Introduction to environmental problems and their causes in the Great Lakes region. Environmental history of the Great Lakes. Case studies of current environmental problems and ongoing restoration efforts. Offered Occasionally.

GES 314
GEOLOGICAL OCEANOGRAPHY
3, 3/0
Prerequisite: GES 111 or equivalent. The sediments, structure, and history of the ocean basins. Offered Occasionally.

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. Offered Occasionally.

GES 331
MODERN SOLAR SYSTEM ASTRONOMY
3, 3/0
Prerequisite: GES 131 or equivalent. The n and planets, their appearance, atmospheres, and surfaces. Planetary magnetic fields, asteroids, meteors, 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. Offered Alternate Years. Equivalent course: GES331W

GES 332
STELLAR AND GALACTIC ASTRONOMY
3, 3/0
Prerequisite: GES 131 or equivalent. How astronomers have determined the properties, energy, masses, and composition of stars, stellar evolution, the structure of the galaxy, and the movement of stars in the galaxy. Offered Alternate Years. Equivalent course: GES332W

GES 335
METHODS OF OBSERVATIONAL ASTRONOMY
3, 3/0
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. Offered Alternate Years.

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. Offered Alternate Years. Equivalent course: GES339W

GES 350
ENVIRONMENTAL GEOCHEMISTRY
3, 3/0
Prerequisites: GES 101 and upper-division status. Chemical nature of the earth, emphasizing chemistry associated with the polluted environment. Offered Alternate Years.

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. Offered Alternate Years.

GES 401
IGNEOUS AND METAMORPHIC PETROLOGY
4, 3/3
Prerequisite: GES 303 or permission of instructor. Description, origin, and classification of igneous and metamorphic rocks. Offered Occasionally. Equivalent course: GES401W

GES 403
GLACIAL GEOLOGY
3, 3/0
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. Offered Occasionally. Equivalent course: GES403W

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. Offered Spring Only.

GES 408
STRUCTURAL GEOLOGY
4, 3/3
Prerequisites: GES 101 and GES 103. Folds, faults, and other structural features in sedimentary and metamorphic terrains. Introduction to rock mechanics, regional tectonics. Offered Spring Only. Equivalent course: GES308

GES 409
FLUVIAL GEOMORPHOLOGY
3, 3/0
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. Offered Occasionally. Equivalent course: GES409W

GES 410
UNDERGRADUATE RESEARCH SEMINAR
1, 1/0
Prerequisites: GES 101, GES 103, and instructor permission. Common topics related to undergraduate research in the geosciences including research methods, handling data, making interpretations, preparing for oral and poster presentations, and preparing for graduate school and professional geology. Must be engaged in (or planning) research with an Earth Sciences faculty member. May be taken more than once. Offered Every Semester.
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. Offered Occasionally. Equivalent course: GES431W

GES 460
FIELD GEOLOGY
3, 2/3
Prerequisites: GES 101, GES 303, and GES 408, or permission of instructor. Application of geological principles and techniques in the interpretation of earth features in the field. Offered Fall Only. Equivalent courses: GES404, GES450W

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. Offered Fall Only.

GES 460
ENVIRONMENTAL FIELD METHODS AND ANALYSIS
3, 2/2
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. Offered Spring Only.

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. Offered Occasionally.

GES 488
INTERNSHIP
3-12, 0/0
Prerequisites: Senior status as department major, 2.5 GPA overall. Requires department application and approval. Practical work on an individual basis with a participating organization. Offered Occasionally.

GES 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Approval of a faculty sponsor. Environment-, energy-, geology-, or astronomy-related areas. Offered Occasionally.

GES 498
HONORS RESEARCH
1-3, 0/0
Prerequisite: Acceptance in geology or earth science honors program. Includes completion of honor's thesis and seminar. May be repeated for a maximum of 6 credit hours. Offered Occasionally.

GES 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Faculty sponsor permission. Environment-, energy-, geology-, or astronomy-related areas. Offered Occasionally.

GRK - GREEK

GRK 101
BEGINNING NEW TESTAMENT GREEK I
3, 3/0; GE14
Fundamentals of Koine Greek with emphasis on reading. Offered Fall Only.

GRK 102
BEGINNING NEW TESTAMENT GREEK II
3, 3/0; GE14
Prerequisite: GRK 101. Continuation of GRK 101. Offered Spring Only.

GST - GLOBAL STUDIES

GST 100
INTRODUCTION TO GLOBAL STUDIES
3, 3/0
Prerequisites: None. Introduction to key concepts, issues, and approaches used in Global Studies including social, political, historical, economic, and geographic perspectives. Topics include migrations, diasporas, the global image of the United States, intercultural conflicts, and study abroad programs. Required for Global Studies minor.

HEW - HEALTH AND WELLNESS

HEW 204
PERSONAL HEALTH
3, 3/0
The many problems and advances in medicine and public health as they affect the health status of the individual, family, school, and community. Offered Every Semester and Summer.

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. Offered Every Semester, J Term and Summer.

HEW 279
PHYSICAL ADAPTATION TO EXERCISE
3, 3/0
Prerequisite: BIO 100 or BIO 101. Introduction to concepts of human anatomy and physiology as related to exercise and human performance. Includes, but is 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. Offered Every Semester.

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. Offered Spring and Summer. Equivalent course: HPR301

HEW 302
EXERCISE PRINCIPLES
3, 3/0
Prerequisite: HEW 279. Exercise and its effects on the human body. Practical knowledge of the principles of fitness testing and exercise prescription and application of knowledge to improve fitness and athletic performance in healthy human populations. Offered Every Semester. Equivalent course: HPR302

HEW 305
COMMUNITY HEALTH
3, 3/0
Prerequisite: HEW 225. Community health as it relates to world concerns, U.S. interests, and local community concerns. The
interrelatedness of health care to various societal issues. Offered Every Semester.

HEW 307
EXERCISE, FITNESS, AND NUTRITION
3, 3/0
Prerequisite: HEW 279. Basic concepts of nutrition and exercise training to improve fitness and athletic performance. The relationship of exercise and nutrition to the etiology and treatment of eating disorders and obesity. Offered Every Semester.
Equivalent course: HPR307

HEW 308
WOMEN'S HEALTH ISSUES
3, 3/0
Prerequisite: Upper-division status. Gender differences in health outcomes, health-care practices, and health behavior, with primary emphasis on women. Historical and current perspectives on women's health issues. Part of Women and Gender Studies minor. Offered Fall, J Term and Summer.
Equivalent course: HPR308

HEW 310
HEALTH STANDARDS AND EMERGENCY CARE
3, 3/0
Prerequisite: BIO 100 or BIO 101 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. Offered Every Semester.

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. Offered Every Semester.
Equivalent course: HEW312W

HEW 320
PSYCHOACTIVE DRUGS AND HEALTH
3, 3/0
Prerequisite: Sophomore status. Widespread effects of drug abuse, its relationship to health and disease, and the implication for application for education and theory. Offered Fall Only.

HEW 327
INTRODUCTION TO MEDICAL ANTHROPOLOGY
3, 3/0; NW14
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. Offered Occasionally.
Equivalent course: ANT327

HEW 330
PRINCIPLES OF PERSONAL TRAINING
3, 3/0
Prerequisites HEW 279 & HEW 302. Fitness assessment techniques, program design and implementation for a variety of populations, and motivational techniques. Prepares students for employment within the personal training and fitness industry, and for the national certifications offered by the National Strength and Conditioning Association and the American College of Sports Medicine.

HEW 345
WELLNESS, FITNESS, AND AGING
3, 3/0
Prerequisite: Junior/Senior 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. Part of Gerontology minor. Offered Spring and Summer.
Equivalent course: HPR345

HEW 389
TOPICS COURSE
1-9, 1-9/0
Offered Occasionally.
Equivalent course: HPR389

HEW 401
ASSESSMENT AND EVALUATION IN HEALTH WELLNESS
3, 3/0
Prerequisite: Upper-division status. Introduction of concepts surrounding assessment and evaluation of health promotion programs. Topics include assessing genetic, social, personal behavioral, and environmental factors. Incorporates health promotion process and planning, such as needs assessment, evaluation measures, research design, and measurement evaluation. Offered Every Semester.
Equivalent course: HPR401

HEW 411
CRITICAL ISSUES IN HEALTH AND WELLNESS
3, 3/0
Prerequisite: 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. Offered Every Semester.
Equivalent courses: HEW411W, HPR411

HEW 412
HEALTH/WELLNESS PROGRAMS
3, 3/0
Prerequisite: HEW 312. Provides an opportunity to use health/wellness concepts. Covers general principles used in the development of health-promotion programs. Specific procedures involved in a fitness profile analysis. Guidelines for implementing physical fitness, nutrition, and weight-control programs. Procedures for stress-management and smoking-cessation programs. Principles presented in class during practical health-planning experiences. Offered Every Semester.
Equivalent courses: HEW412W, HPR412

HEW 425
ALCOHOL PROBLEMS
3, 3/0
Prerequisite: Upper-division status. A seminar designed for students as prospective citizens, teachers, supervisors, and voluntary government personnel concerned with individual and community health problems. Emphasis on understanding the widespread effects of alcohol, its relationship to health and disease, and implications for health and therapy. Offered Spring Only.
Equivalent course: HPR425W

HEW 488
INTERNSHIP
1-15, 0/0
Prerequisites: HEW 412W and application to the department. Additional prerequisites apply to selected areas of health/wellness; check with the Health and Wellness Department. The integration of theoretical knowledge with practical field experience in related areas of health and wellness. Offered Every Semester.
Equivalent course: HPR488

HEW 495
SPECIAL PROJECT
1-3, 0/0
Offered Summer Only.
Equivalent course: HPR495

HEW 497
WORKSHOP
1-3, 0/0
Offered Occasionally.
Equivalent course: HPR497

HEW 499
INDEPENDENT STUDY
3-12, 0/0
Offered Occasionally.
HIS 106  HISTORY OF AMERICAN LIFE I
3, 3/0; AH14
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. Offered Every Semester. Equivalent course: HIS106W

HIS 107  HISTORY OF AMERICAN LIFE II
3, 3/0; AH14
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 globalization; World War II; postwar adjustments; the Kennedy and Johnson years; resurgent Republicanism. Offered Every Semester. Equivalent courses: HIS101, HIS107W

HIS 115  FOUNDATIONS OF WESTERN CIVILIZATION
3, 3/0; WC14
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. Offered Every Semester. Equivalent course: HIS115W

HIS 116  EUROPE SINCE 1500
3, 3/0; WC14

HIS 117  TWENTIETH-CENTURY EUROPE
3, 3/0; WC14
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. Offered Every Semester. Equivalent course: HIS117W

HIS 120  HISTORY OF AMERICAN URBAN TECHNOLOGY
3, 3/0
Development and interaction of technology and urban America, from Indian villages and colonial towns to high technology reindustrialization. American Indian and European traditions, early urban production and planning, industrialism and infrastructure, electricity, impact, reforms in housing and health, leisure and consumption technology, and technology as a competitive factor in national and international urban development. Offered Occasionally.

HIS 189  TOPICS COURSE
1-9, 1-9/0
Offered Occasionally.

HIS 204  GLOBAL HISTORY OF THE TWENTIETH CENTURY
3, 3/0
The history of the twentieth century, emphasizing the interrelationship of events and interaction of movements and ideas within a global context. Offered Occasionally.

HIS 210  HISTORY OF MODERN ASIA
3, 3/0

HIS 230  WORLD CIVILIZATIONS I
3, 3/0; NW14
Origins, cultural achievements, and interrelationships of the various civilizations of the world to approximately 1500 C.E. Topics include the prehistoric era and the origins of human civilization; civilizations of the ancient Near East; early civilizations of Africa and the Americas; East Asian culture and civilization; Indian (South Asian) culture and civilization; Greek and Roman civilization; early civilizations of Southeast Asia; Islamic civilization; the Byzantine empire and medieval Europe. Offered Occasionally.

HIS 231  WORLD CIVILIZATIONS II
3, 3/0; NW14
Origins, cultural achievements, and interrelationships of the various civilizations of the world from approximately 1500 to 1914 (World War I). Topics include European culture and civilization from the Renaissance to World War I; Islamic civilization in Asia and the Middle East; East Asian culture and civilization in the late traditional era; African culture and politics in an era of European hegemony; colonial Latin American and the independent states of the postcolonial era; the U.S. and Canada; Western imperialism and global interactions in the modern era. Offered Occasionally.

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. Offered Every Semester. Equivalent course: HIS300W

HIS 302  HISTORY OF WOMEN IN AMERICA
3, 3/0; DI14
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. Offered Occasionally. Equivalent course: HIS302W

HIS 304  EUROPE FROM NAPOLEON TO THE FIRST WORLD WAR
3, 3/0
Major influences in nineteenth-century Europe; nationalism, imperialism, Industrial Revolution, democracy, and socialism; causes of World War I. Offered Occasionally. Equivalent course: HIS304W

HIS 306  AFRICA TO 1800
3, 3/0; NW14
Prerequisite: Upper-division status or instructor permission. African history from the Paleolithic period to 1800. Development of agriculture,
ancient civilizations of Africa, iron working societies, the trans-Saharan trade, the impact of Islam and Christianity, traditional African political and social arrangements, the slave trade, and the European presence in early modern Africa. Offered Occasionally.
Equivalent courses: AAS306, HIS306W

HIS 307
HISTORY OF INDIA
3, 3/0, NW14
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. Offered Occasionally.
Equivalent course: HIS307W

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 Confederation in 1867. Topics include cultural and religious heritage of Canada's native peoples, histories of New France and British North America, the fight for responsible government and Canadian confederation. Offered Occasionally.
Equivalent course: HIS308W

HIS 309
AMERICAN LEADERS
3, 3/0
Selected leaders in critical periods or areas of American civilization, such as Benjamin Franklin and revolutionary America; John Marshall and federal power; Booker T. Washington and W. E. B. DuBois; contrasting black leaders; Lincoln Steffens and the muckrakers; Henry Ford and mass production. Offered Occasionally.
Equivalent course: HIS309W

HIS 310
HISTORY OF EAST ASIA: THE TRADITIONAL ERA
3, 3/0, NW14
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. Offered Occasionally.
Equivalent course: HIS310W

HIS 311
AMERICAN IMMIGRATION AND EMIGRATION
3, 3/0, DI14
Immigration and ethnicity from the colonial period to the present. World population movements, shifts in governmental immigration policy, the changing meaning of ethnicity and race, and its impact on the immigrant experience. How and why immigrants came, degree of assimilation and alienation, work and leisure experiences, demographics, coping mechanisms, transmission of cultural traditions, and generational differences. Offered Occasionally.
Equivalent course: HIS311W

HIS 312
HISTORY OF ITALY
3, 3/0
Classical and medieval foundation. Renaissance Italy. Prelude to unification. Italian nationalism, liberalism, and socialism. Italy under fascism. The Italian Republic, accomplishments and problems. Offered Occasionally.

HIS 313
POLITICS AND HISTORY OF THE MIDDLE EAST
3, 3/0
Equivalent courses: HIS313W, PSC345

HIS 314
MODERN LATIN AMERICA
3, 3/0
Movements for independence; early political apprenticeship; age of dictators; nationalism and national development; Hispanic-American interrelations; growth of inter-American system; Latin America in world politics; revolution of rising expectations, guerrilla movements, turmoil in Central America; contemporary problems. Offered Occasionally.
Equivalent course: HIS314W

HIS 315
HISTORY OF CLASSICAL AND MEDIEVAL THOUGHT
3, 3/0
Early Western intellectual tradition and the interaction of various modes and traditions of intellectual discourse (music, literature, history, philosophy, natural science) and their impact. Dynamics of cultural development and the influences that have shaped Western civilization. Offered Occasionally. Offered Occasionally.

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. Offered Occasionally.

HIS 317
HISTORY OF RUSSIA TO 1917
3, 3/0
Social, political, and economic history of Russia from the Varangian 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. Offered Occasionally.
Equivalent course: HIS317W

HIS 318
HISTORY OF THE FORMER SOVIET UNION
3, 3/0
Economic and historical forces behind the Communist Revolution of 1917. The governmental system and its political, social, and economic theories. The evolving economic system. Soviet foreign policy, impact of the Revolution, and World War II. The church, educational systems, and other cultural developments. Offered Occasionally.
Equivalent course: HIS318W

HIS 319
COLONIAL HISTORY OF THE AMERICAN PEOPLE
3, 3/0
Equivalent course: HIS319W

HIS 320
MODERN HISTORY OF JAPAN AND KOREA
3, 3/0, NW14
Prerequisites: Upper-division status or permission of instructor. History of Japan and Korea from the premodern era to the present. Topics include Tokugawa Japan; the Meiji Restoration; the Meiji state and the rise of Japanese imperialism; Japan and World War II; economic and political developments in postwar Japan; late Yi (Choson) dynasty Korea; the era of Japanese colonialism in Korea; the emergence of modern Korean nationalism; the Korean War; and postwar developments in North and South Korea. Offered Occasionally.
Equivalent course: HIS320W

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. Offered Occasionally.
HIS 322
AFRICAN AMERICAN HISTORY
3, 3/0; DI14
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. Offered Occasionally. Equivalent courses: HIS321W

HIS 323
CLASSICAL GREECE AND ROME
3, 3/0
Origins and development of ancient Greece, the Hellenistic world, and the Roman republic and empire. Emergence and growth of major cities, the evolution of social and political institutions, trade and economic development, technological innovation; philosophy and religion. Offered Occasionally.

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. Offered Occasionally. Equivalent course: HIS324W

HIS 326
HISTORY OF THE GREAT LAKES REGION
3, 3/0
The history of the Great Lakes. Introduction to the variety of natural, social, and political factors that have shaped the region. Offered Occasionally.

HIS 327
COLONIAL LATIN AMERICA
3, 3/0
Encounter between Europe and the New World; establishment of the political, social, cultural, and religious institutions of the Spanish and Portuguese in the Americas between 1492 and 1824. Role of the church, economic institutions, women, slaves, and Indians in further understanding the cultural and political heritage of the region. Offered Occasionally.

HIS 328
HISTORY OF POLAND
3, 3/0
Prerequisites: upper-division status. Major Polish historical and cultural achievements from 966 to the present. The growth and development of the nation and the state. Scientific, cultural and religious forces in Polish life. The interaction of Poland with neighboring states and cultures, and Poland's role in world affairs. Offered Occasionally. Equivalent course: HIS206

HIS 330
U.S. ENVIRONMENTAL HISTORY
3, 3/0

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. Offered Occasionally. Equivalent course: HIS331W

HIS 332
TECHNOLOGY AND U.S. HISTORY
3, 3/0
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. Offered Occasionally. Equivalent course: HIS332W

HIS 334
MODERN IRELAND SINCE 1800
3, 3/0
Major factors that shaped Irish history in the nineteenth and twentieth centuries: the impact of the union with Britain; the struggle for Catholic emancipation; the Great Famine and its aftermath; revolutionary movements like Young Ireland, the Fenians, and Sinn Fein; cultural revival and religion in Victorian Ireland. Also the question of home rule and independence, the growth of the free state and the establishment of the Northern Ireland state. Ireland in World War II, and the emergence of contemporary Ireland in the context of the European economic community. Offered Occasionally. Equivalent course: HIS334W

HIS 335
HISTORY OF MEXICO
3, 3/0
Pre-Columbian 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. Offered Occasionally. Equivalent course: HIS335W

HIS 336
HISTORY OF EARLY MODERN IRELAND
3, 3/0
A focus on the political, economic, and social histories of Ireland in the Early Modern period, ca.1485-1800. An overview of the development of the Irish state, its constituent communities, and relations with England and the British mainland up to the union of 1800. Emphasis is placed on what it meant to "be Irish" in the Early Modern period, and how varying definitions of "Irishness" have affected Ireland's cultural and political history. Reading primary sources and leading and participating in discussions are emphasized. Offered Occasionally.

HIS 337
AFRICA SINCE 1800
3, 3/0; NW14

HIS 338
MODERN HISTORY OF CHINA
3, 3/0; NW14
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. Offered Occasionally.

HIS 340
HISTORY OF THE BUFFALO NIAGARA REGION
3, 3/0
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. Offered Occasionally. Equivalent courses: GEG340, HIS340W
HIS 341
AFRICAN AMERICANS AND CIVIL RIGHTS
3, 3/0
History of the landmark court decisions, laws, and governmental policies regarding the civil rights of African Americans. The course examines some of the historic relationships among race, racism, law, and public policy in America. Focuses on resistance, protest, and the quest for equality in America. Offered Occasionally. Equivalent courses: AAS341, HIS341W

HIS 342
ENGLISH LEGAL HISTORY
3, 3/0
Origins of English law to 1066, growth of medieval common law, common law and its rivals in sixteenth and seventeenth centuries, consolidation and reform of law and courts, relation of law and equity, criminal and civil jurisdiction and procedure, the legal profession, changing legal concepts and the modern state. Offered Occasionally. Equivalent course: HIS342W

HIS 344
EMERGENCE OF INDUSTRIAL AMERICA: 1877 TO 1919
3, 3/0
Conservative reaction to reconstruction, decline of the presidency, the triumph of capitalism and industry, populist protest, the end of westward movement, socialization of immigrants, progressive impulse and leadership, rural vs. urban conflict, the United States and the race for empire, and the role of America in World War I. Offered Occasionally. Equivalent course: HIS344W

HIS 345
HISTORY OF THE UNITED STATES SINCE 1941
3, 3/0
Political, diplomatic, social, and cultural history of contemporary America; World War II and the advent of the nuclear age; the Cold War and the policy of containment; the Korean War, McCarthyism, and domestic reform; the New Frontier and the Great Society; civil rights, civil disobedience, and the greening of America; war and peace in Southeast Asia; Watergate and the travails of liberalism. Offered Occasionally. Equivalent course: HIS345W

HIS 350
LEFT AND RIGHT IN EUROPEAN HISTORY
3, 3/0
The evolution of Marxist, anarchist, state socialist, and right radical ideologies in European thought and politics. Offered Occasionally. Equivalent course: HIS350W

HIS 351
MODERN FRANCE
3, 3/0
Selected problems in French political, social, economic, and diplomatic history emphasizing historiography and interpretation of such periods as the restored monarch, the revolution of 1848, the Second Empire, the Third Republic, and its successors. Offered Occasionally. Equivalent course: HIS351W

HIS 354
HISTORY OF THE CARIBBEAN
3, 3/0
Spanish colonization of the Caribbean, pirates and the foreign threat, race relations and the development of colonial society, Cuba rebels against Spain, the Spanish-American War, Cuba and the United States, Castro's revolution, Puerto Rico under U.S. rule, the rise of Puerto Rican nationalism, Puerto Rico today. Offered Occasionally. Equivalent course: HIS354W

HIS 355
HISTORY AND CULTURE OF ARGENTINA
3, 3/0

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 and beyond. Offered Occasionally.

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. Offered Occasionally.

HIS 358
HISTORY AND CULTURE OF PARAGUAY
3, 3/0
Prerequisites: Upper class standing. Paraguay's pre-contact cultures and societies, isolated colonial era, the dramatic War of the Triple Alliance, the Chaco War, securing the vast Chaco region and the longest dictatorship in the hemisphere of Alfredo Strossner. Offered Occasionally.

HIS 359
GERMANY AND CENTRAL EUROPE, 1618-1918
3, 3/0
History of Central Europe from the Thirty Years' War to the twentieth century. Political and cultural development of the modern German nation-state from nationalist dream to the Second Reich in the nineteenth century. Offered Occasionally.

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. Offered Occasionally. Equivalent course: HIS360W

HIS 361
HISTORY AND CULTURE OF BRAZIL
3, 3/0
Prerequisites: Upper class standing. Brazil's Indigenous population and culture before Columbus. How Europeans, Africans and Indigenous populations experienced colonialism, Empire and republicanism. Brazil evolves from an exporter of primary commodities to industrialization. Women and minorities' struggles for political equality and economic survival. How Brazil became a global powerhouse in the 21st century. Offered Occasionally.

HIS 362
THE WAR OF 1812
3, 3/0
Prerequisites: upper-division status. The causes, conduct and implications of the War of 1812. Thematic and narrative treatment of the war and its implications for the history of North America in the 19th century and beyond; the emergence of the United States as a hemispheric power; the future of Canada-US relations. The war as an aspect of 19th century British imperial history; impact on North American Indigenous Peoples. Offered Occasionally.

HIS 363
AMERICAN IDENTITY IN TRANSITION: DIVERSITY AND PLURALISM IN THE UNITED STATES
3, 3/0; DI14
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. Offered Occasionally. Equivalent courses: SSE363, SST363
HIS 365 AMERICAN LABOR HISTORY
3, 3/0
Readings and bibliography on the role of workers in American life. Slaves, indentured servants, wage earners, and craftsmen. The rise of organized labor from colonial times. The history of the Knights of Labor, the American Federation of Labor, the Congress of Industrial Organizations, and independent unions, with related issues of immigration, radicalism and political action, and contemporary labor problems. Offered Occasionally.
Equivalent course: HIS365W

HIS 366 MEDIEVAL AND EARLY MODERN BRITAIN
3, 3/0
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. Offered Occasionally.

HIS 367 MODERN BRITAIN
3, 3/0
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. Offered Occasionally.

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. Offered Occasionally.
Equivalent course: HIS370W

HIS 371 AMERICAN DIPLOMATIC HISTORY SINCE 1898
3, 3/0
War with Spain and the rise to world power; inter-American and Far Eastern relations; diplomacy of World War I; retreat to isolationism; road to World War II; global war and its aftermath; leadership in the United Nations and the Cold War; inter-American and Far Eastern affairs. Offered Occasionally.
Equivalent course: HIS371W

HIS 372 AMERICAN FOREIGN POLICY IN THE FAR EAST
3, 3/0
Dawn of America's Asiatic interests; early relations with China; opening of Japan; missionary activity and influence; war with Spain; America becomes a Pacific power; World War I and the rise of Chinese nationalism; American gunboat diplomacy; interwar naval conferences; Manchurian Incident; American-Japanese problems; road to war; Pearl Harbor and war in the Pacific; search for Pacific security; conflict in Korea; war and peace in Vietnam. Offered Occasionally.
Equivalent course: HIS372W

HIS 373 VIETNAM AND THE VIETNAM WAR
3, 3/0; NWIF
Introduction to the major issues associated with the history of Vietnam and modern Vietnam's wars with France and the United States. Origins and historical development of Vietnamese society and culture; French colonialism and the emergence of modern Vietnamese nationalism; Vietnamese communism under Ho Chi Minh; the Franco-Vietminh War; the American war in Vietnam; and postwar reunification and consolidation under the Vietnamese Communist Party. Offered Occasionally.

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. Offered Occasionally.
Equivalent course: HIS375W

HIS 379 MUSEUM AND CIVIC ENGAGEMENT
3, 3/0
In-depth study of how museums and cultural agencies define community identity. Internal operations of museums and cultural agencies. Minimum 20 hours in-service (fieldwork) activity required, with 15 percent of the grade dependent upon the resulting learning from that service. Offered Occasionally.

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. Offered Occasionally.
Equivalent course: HIS380W

HIS 381 THE ROLE OF THE HISTORY MUSEUM
3, 3/0
Equivalent course: HIS381W

HIS 382 HISTORY OF CHRISTIANITY TO 1500
3, 3/0
Prerequisites: junior or senior status. Christianity in the East and the West from its origins to the dawn of the modern age. Development of Christianity, the Apostolic Era, the Patristic Era; Byzantine and medieval Latin Christianity until the fall of Constantinople and the Protestant Reformation. Political, intellectual and cultural significance of Christianity in world civilizations. Offered Occasionally.

HIS 383 HISTORY OF CHRISTIANITY FROM 1500 - PRESENT
3, 3/0
Prerequisites: junior or senior status. Developments in Christianity in the Modern World from the collapse of the Byzantine Empire in the East and from the Protestant Reformation in the West through the twenty-first century. Challenges of Christianity with respect to the Scientific Revolution, the Enlightenment, liberalism, nationalism, socialism, capitalism and the Industrial Revolution, secularism, consumerism, and globalization. Offered Occasionally.

HIS 385 AZTEC AND MAYA HISTORY
3, 3/0
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. Offered Occasionally.

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. Offered Occasionally.
HIS 389
HISTORICAL PERSPECTIVES (TOPICS)
3, 3/0
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. Offered Occasionally.

HIS 400
SENIOR SEMINAR IN HISTORY
3, 3/0
Prerequisites: Senior standing; HIS399 for history majors. Readings, discussion, and research on selected problems in history, which results in a substantial research paper. Fulfills seminar requirement for history majors and secondary social studies majors. Offered Every Semester. Equivalent course: HIS400W

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. Offered Occasionally. Equivalent course: HIS401W

HIS 402
THE ITALIAN RENAISSANCE
3, 3/0

HIS 404
THE SOUTH SECTIONALISM, AND THE CIVIL WAR
3, 3/0
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. Offered Occasionally. Equivalent course: HIS404W

HIS 405
REFORMATION
3, 3/0
Impact of the Renaissance and Reformation on intellectual, artistic, economic, and political development of Europe; social and religious problems; humanism, secularism, classicism, individualism in Italy and Northern Europe; Protestant reform and reformers; Catholic Reformation. Offered Occasionally. Equivalent course: HIS405W

HIS 406
THE FRENCH REVOLUTION AND NAPOLEON
3, 3/0
Political, social, economic, and intellectual fabric of the Old Regime; the Revolution; dictatorship of Napoleon and spread of revolutionary ideas; rise of modern nationalism. Offered Occasionally. Equivalent course: HIS406W

HIS 407
THE TEACHING OF HISTORY
3, 3/0
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. Offered Occasionally. Equivalent courses: SSE407, SST407

HIS 408
HISTORY OF AMERICAN THOUGHT
3, 3/0
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. Offered Occasionally. Equivalent course: HIS408W

HIS 412
HISTORY OF EAST CENTRAL EUROPE
3, 3/0
Social, political, and economic history of the Baltic States, Western Slavdom, 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. Offered Occasionally.

HIS 415
HISTORY AND GOVERNMENT OF NEW YORK STATE
3, 3/0
Aboriginal background; development of the colony; establishment of the state; rise of political parties; past and present structure and problems of New York State government; current economic and social growth. Offered Occasionally. Equivalent course: HIS415W

HIS 418
FOOD AND GLOBAL HISTORY
3, 3/0
How food has influenced human society from hunter-gatherer societies to the present. Food rituals, famines, food and spice trade, national identity. How cultures from Asia, Africa, Europe, and the Americas understood their relationship to food. Offered Occasionally.

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. Offered Occasionally. Equivalent course: HIS419W

HIS 420
ADMINISTRATION OF THE HISTORICAL AGENCY OR ART MUSEUM
3, 3/0
Principles and practice of administration of museums. Problems of organization, collection, exhibition, public services, finance, special public relations, and trustee relations. Experience in the area of interpretation. Offered Occasionally. Equivalent course: HIS420W

HIS 422
TUDOR AND STUART ENGLAND
3, 3/0
Henry VII and the new dynasty; religion and politics under the early Tudors; the age of Elizabeth I; the Stuarts and the Puritan revolt; restoration and revolution; limiting the monarchy and establishing the empire. Offered Occasionally. Equivalent course: HIS422W

HIS 425
MUSEUM PRESERVATION AND PRACTICE
3, 3/0
Acquaints students who are non-conservation specialists with conservation principles of museum collections. Environmental, handling, and procedural issues; lecture, demonstrations, and practical work; examine exhibition and storage facilities at local institutions. Offered Occasionally.

HIS 430
UNITED STATES: THE NEW NATION
3, 3/0
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. Offered Occasionally. Equivalent course: HIS430W

**HIS 440**  
**THE HOLOCAUST**  
3, 3/0  
Persecution and murder of Jews and other victims of Nazi genocide. Historical anti-Semitism, the personality of Adolf Hitler, the traumas of Weimar Germany, birth and rise of the Nazi party, persecution and extermination of Jews, non-Jewish victims, the death camps, Jewish resistance, and world reaction to Nazi policies. Offered Occasionally.

**HIS 445**  
**HISTORY OF WOMEN AND GENDER IN THE MIDDLE EAST**  
3, 3/0; NW14  
History of women and gender in the Middle East from Muhammad to present. Women and gender in the formation of Islam, medieval caliphates, and Islamic empires. Historical role of modernization, and colonization on early Middle Eastern feminist movements. The end of empires and influence of nation-building on social relations. Offered Occasionally.

**HIS 447**  
**NINETEENTH CENTURY EUROPEAN INTELLECTUAL HISTORY**  
3, 3/0  
Prerequisites: Upper-division status. European intellectual history 1789-1914. Topics include political and artistic responses to the French and Industrial revolutions; romanticism, liberal-democratic nationalism, and utopian socialism; the failed revolutions of 1848; modernism and realism in the arts; positivism in philosophy; conservative nationalism and scientific socialism; Darwin and Social Darwinism; the new imperialism and its critics, 1880-1914; racism, radical nationalism, political anti-Semitism; the Second International and syndicalism; the revolt against positivism and realism in philosophy and the arts; the birth of modern sociology. Offered Occasionally.

**HIS 448**  
**TWENTIETH CENTURY EUROPEAN INTELLECTUAL HISTORY**  
3, 3/0  
Prerequisites: Upper-division status. Main currents of European intellectual and cultural life from 1914-2001. Topics include psychoanalysis; intellectual and cultural responses to World War I, the Russian Revolution and the rise of fascism; Critical Theory, existentialism, feminism and postmodernism; decolonization and the protest movements of the 1960s; the Cold War and the collapse of the Soviet communism; globalization, immigration and the new multicultural Europe. Offered Occasionally.

**HIS 450**  
**MUSEUM INTERNSHIP**  
3-6, 0/0  
For students interested in gaining practical experience in museum work. Assignment to a particular museum is based on a student’s major-related disciplines. Students in areas such as history, anthropology, art history, education, and the natural sciences are eligible. Offered Occasionally. Equivalent course: MST450

**HIS 460**  
** PATTERNS OF HISTORY IN SOUTHEAST ASIA**  
3, 3/0  
Examination of key topics in the social and political history of the principal regions of Southeast Asia. Primary emphasis on the cultural heritage and political origins of the major modern Southeast Asian nations. Myanmar (Burma), Thailand, Malaysia, Cambodia, Vietnam, Indonesia, Singapore, and the Philippines. Offered Occasionally.

**HIS 465**  
**IMPERIALISM IN THE 19TH AND 20TH CENTURIES**  
3, 3/0; NW14  

**HIS 466**  
**DRUGS AND GLOBAL HISTORY**  
3, 3/0  
Prerequisites: Upper division status or Instructor Permission. Research seminar on the history, culture, and sociology of drug consumption including food drugs such as coffee, tea and yerba maté. Cultural uses of drugs and their rejection or acceptance in society. How drug commodities have influenced human migration patterns and global economics. Offered Occasionally.

**HIS 468**  
**READINGS IN AFRICAN AMERICAN HISTORY**  
3, 3/0  
The major historical writings on selected periods and topics in African American history. Readings, discussions, and writing book reviews and biographical essays. Offered Occasionally. Equivalent courses: AAS468, HIS468W

**HIS 469**  
**BLACK PROTEST AND LEADERSHIP IN THE UNITED STATES IN THE TWENTIETH CENTURY**  
3, 3/0  
The black protest movements and leaders in twentieth-century America. Offered Occasionally. Equivalent courses: AAS469, HIS469W

**HIS 480**  
**DIGITAL MUSEUM COLLECTIONS**  
3, 3/0  
Digital technology enables museums to make their collections more accessible. Students investigate what is involved in digitizing museum objects through classroom instruction and a class project. To balance theory with practice, students work as a group to develop their own digital collection. Course is taught at Buffalo State College and a local cultural institution. Offered Occasionally.

**HIS 488**  
**INTERNSHIP**  
1-12, 0/0  
Background of courses or experience within the area of interest; 6 credit hours of lower-division major courses; 6 credit hours of history and social studies education coursework at the upper-division level; minimum cumulative GPA of 2.5 (overall and in major coursework); approval of student adviser and department chair. Internships provide students with guided, supervised field experiences that complement the academic program. Offered Occasionally. Equivalent course: SSE488

**HIS 490**  
**SENIOR SEMINAR IN HISTORIOGRAPHY**  
3, 3/0  
Acquaints history and social studies education majors and others with great works of historic literature in the Western and other traditions. Introduction to the development of historical writing from ancient times to the present. Students are encouraged to assess sources that have been used to record the past and to examine the various methodologies employed by historians in studying the past. Offered Every Semester. Equivalent courses: HIS399W, HIS490W

**HIS 495**  
**SPECIAL PROJECT**  
1-3, 0/0  
Offered Occasionally.

**HIS 497**  
**SPECIAL WORKSHOP**  
1, 0/0  
Offered Occasionally.

**HIS 498**  
**HONORS RESEARCH**  
1-9, 0/0  
Prerequisite: Completion of 12 credit hours in the history honors program. An advanced research course for students in the history honors sequence. Offered Occasionally.
### HON - ALL COLLEGE HONORS PROGRAM

**HON 100**  
**ALL COLLEGE HONORS SEMINAR**  
3, 3/0  
Prerequisite: Acceptance into All College Honors Program. Introductory course. Introduces students to faculty from across the disciplines. Includes discussion of specific fields of study and their contributions to the betterment of humankind. Promotes student appreciation, critical examination, and application of interrelated concepts and values as defined by works of literature, art, music, scientific endeavor, technology, historical research, pedagogy, and political theory.  
Equivalent course: BSC101

**HON 101**  
**HUMANITIES SEMINAR**  
3, 3/0; HU14  
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; NS14  
Prerequisite: Acceptance into All College Honors Program. Natural science core. Part of an integrated sequence of core courses. Focuses on the role of science in contemporary society. Students enrolled in this course may not receive credit for SCI 100.  
Equivalent course: SCI100

**HON 103**  
**ARTS SEMINAR**  
3, 3/0; AR14  
Prerequisite: Acceptance into All College Honors Program. Arts core. Part of an integrated sequence of core courses. Focuses on great ideas and significant works in the arts.

**HON 202**  
**SOCIAL SCIENCE SEMINAR**  
3, 3/0; SS14  
A social science core course designed for All College Honor Students as part of an integrated sequence of core courses. This course focuses on the central ideas, epistemology, issues and significant works in and among the disciplines of the social sciences.  
Equivalent course: HON302

**HON 301**  
**VALUES AND ETHICS IN THE PROFESSIONS**  
3, 3/0  
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 400**  
**ALL COLLEGE HONORS COLLOQUIUM**  
3, 3/0  
Prerequisite: Acceptance into All College Honors Program. Culminating activity. Students complete original works of scholarship and creativity and present their work in a colloquium forum to allow for the maximum exchange of ideas. Course provides closure to the objectives of the All College Honors Program.  
Equivalent course: HON400W

**HON 499**  
**INDEPENDENT STUDY**  
3-12, 0/0

### HPR - COACHING AND PHYSICAL EDUCATION

**HPR 100**  
**SPECIAL PROJECT**  
1, 0/0  
Limited for certain movement, exercise, and sport experiences. Completion of form and approval of program coordinator required. Forms available in the Coaching and Physical Education Office. Offered Every Semester.

**HPR 114**  
**JOGGING FOR PHYSICAL FITNESS**  
1, 0/2  
Offered Occasionally.  
Equivalent course: HEW114

**HPR 154**  
**FITNESS THROUGH SWIMMING**  
1, 0/2  
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. Offered Occasionally.  
Equivalent course: HEW154

**HPR 180**  
**PHYSICAL FITNESS FOR WOMEN**  
1, 0/2  
Offered Occasionally.  
Equivalent course: HEW180

**HPR 198**  
**STRENGTH FITNESS**  
1, 0/2  
Offered Occasionally.  
Equivalent course: HEW198

**HPR 201**  
**TECHNIQUES AND THEORES 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. Offered Summer Only.  
Equivalent course: HEW201

**HPR 202**  
**TECHNIQUES AND THEORIES OF SOCCER**  
3, 3/0  
Analysis of soccer with emphasis on history, present status, rules, techniques, and theories. Offered Spring Only.  
Equivalent course: HEW202

**HPR 203**  
**TECHNIQUES AND THEORIES OF FOOTBALL**  
3, 3/0  
Analysis of football with emphasis on history, present status, rules, techniques, and theories. Offered Fall Only.

**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. Offered Spring Only.

**HPR 207**  
**TECHNIQUES AND THEORIES OF BASEBALL/SOFTBALL**  
3, 3/0  
Analysis of baseball with emphasis on history, present status, rules, techniques, and theories. Offered Spring Only.  
Equivalent course: HEW207

**HPR 208**  
**TECHNIQUES AND THEORIES OF SWIMMING**  
3, 3/0  
Analysis of swimming with emphasis on history, present status, rules, techniques, and theories. Offered Spring Only.
HPR 209
TECHNIQUES AND THEORIES OF BASKETBALL
3, 3/0
Analysis of basketball with emphasis on history, present status, rules, techniques, and theories. Offered Fall Only.
Equivalent course: HEW208

HPR 300
COACHING AND PHYSICAL EDUCATION
3, 3/0
Basic philosophy and principles of coaching interscholastic athletics; state, local, and national policies and regulations related to athletics. Partially fulfills New York State requirements for interscholastic coaching certification. Offered Fall Only.
Equivalent course: HEW300

HPR 301
KINESIOLOGY: APPLIED ANATOMY AND BIOMECHANICS
3, 3/0
Prerequisite: Sophomore status. Study of selected anatomical, physiological, and mechanical principles of movement and their application to human motion. Offered Fall Only.
Equivalent course: HEW301

HPR 306
ORGANIZATION AND ADMINISTRATION OF INTRAMURAL SPORTS
3, 3/0
Prerequisite: Sophomore status. Critical analysis of the organization and administration of intramural and recreational sports programs. Offered Occasionally.

HPR 309
HEALTH SCIENCES FOR COACHING
3, 3/0
Interdisciplinary study of the health sciences as they apply to coaching interscholastic sports. Selected principles of anatomy, kinesiology, and physiology related to coaching; risk minimization; mixed competition; New York State Department of Education selection and classification of athletes; definition of age and maturity of athletes. Partially fulfills New York State requirements for interscholastic coaching certification. Offered Spring and Summer Only.

HPR 319
SOCIOLOGY OF SPORT
3, 3/0
Sport and related social phenomena of social status, norms, goals, values, and organizational network. Offered Spring Only.
Equivalent courses: HWE319, SOC324

HPR 335
PREVENTION AND CARE OF ATHLETIC INJURIES
3, 3/0
Prerequisite: HPR/HEW 301 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. Offered Fall Only.
Equivalent course: HEW335

HPR 389
TOPICS COURSE
3, 3/0

HPR 488
INTERNSHIP
1-15, 0/0
Prerequisites: Upper-division status and instructor permission. The integration of theoretical knowledge with practical field experience in coaching interscholastic sports. Offered Fall Only.
Equivalent course: HEW488

HPR 495
SPECIAL PROJECT
1-3, 0/0
Offered Occasionally.

HPR 499
INDEPENDENT STUDY
3-9, 0/0
Offered Occasionally.

HTR 100
MULTICULTURAL FOODS
3, 3/0
Cultural overview of the foods and food habits of selected groups. Common foods, meal patterns, special-occasion foods, and the role of food in society. The impact of the groups on the American lifestyle. Offered Fall, Spring and Summer Only.

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. Offered Fall, Spring and Summer Only.

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. Offered Fall and J Term Only.

HTR 300
FOOD AND BEVERAGE MANAGEMENT
4, 1/6
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. Offered Fall, Spring and Summer Only.
Equivalent course: NFS300

HTR 305
ADVANCED FOOD
3, 2/2
Prerequisites: HTR 100 Multicultural Foods. This course is designed to provide students with the progressive skills and knowledge needed to build on their existing culinary abilities in order to create advanced levels of Haute cuisine. Offered Spring Only.
Equivalent course: NFS305

HTR 318
CULTURAL TOURISM
3, 3/0
A practical approach to understanding regional cultural attractions and the economic impact they have on the community. The course examines the historical context of cultural tourism and the structure of local cultural attractions through guided tours, guest presentations, and participation in the regional cultural tourism efforts. Offered Spring Only.

HTR 330
FUNDAMENTALS OF BAKESHOP PRODUCTION
3, 1/4
Designed to provide students with an overview of bakeshop concepts, which include knowledge base and production skills necessary to create fundamental bakery products. Offered Spring and Summer Only.

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. Offered Fall Only.
HTR 340
INDUSTRY EXPERIENCE
1-3, 1/9
Prerequisites: 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. Offered Fall, Spring and Summer Only.
Equivalent courses: HTR340W, NFS340

HTR 348
TOURISM AND WORLD TRAVEL
3, 3/0
Overview of world tourism and travel and the impact of tourism on world trade, geopolitical understandings, and cultural exchange. Introduction to career opportunities in the industry. Offered Occasionally.

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. Offered Fall and Spring Only.
Equivalent course: NFS350

HTR 361
PRINCIPLES OF MANAGEMENT IN FOOD SERVICE
3, 3/0
Application of management principles in food service systems. Offered Fall Only
Equivalent courses: HTR361W, NFS361

HTR 365
MENU DESIGN AND DEVELOPMENT
3, 3/0
Prerequisites: HTR 300- Food and Beverage Management. A complete study of restaurant menus including historic perspective, the current state of the food service industry, detailed menu analysis, pricing, mechanics, menu production and service. Financial planning and ethical management will also be covered. Offered Fall Only
Equivalent course: NFS365

HTR 368
HOTEL OPERATIONS
3, 3/0
Organization, function, and management of the rooms and divisions of hotels, resorts, and other lodging facilities; security; facilities management; front-office management. Offered Fall, Spring and Summer Only.
Equivalent course: NFS368

HTR 370
COST CONTROLS IN HOSPITALITY
3, 3/0
Prerequisite: Successful completion of mathematics basic skills competency requirement. Relevant accounting and financial concepts and procedures. Interrelationships between costs and their impact on gross margins and net incomes. Strategies to control fixed and variable costs. Offered Fall, Spring and Summer Only.
Equivalent course: NFS370

HTR 375
EVENTS MANAGEMENT
3, 2/0
The best practices in modern event management and the three dimensions of event leadership: event administration, an insider's vocabulary, and industry certification standards. An overview of event projects, new product developments, business meetings, seminars and conferences and exhibitions. Fieldwork opportunities, in special events on campus and off campus. Offered Fall Only

HTR 380
ADVANCED TRAINING IN HOSPITALITY
3, 3/0
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. Offered Fall and Spring Only.
Equivalent course: NFS380

HTR 385
PRIVATE CLUB MANAGEMENT
3, 3/0
This course is an in depth study of the private club industry. Emphasis is on club needs assessment, development of programs for members and other audiences, overcoming challenges that external and government agencies pose for managers, golf course maintenance, and capital improvement projects for club and resort facilities. Issues relative to finance and board governance and structure will also be analyzed. Offered Fall Only

HTR 389
TOPICS COURSE
3, 0/0
Offered Occasionally.

HTR 390
STRATEGIC MARKETING IN HOSPITALITY
3, 3/0
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. Offered Fall, Spring and Summer Only.
Equivalent course: NFS390

HTR 400
CATERING MANAGEMENT
3, 1/4
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. Offered Fall and Spring Only.

HTR 408
CONVENTIONS, MEETINGS, AND EXPOSITIONS
3, 3/0
Introduction to the meeting, convention, and exposition industry. The basic framework for planning a meeting, convention, or exposition. Offered Fall and Spring Only.
Equivalent course: NFS408

HTR 418
TOURISM MANAGEMENT
3, 3/0
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. Offered Fall, Spring and Summer Only.
Equivalent course: NFS418

HTR 455
ADVANCED HUMAN RESOURCE MANAGEMENT IN HOSPITALITY
3, 3/0
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. Offered Fall, Spring and Summer Only.
Equivalent courses: HTR455W, NFS455

HTR 468
HOTEL MANAGEMENT
3, 3/0
Prerequisites: 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. Offered Fall and Spring Only.

HTR 470
LEGAL ISSUES IN HOSPITALITY
3, 3/0
Prerequisite HTR 110Overview of local, state, and federal laws and regulations that promote policies for effective hospitality organizations. Case-study analysis. Offered Spring and Summer Only.
Equivalent course: NFS470

HTR 480
PRACTICUM IN HOSPITALITY OPERATIONS
4, 1/6
Prerequisites: HTR 300 and senior status. Culminating experience in hospitality administration at Campus House requiring students to apply various theories and concepts learned in previous courses. Students develop marketing, strategic, and financial plans. Offered Fall, Spring and Summer Only.
Equivalent course: NFS480

HTR 485
SEMINAR IN HOSPITALITY
1, 1/0
Prerequisite: Senior status. Investigation of contemporary issues relevant to the hospitality industry. Students research and present topics of their choice and participate in career-related activities. Offered Fall and Spring Only.
Equivalent course: NFS485

HTR 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Instructor and department chair permission, using department forms available in Caudell Hall 207. Offered Occasionally.

HTR 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Instructor and department chair permission, using department forms available in Caudell Hall 207. Offered Occasionally.

IDE - INTERIOR DESIGN

IDE 101
INTRODUCTION TO INTERIOR DESIGN
3, 3/0
Introductory survey of the theory and practice of interior design. Emphasis is given to the impact of interior space upon the physical, social, psychological, and aesthetic needs of people. Offered Fall Only.
Equivalent course: DES260

IDE 103
DIGITAL PRESENTATION METHODS
3, 1/5
Introductory course integrating basic research methods, digital file management, presentation techniques, and three-dimensional massing models. Creation of e-portfolios of student work using introductory research methods, 2D graphics, desktop publishing, and 3D modeling software programs. Offered Fall Only.

IDE 151
MECHANICAL AND PERSPECTIVE DRAWING
3, 1/5
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. Offered Spring Only.
Equivalent course: DES309

IDE 152
INTRODUCTION TO COLOR RENDERING
3, 1/5
Prerequisites: IDE 101, IDE 102, DES 101. Corequisites: IDE 151, IDE 153.Studio introduction to interior design problem-solving processes, design analysis techniques, conceptual ideation, and spatial studies utilizing communication methods in various two-dimensional media. Offered Spring Only.

IDE 153
SPATIAL EXPLORATIONS AND MODEL BUILDING
3, 1/5
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. Offered Spring Only.

IDE 201
INTERIOR DESIGN I
3, 1/5
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. Offered Fall Only.
Equivalent course: DES310

IDE 202
CONSTRUCTION FUNDAMENTALS I
3, 3/0
Corequisite: IDE 201.Investigation of basic construction systems and materials related to the built environment. Covers the principles of structure and behavior (engineering principles) and enclosures and aesthetics (architectural design principles). With increasing specificity, material properties affecting installation and appearance are observed and knowledge is utilized in collaborative projects with IDE 301. Materials that are examined include wood, concrete, stone, metal, synthetics, and glass. Offered Fall Only.
Equivalent course: DES364

HUM - HUMANITIES

HUM 100
INTRODUCTION TO HUMANITIES
3, 0/0; HU14
Introduction to some central topics in the humanities. Humans’ attempts to give meaning to their lives through literary, philosophical, and creative expression.

HUM 490
SENIOR SEMINAR
3, 3/0
Prerequisites: HUM 100, HUM 300, and upper-division status.Research methodologies and examples of research in the humanities. Students may choose to research and develop their own articulated areas of engagement in the humanities by taking HUM 495 concurrently with this culminating-experience course. Senior-level course; required for humanities majors. Offered Occasionally.
Equivalent course: HUM490W

HUM 495
SPECIAL PROJECT
3, 0/0

HUM 499
INDEPENDENT STUDY
3, 0/0

IDE 203  
FURNITURE THEORY AND APPLICATION  
3, 3/0  
Corequisites: IDE 251, IDE 252. Exploration of the furniture elements found within interior design; the interrelation of construction, strength of materials, and styles; and how modern-day furniture, theory, and applications have been influenced by and have evolved due to mass production, material development, and ergonomics. Offered Fall Only.  
Equivalent courses: DES363, IDE253

IDE 204  
MATERIALS AND COLOR  
3, 3/0  
Corequisites: IDE 101, IDE 103. The study of interior finishes, materials, products, and color used for floors, walls, windows, ceilings, and various interior components as they apply to commercial and residential interior spaces. Offered Fall Only.  
Equivalent course: IDE102

IDE 205  
HISTORY OF INTERIOR DESIGN AND ARCHITECTURE I  
3, 3/0; W/CF  
A comprehensive survey of the major historical periods of architecture and interiors from antiquity to the advent of the Industrial Revolution. Offered Fall Only.

IDE 251  
INTERIOR DESIGN II  
3, 1/5  
Prerequisite: IDE 201 OR DES 310. 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. Offered Spring Only.  
Equivalent course: DES360

IDE 252  
CONSTRUCTION FUNDAMENTALS II  
3, 3/0  
Prerequisite: IDE 202. Corequisite: IDE 251. Exploration of advanced construction techniques and materials used in the built environment, with specific emphasis on building systems. Illustrates the principles and philosophy of current building systems and how they relate to appearance, composition, and installation. Knowledge is utilized in practical application and collaboration with the IDE 251 studio course. Offered Spring Only.

IDE 254  
HISTORY OF INTERIOR DESIGN AND ARCHITECTURE II  
3, 3/0  
Prerequisites: IDE 205. A comprehensive survey of the major historical periods of architecture and interiors from the Industrial Revolution to the present. Offered Spring Only.

IDE 301  
INTERIOR DESIGN III  
3, 1/5  
Prerequisite: IDE 251 OR DES 360. 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. Offered Fall Only.  
Equivalent course: DES361

IDE 302  
INTERIOR DESIGN COMPUTER APPLICATIONS  
3, 1/5  
Corequisites: IDE 301 and IDE 303. Intermediate-level course. Integrates computer presentation software to augment concurrent Interior Design studio, professional practice, and stand-alone projects. Digital 3-D modeling and 2-D presentation tools, in conjunction with computer-aided design (CAD) software, are used to translate students' fundamental manual presentation techniques to digital drawing, modeling, and layout. Offered Fall Only.

IDE 303  
INTERIOR DETAILING  
3, 1/5  
Prerequisite: IDE 251. Corequisites: IDE 301, IDE 302. Interior designs are taken from concept to construction via micro-design projects. 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. Offered Spring Only.  
Equivalent course: DES369

IDE 351  
INTERIOR DESIGN IV  
3, 1/5  
Prerequisite: IDE 301 or DES361. Corequisites: IDE 352, IDE 353. Information-gathering research and analysis is the basis to solve the functional and spatial requirements of complex public buildings, such as museums, libraries, health-care facilities, and cinemas. Special emphasis is placed on adjacencies, circulation, articulation, and the shaping of space. Offered Spring Only.  
Equivalent course: DES460

IDE 352  
AUTOCAD FOR INTERIOR DESIGNERS  
3, 1/5  
Corequisite: 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. Offered Spring Only.  
Equivalent course: DES262

IDE 353  
INTERIOR DESIGN PROFESSIONAL PRACTICE AND SPECIFICATIONS  
3, 1/5  
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. Offered Fall Only.  
Equivalent courses: DES367, IDE403

IDE 354  
GLOBAL DESIGN STUDY TOUR  
3, 1/5  
Prerequisites: open for visual arts sophomores, juniors, and seniors with a cumulative GPA of 2.5 or better, instructor permission required. The Global Design Study Tour provides an opportunity to travel and experience a wide range of different cultural and geographical settings and their impact on interior design, art and architecture. Students will study exemplary global designs with an awareness and respect for cultural and social diversity. Offered Occasionally.

IDE 355  
LIGHTING DESIGN  
3, 1/5  
Prerequisites: None. Concurrent Enrollment: IDE 351. Designing with light, illumination principles, design criteria, specifications, and systems applied to public and private interiors. Hands-on experience using a lighting lab, case studies, and 3-D projects reinforce lecture material in a studio setting. Offered Spring Only.  
Equivalent courses: DES368, IDE402

IDE 389  
TOPICS COURSE  
3, 3/0
IDE 401
INTERIOR DESIGN V
1-3, 1-3/5-15
Prerequisite: IDE 351 OR DES 460. 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. Offered Fall Only. Equivalent course: DES461

IDE 403
PROFESSIONAL PRACTICE
3, 3/0
Introduction to the business principles, practices and ethics of the Interior Design profession. Emphasis is placed on regional standards, codes, means, methods, organizational charts, and client interaction. Résumé and portfolio creation, preparation for internship, and job interviews, business development and marketing material creation. Equivalent course: IDE353

IDE 451
INTERIOR DESIGN VI THESIS STUDIO
3, 1/5
Prerequisite: IDE 401. Constitutes the final studio experience prior to graduation and features one major design project. Students focus their design initiative with increased objectivity and adopt a comprehensive approach to the interior design process utilizing proposal, research, schematic design, construction documentation, material selections, specifications, technical writing, and presentation. Offered Spring Only.

IDE 488
INTERIOR DESIGN INTERNSHIP
3, 0/6
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 135 contract hours with the firm, provide a written report of the work experience, and receive a written evaluation from the employer. Offered Fall Only. Equivalent course: DES488

IDE 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Faculty adviser permission.

INS 300
ASSESSMENT OF EXPERIENTIAL LEARNING
3, 3/0
Prerequisite: Permission of instructor, matriculated students only. Designed for students who consider previous learning experiences as college-level creditable. Analysis of experiences that may qualify for college credit, and preparation of a portfolio to inventory college-level learning gained outside of college. Not for second-semester seniors. Equivalent courses: AEL300, INS300W

INS 495
PROJECT
0-3, 0/0

INS 497
WORKSHOP
2-12, 3/0
Equivalent course: GSS497

INS 499
INDEPENDENT STUDY
3-12, 0/0

ITA 101
BEGINNING ITALIAN I
3, 3/0; GE14
Fundamentals of Italian with emphasis on listening, reading, speaking and writing. Offered Every Semester.

ITA 102
BEGINNING ITALIAN II
3, 3/0; GE14
Prerequisite: ITA 101. Continuation of ITA 101. Offered Every Semester.

ITA 201
INTERMEDIATE ITALIAN I
3, 3/0
Prerequisite: ITA 102. Further development of basic skills with emphasis on listening, reading, speaking and writing. Offered Fall Only.

ITA 202
INTERMEDIATE ITALIAN II
3, 3/0
Prerequisite: ITA 201. Continuation of ITA 201. Offered Spring Only.

ITA 301
ITALIAN CONVERSATION AND COMPOSITION
3, 3/0
Prerequisite: ITA 202. Practice in written and spoken Italian. Offered Fall Only.

ITA 302
ITALIAN CONVERSATION AND COMPOSITION
3, 3/0
Prerequisite: ITA 202. Practice in written and spoken Italian. Offered Every Semester.

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. Offered Occasionally.

ITA 307
SURVEY OF ITALIAN LITERATURE
3, 3/0
Prerequisite: ITA 202. Readings and discussions of major works from the origins through the cinquecento. Offered Occasionally.

ITA 308
SURVEY OF ITALIAN LITERATURE
3, 3/0
Prerequisite: ITA 202. Readings and discussions of major works from the seicento to the ottocento. Offered Occasionally.

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. Offered Occasionally.

ITA 450
DIRECTED READINGS I
3, 3/0
Prerequisite: Permission of instructor. Variable topics. Offered Occasionally.

ITA 451
DIRECTED READINGS II
3, 3/0
Prerequisite: Permission of instructor. Variable topics. Offered Occasionally.
MAT 097
BASIC MATHEMATICS
3, 3/0
Provides the necessary mathematics background needed to pass college-level algebra; covers polynomials, rational expressions, exponents and roots, solving equations and inequalities. Offered Every Semester.

MAT 098
BASIC MATHEMATICS
3, 3/0
Computer-based instruction presentation. Information is presented primarily by computer program with instructor intervention. Instructor interacts with the program by evaluating pre-tests and placing students appropriately in the course continuum. Students are encouraged to complete the entire course of study, but may exit the course when they achieve a score at or above the minimum competency exam. One hour per week attendance is required. Offered Every Semester.

MAT 103
INTRODUCTION TO MATHEMATICS
3, 3/0; MQ14
Some of the greatest achievements of mathematical thought, highlighting the beauty and creativity of these ideas. Topics include Fibonacci numbers; the golden rectangle; estimation; comparing infinities; fractals; the Pythagorean Theorem; the five platonic solids; and selected topics from probability and statistics. Designed for liberal arts majors who do not plan to take further math courses. Offered Every Semester. Equivalent course: MAT103W

MAT 107
BASIC MATHEMATICS
3, 3/0; GE14
Fundamentals of Latin with emphasis on reading.

MAT 108
BEGINNING LATIN II
3, 3/0; GE14
Prerequisite: LAT 101. Continuation of LAT 101.

LIB 100
INTRODUCTION TO LIBRARY RESEARCH METHODS
3, 3/0
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 200
ADVANCED LIBRARY RESEARCH METHODS
3, 3/0
Advanced library research strategies with critical thinking and evaluation skills. Emphasizes selecting and using appropriate print and online sources to conduct specialized research. Recommended for students with upper-division status and those planning to pursue graduate studies.

LIB 495
SPECIAL PROJECT
1-3, 0/0
SPECIAL PROJECT
LIB 499
INDEPENDENT STUDY
3-12, 0/0

MAT 114
FUNCTIONS AND MODELING
3, 3/0; MQ14
Prerequisite: 3 years of high school mathematics or equivalent. Describe and explore real-world functions, data, and phenomena through graphic, numeric, symbolic, and verbal representations. Use elementary functions (linear, polynomial, power, and exponential) to investigate and analyze applied problems (supported by the use of appropriate technology). Offered Every Semester.

MAT 121
ELEMENTARY MATHEMATICS FROM AN ADVANCED STANDPOINT I
4, 4/0
Prerequisite: 3 years of high school math or equivalent. First course of a two-semester sequence on the fundamental concepts of elementary mathematics: positional numeration systems, number and operations, proportional reasoning, and number theory. Emphasis on problem solving, understanding the concepts and procedures of elementary mathematics, mathematical modeling, the use of manipulatives, and effective communication of mathematical ideas. Offered Every Semester.

MAT 122
ELEMENTARY MATHEMATICS FROM AN ADVANCED STANDPOINT II
4, 4/0; MQ14
Prerequisite: MAT 121 or equivalent. Second course of a two-semester sequence on the fundamental concepts of elementary mathematics: 2- and 3-dimensional geometry, measurement, probability, statistics, linear and non-linear functions. Emphasis on problem solving, understanding the concepts and procedures of elementary mathematics, mathematical modeling, the use of manipulatives, and effective communication of mathematical ideas. Offered Every Semester.

MAT 124
FUNCTIONS AND MODELING II
3, 3/0; MQ14
Prerequisite: MAT 114 with a minimum grade of C, or equivalent. A precalculus course designed for students who have completed a minimum of three years of New York State Regents high school mathematics or the equivalent. Topics include analysis of polynomial, rational, exponential, logarithmic, and trigonometric functions from graphical, symbolic, numerical, and verbal perspectives with an emphasis on modeling and applications of those functions in real-world contexts. No credit given to students who have previously completed MAT 126 or MAT 161 or equivalent. Offered Every Semester.

MAT 126
APPLIED CALCULUS I
4, 4/0; MQ14
Prerequisite: MAT 124 with a minimum grade of C, or four years of Regents high school mathematics. Intuitive introduction to differential and integral calculus. Analysis of functions, derivatives of algebraic, exponential, ad logarithmic functions, applications of the derivative, anti-derivatives of simple algebraic, exponential and logarithmic functions, area and the fundamental theorem of calculus. Graphical, symbolic, numerical, and verbal representations are used for all topics. Designed for students majoring in disciplines that use calculus as a tool. No credit given to students who have previously completed MAT 160 or equivalent. Offered Every Semester.

MAT 127
APPLIED CALCULUS II
4, 4/0
Prerequisite: MAT 126 with a minimum grade of C, or equivalent. Continuation of MAT 126. Techniques of integration; applications of integration; introduction to differential equations including separation of variables, first order linear equations, and their applications; Taylor polynomials; Newtons method; partial derivatives; and optimization of functions of two and three variables. Graphical, symbolic, numerical, and verbal representations are used for all topics. Designed for students majoring in disciplines that use calculus as a tool. Credit issued for either MAT 127 or MAT 162 (or equivalents), but not for both. Offered Every Semester. Equivalent course: MAT162
MAT 161  
CALCULUS I  
4, 4/0; MQ14  
Prerequisite: MAT 124 with a minimum grade of C. Corequisite: MAT 163. Graph, symbolic, and numeric representation and analysis of functions; limits; continuity; derivatives and antiderivatives of algebraic, trigonometric, exponential, and logarithmic functions; applications of the derivative and antiderivative. Appropriate for math majors and students in partner disciplines requiring understanding of fundamental principles of calculus with emphasis on deductive reasoning and proof. Offered Every Semester.

MAT 162  
CALCULUS II  
4, 4/0  
Prerequisite: MAT 161. Corequisite: MAT 164. A continuation of MAT 161. Area accumulation functions; definition of the definite integral; fundamental theorem of calculus; integration techniques; applications of integrals; improper integrals; sequences and series; function approximation. Graph, symbolic, and numeric representations are used throughout the course. Appropriate for math majors and students in partner disciplines requiring understanding of fundamental principles of calculus with emphasis on deductive reasoning and proof. Offered Every Semester.

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. Offered Every Semester.

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. Offered Every Semester.

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. Offered Every Semester.

MAT 223  
ELEMENTARY AND MIDDLE SCHOOL MATHEMATICS FROM AN ADVANCED STANDPOINT  
4, 4/0  
Pre-requisite: MAT121, MAT122. Deepens and extends content introduced in MAT 121 and MAT 122 through study of analytic and synthetic geometry, transformational geometry, statistics and fundamental concepts of probability. Emphasis on mathematical reasoning and problem solving, mathematical modeling, use of appropriate tools, and effective communication of mathematical ideas prominent in upper elementary and middle school.

MAT 241  
COMPUTATIONAL TOOLS FOR APPLIED MATHEMATICIANS I  
3, 3/0  
Prerequisite: MAT 161 and MAT 163 or equivalent or permission of instructor. Fundamental concepts of problem solving by computer as applied to mathematics. Computer organization, operations and functions, algorithm development, programming techniques. Numerical methods as used in calculus, linear algebra, geometry, etc. Uses a computer language to be applied in this and other mathematics classes. Offered Fall Only. Equivalent course: MAT141

MAT 263  
CALCULUS III  
3, 3/0  
Prerequisite: MAT 162. Corequisite: MAT 264. Vectors, partial differentiation, multiple integrals, and infinite series. Applications studied through algorithmic techniques and/or computer usage. Offered Every Semester.

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. Offered Every Semester.

MAT 270  
DISCRETE MATHEMATICS  
3, 3/0  
Prerequisites: 4 years of high school mathematics or equivalent. Fundamental principles used in discrete mathematics. Topics include logic, mathematical induction, sets, relations, functions, permutations, combinations, recursion, and graph theory. Offered Every Semester.

MAT 300  
TECHNIQUES OF PROOF  
3, 3/0  
Prerequisite: MAT 161 AND MAT 270A gateway to upper-division mathematics with an emphasis on mathematical structures, techniques of proof, and the effective written and oral communication of mathematical ideas. Designed to ease the transition from lower-division mathematics to more theoretical courses such as abstract algebra and real analysis. Students are required to submit written work and make oral presentations. Offered Every Semester.

MAT 301  
FUNDAMENTALS OF ABSTRACT ALGEBRA  
3, 3/0  
Prerequisite: MAT 202 and MAT 300. Fundamental concepts of abstract algebra: sets, mappings, binary operations, relations; algebraic structures of groups, rings, fields, and applications. Offered Every Semester. Equivalent course: MAT301W

MAT 302  
ABSTRACT ALGEBRA II  
3, 3/0  
Prerequisite: MAT 301. Quotient fields of integral domains, polynomials, rings; Euclidean domains, ideals, and factorization; finite fields, extension fields, splitting fields. Applications to geometric constructions and solvability chosen from contemporary areas of coding theory, block designs, etc. Offered Occasionally. Equivalent course: MAT302W

MAT 304  
GAMES AND LINEAR PROGRAMMING  
3, 3/0  
Prerequisite: Three years of Regents high school mathematics. Elementary techniques for finding optimal choices among game strategies and in linear programming problems using the fundamental minimax theorem and the simplex method. Applications in such areas as business, industry, economics, social sciences, and behavioral sciences. Not open to 0718, 0719, or 0721 majors. Offered Occasionally.

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. Offered Occasionally.

MAT 311  
INTRODUCTORY PROBABILITY AND STATISTICS  
3, 3/0; MQ14  
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. Offered Every Semester. Equivalent course: MAT111

MAT 315  
DIFFERENTIAL EQUATIONS  
3, 3/0  
Prerequisite: MAT 263 or permission of instructor. Preliminary ideas on order, degree, and solutions; formation of differential equations; differential equations of first-order linear equations with constant
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. Offered Spring Only.

MAT 318
MATHEMATICAL MODELING
3, 3/0
Prerequisites: MAT 162 and MAT 202. Construction, interpretation and application of mathematical models; various modeling paradigms such as deterministic, probabilistic, discrete and continuous modeling. Models which provide valuable insights into contemporary topics from different fields that may include bio-medical applications, financial mathematics, cellular automata models, mathematical methods for data collection and analysis in geology, mathematical tools for GIS, and weather prediction. Offered Fall Only.

MAT 319
MATHEMATICAL BIOLOGY
3, 3/0
Prerequisites: MAT 161 with a minimum grade of C, or equivalent. A project-oriented, introductory mathematical modeling course with an emphasis on the construction and analysis of mathematical models of biological events and phenomena. Mathematical topics include matrix algebra, difference and differential equations. Biological topics include population dynamics, dynamics of infectious disease and models of molecular evolution. Offered Spring Only.

MAT 322
MODERN GEOMETRY
3, 3/0
Prerequisite: MAT 270. Euclidean constructions; theorems of Menelaus and Ceva; cross-ratio; harmonic points; orthogonal circles; isometrics and similarities in the plane; introduction of projective geometry. Offered Every Semester. Equivalent course: MAT322W

MAT 325
PROBABILITY AND STATISTICS
3, 3/0
Prerequisites: MAT 127 or MAT 162 and MAT 270, and MAT 311 or permission of instructor. Probability (graphical 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. Offered Every Semester.

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. Offered Every Semester.

MAT 366
COMPUTATIONAL TOOLS FOR APPLIED MATHEMATICIANS II
3, 3/0
Prerequisites: MAT 164, MAT 241, and MAT 270; or permission of instructor. Structured programming, verification of program validity, data structures, combinatorial problems, flow network, algorithms, random number generators, simulation of random and nonrandom processes. Offered Spring Only.

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. Offered Occasionally.

MAT 381
PROBABILITY THEORY
3, 3/0
Prerequisites: MAT 270 and either MAT 127 or MAT 162. Probability models; discrete and continuous random variables and their distributions or densities; multivariate distributions; mathematical expectation; special distributions and densities. Offered Every Semester. Equivalent course: MAT111

MAT 382
MATHEMATICAL STATISTICS
3, 3/0
Prerequisites: MAT 263 and MAT 381. Sampling distributions; central-limit theorem; point and interval estimation; tests of hypotheses. Offered Spring Only.

MAT 383
APPLIED STATISTICS I
3, 3/0
Prerequisites: MAT 382 or MAT 325 or MAT 311 and MAT 381. Categorical data analysis; simple linear regression and correlation; multiple linear regression; experimental design models (one, two or more factors); nonparametric statistics. Offered Spring Only.

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 of 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. Offered Spring Only.

MAT 401
INTRODUCTION TO 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. Offered Occasionally.

MAT 404
APPLICATIONS OF LINEAR ALGEBRA
3, 3/0
Prerequisites: MAT 202, MAT 263, and MAT 264. Eigenvalue problems; diagonalizing matrices; linear programming; simplex method; applications to areas such as business, industry, economics, social sciences, and behavioral sciences. Offered Fall Only.

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. Offered Every Semester.

MAT 417
INTRODUCTION TO REAL ANALYSIS I
3, 3/0
Prerequisite: MAT 263 AND MAT 300. Elementary real analysis, including properties and axioms of the real number system; relations and functions; sequences; continuity; differentiation; infinite series; power series; Riemann integral. Offered Every Semester.

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. Offered Occasionally.
MAT 431
MATHEMATICAL LOGIC
3, 3/0
Prerequisite: 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. Offered Occasionally.

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. Offered Occasionally.

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. Offered Occasionally.

MAT 481
STOCHASTIC PROCESSES
3, 3/0
Prerequisite: MAT 325 or MAT 381. Random walks, Brownian motion, Markov chains and applications, continuous-time processes including exponential distribution and Poisson processes, software applications. Offered Occasionally.

MAT 484
APPLIED STATISTICS II
3, 3/0
Prerequisite: MAT 383. Logistic regression, survival analysis, time series analysis. Offered Occasionally.

MAT 490
SEMINAR
1-3, 1-3/0
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. Offered Occasionally.

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. Offered Spring Only.

MAT 495
SPECIAL PROJECT
1-3, 0/0
Offered Occasionally, Equivalent course: AMT495

MAT 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Permission of instructor. Offered Every Semester.

MCL 205
LANGUAGE, DICTION AND SOCIETY
3, 3/0
The role of language perception in society; focus on how accent and pronunciation shape societal opinions of speakers, with respect to race, gender, socioeconomic standing, and other factors. Offered Occasionally.

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. Offered Every Semester. Equivalent courses: FLA337, MCL337W

MCL 488
INTERNSHIP
1-15, 0/0
Prerequisite: Upper-division status and permission of instructor and department chair. Overall 2.5 GPA and 2.5 GPA in upper-division courses in specific language area. Guided and supervised field experiences (experiential learning) of degree programs. Supervised on-site activities for qualified students; training sessions, seminars and reports. Offered Every Semester.

MCL 495
SPECIAL PROJECT
3, 0/0
Prerequisite: Permission of instructor. Offered Every Semester.

MCL 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Permission of instructor. Offered Every Semester.

MED - MATHEMATICS EDUCATION

MED 200
FIELD EXPERIENCE IN SECONDARY EDUCATION MATHEMATICS
3, 1/0
Classroom and field experience designed to help students contemplating careers in secondary mathematics education; provides important background for students’ roles as citizens and as parents. Required for secondary education mathematics majors. Offered Every Semester. Equivalent course: SED200

MED 300
FIELD EXPERIENCE: METHODS IN THE TEACHING OF SECONDARY SCHOOL MATHEMATICS
3, 2/0
Corequisite: MED 308. Supervised field experience at the middle and/or high school level. Emphasis on classroom implementation of knowledge, understanding, and practice consistent with state and national mathematics teaching standards discussed in MED 308. Offered Every Semester.

MED 307
USES OF TECHNOLOGY IN THE TEACHING OF MATHEMATICS
3, 3/0

MED 308
METHODS IN THE TEACHING OF SECONDARY SCHOOL MATHEMATICS
3, 3/0
Minimum of 30 hours of MAT courses completed with a GPA of 2.75. Minimum of 9 hours of Professional courses including MED 200 and MED 307 with a GPA of 2.5. Permission of instructor. Corequisite: MED
MED 309
FIELD EXPERIENCE: METHODS IN TEACHING OF SECONDARY SCHOOL MATHEMATICS
3, 3/0
Prerequisites: Must be enrolled in 0524; a minimum of 24 hours of the math concentration completed with a GPA of 2.5 or higher; a minimum of 6 hours of professional education courses completed with a GPA of 2.5 or higher; permission of instructor. Corequisite: MED 308. Preparation to teach mathematics in grades 5-9. Includes techniques and models used to teach mathematics at the middle-school level in the context of current research on how children learn mathematics. Offered Spring Only.

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. Offered Every Semester. Equivalent course: MED383W

MED 406
STUDENT TEACHING OF MATHEMATICS IN THE LOWER MIDDLE GRADES 5-6
6, 0/0
Prerequisites: Completion of MED 200, MED 307, MED 309, MED 383W, SPF 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. Offered Occasionally.

MED 407
STUDENT TEACHING OF MATHEMATICS IN JUNIOR HIGH/MIDDLE SCHOOL
6, 0/0
Prerequisites: Completion of MED 308 and MED 300 or MED 309 with a minimum grade of C; completion of all mathematics coursework; minimum cumulative GPA of 2.5 in all major mathematics courses; completion of all education courses with a minimum cumulative GPA of 2.5; senior status; and instructor permission. Supervised teaching experience five full days a week for approximately eight consecutive weeks in an early secondary mathematics classroom. Effective demonstration of content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflectivity of practice required. Offered Every Semester. Equivalent course: SED407

MST 409
FIELD EXPERIENCE: METHODS IN TEACHING OF SECONDARY SCHOOL MATHEMATICS
3, 3/0
Prerequisites: Must be enrolled in 0524; a minimum of 24 hours of the math concentration completed with a GPA of 2.5 or higher; a minimum of 6 hours of professional education courses completed with a GPA of 2.5 or higher; permission of instructor. Corequisite: MED 308. Preparation to teach mathematics in grades 5-9. Includes techniques and models used to teach mathematics at the middle-school level in the context of current research on how children learn mathematics. Offered Spring Only.

MST 450
MUSEUM INTERNSHIP
3-6, 0/0
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. Offered Occasionally. Equivalent course: HIS450

MST 488
INTERNSHIP
3-15, 3/0
Prerequisite: Approval of the faculty supervisor. Supervised field experience in a variety of settings to supplement classroom instruction. Offered Occasionally.

MST 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Faculty supervisor permission. Research conducted under the supervision of a faculty member. Offered Occasionally.

MST 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Faculty adviser permission. Offered Occasionally.

MUS 110
ACCOMPANIST COACHING SESSION
1, 0/2
Corequisites: MUS 171, 173, 271, 273, 371, 373, 471, or 473 applied lessons. Provides students enrolled in the applied music lesson sequence the opportunity to meet and rehearse privately with a staff pianist, horn conductor, and an accompanist present in their applied lesson. Emphasis on memorization techniques, solo and ensemble performance practices, and musical interpretation. Includes solo or chamber repertoire currently under preparation for collegium, jury, or recital performance. Offered Every Semester.

MUS 111
ACCOMPANYING FOR PIANISTS
1, 1/0
Prerequisite: Music Majors only. For piano students who wish to gain chamber experience. Students assigned to a vocalist, instrumentalist, or ensemble and will be required to attend weekly applied lessons or rehearsals as well as a coaching/masterclass session with an assigned coach. Offered Every Semester.

MUS 112
APPLIED MUSIC
1, 1/0
Prerequisites: Permission of instructor. Previous performance experience; audition and ensemble participation required. Individual lessons for voice or instrument. Private lesson fee possible. Offered Occasionally.

MUS 113
BRASS TECHNIQUES
1, 1/0
Prerequisite: Music education majors. Pre-professional training in playing and teaching methodologies for trumpet, horn, trombone, baritone, and tuba. Offered Every Semester.
MUS 114
PERCUSSION TECHNIQUES
1, 1/0
Prerequisite: Music education majors. Pre-professional training in performing and teaching methodologies for percussion instruments. Offered Every Semester.

MUS 115
STRING TECHNIQUES
1, 1/0
Prerequisite: Music education majors. Pre-professional training in performing and teaching methodologies for violin, viola, violoncello, and contrabass. Offered Every Semester.

MUS 116
WOODWIND TECHNIQUES
1, 1/0
Prerequisite: Music education majors. Pre-professional training in performing and teaching methodologies for flute, clarinet, oboe, bassoon, and saxophone. Offered Every Semester.

MUS 119
VOCAL PEDAGOGY
1, 1/0
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. Offered Spring and Summer Only.

MUS 122
INTRODUCTION TO MUSIC STUDIES AND CAREERS
2, 2/0
Provides historical, philosophical, and practical foundations needed for a career in music. Experiences that integrate library, research, teacher observation and analysis, reading, and writing skills with regard to the profession will be utilized to assist students' exploration and confirmation of his or her decision to enter the field. Offered Fall Only.

MUS 123
CLASS VOICE FOR NON-MAJORS
1, 1/1
Co-requisite: MUS 313 Chamber Choir or MUS 335 BSC Chorale. Study and perform vocal music as a singer. Expand the student's knowledge of singing and sight singing.

MUS 161
CLASS PIANO I
1, 0/2
This is the first in a sequence of four group piano courses designed for those music students who need to improve their piano skills. The first two semesters focus on developing general musicianship skills, such as sight reading from the grand staff, melody harmonization, technique, improvisation, ensemble performance, practicing, and use of basic theory skills at the keyboard. Offered Every Semester.

MUS 162
CLASS PIANO II
1, 0/2
Prerequisite: C or better in MUS 161 or audition. Continuation of the skills acquired in MUS 161. Offered Every Semester.

MUS 171
APPLIED MUSIC
1, 1/0
Prerequisite: Music Major and Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required. Offered Every Semester.

MUS 173
APPLIED MUSIC
1, 1/0
Prerequisite: Music Major and Audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required. Offered Every Semester.

MUS 201
SURVEY OF WESTERN MUSIC HISTORY
3, 3/0; AR14
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. Offered Every Semester and Summer.
Equivalent courses: MUS201W, MUS301, MUS329

MUS 206
FOUNDATIONS OF AMERICAN POPULAR MUSIC
3, 3/0; AR14, DI14
This survey course studies the historical developments that helped formulate today's popular music, including the roots of blues, jazz, and rock music in America. Offered Every Semester.

MUS 208
SURVEY OF WORLD MUSIC CULTURES
3, 3/0; AR14
Survey of representative art and popular music cultures of Africa, Asia, the Middle East, and Latin America. Lectures and listening assignments. Concert attendance required. Offered Every Semester and Summer.

MUS 209
SUB-SAHARAN AFRICAN MUSIC AND CULTURES
3, 3/0; NW14
Study of the cultures of sub-Saharan Africa focused on the histories and music from four specific regions. Two-thirds of class time is in lecture format; one-third is dedicated to learning and performing African rhythms on percussion instruments. Offered Every Semester and Summer.

MUS 210
MUSIC THEORY FOR NON-MAJORS
3, 3/0; AR14
Music notation, aural and written. Scales, intervals, triads, seventh chords, rhythms, simple and compound meters, elementary ear-training, dictation, analysis, and composition. Offered Every Semester.

MUS 218
AURAL PERCEPTION I
1, 0/3
Corequisite: MUS 230. Laboratory course for those with basic music-reading skills. Reinforces theoretical music concepts through sight singing, rhythmic, melodic dictation, and basic musicianship. A diagnostic test is given at the beginning of the semester. Required for music majors. Offered Fall Only.

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. Offered Spring Only.

MUS 220
TECHNOLOGY APPLICATIONS FOR MUSIC EDUCATION
2, 2/0
Prerequisites: MUS 230 and MUS 231, or permission of instructor. Students gain knowledge of current technology applications suitable for music instruction, including administrative applications, software for notation and composition, and MIDI-based sequencing, as well as teaching methods and strategies for using technology in music classrooms and ensembles; incorporates extensive hands-on activities. Offered Every Semester.

MUS 223
SACRED MUSIC IN WESTERN SOCIETY
3, 3/0; HUIF
Examines the creation, use, influence and position of sacred music throughout the course of Western history. Analyze how this music reflects the cultural values of the society in which it was created and also demonstrates the beliefs and attitudes of the various institutions that supported its creation and provided the context for its performance; Explore how the understanding of this repertoire may be made more meaningful by reflective personal experience and inspire a broader awareness of humanity. Offered Every Semester.
MUS 224
MUSIC AND POLITICAL ACTION
3, 3/0; WC14
Prerequisites: CWP 101 and CWP 102. Chronological overview of significant political, social, military, and religious events and along with the music associated with those important events. Students will be introduced to various composers, musical styles, musical forms and musical selections as they directly relate to historically significant circumstances, events, and movements within World and American History. While previous musical experience is helpful, it is not required. Offered Every Semester.

MUS 230
MUSIC THEORY I
3, 3/0
Prerequisite: Music Majors only. 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. Required for Music Majors. Offered Fall Only.

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. Offered Spring Only.

MUS 261
CLASS PIANO III
1, 0/2
Prerequisite: C or better in MUS 162 or audition. This course and MUS 262 are designed for music students who are working toward successful completion of the piano proficiency exam. The skills developed are those used by music educators in the elementary or secondary classroom: Sight reading, melody harmonization, accompanying, score reading, and improvisation. Offered Every Semester.

MUS 262
CLASS PIANO IV
1, 0/2
Prerequisite: C or better in MUS 261 or audition. Continuation of the skills acquired in MUS 261. Offered Every Semester.

MUS 271
APPLIED MUSIC
1, 1/0
Prerequisite: Music Majors only and audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required. Offered Every Semester.

MUS 273
APPLIED MUSIC
1, 1/0
Prerequisite: Music Majors only and audition. Individual lessons for voice or instrument. Required for music majors. Private lesson fee possible. Concert attendance required. Offered Every Semester.

MUS 290
PHILHARMONIA ORCHESTRA
1, 1/0; AR14
Prerequisite: Audition. Participation in the Buffalo State College Philharmonia Orchestra, a college-community ensemble composed of qualified Buffalo State student musicians and experienced community musicians. The orchestra serves as the principal vehicle for increasing students' awareness of symphonic repertoire, orchestral excerpts, and standard notation for choir, band, and orchestra. Equivalent course: MUS 319W.

MUS 302
MUSIC HISTORY: ANTIQUITY THROUGH BAROQUE
3, 3/0
Prerequisite: One theory course or permission of instructor. Listening, identification, analysis, and study of musicological and sociohistorical trends in the medieval, Renaissance, and Baroque style periods. Offered Fall Only. Equivalent course: MUS 302W.

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. Offered Spring Only. Equivalent course: MUS 303W.

MUS 305
MODERN JAZZ
3, 3/0
Prerequisite: MUS 206. History and development of modern jazz from 1941 to the present. Offered Occasionally. Equivalent courses: AAS 305, MUS 305W.

MUS 306
URBAN BLUES AND ROCK
3, 3/0
Prerequisite: MUS 206. Sources and development of the idioms, style, and sound media of jazz. Offered Occasionally. Equivalent course: MUS 306W.

MUS 313
CHAMBER CHOIR
1, 1/0
Prerequisite: Audition. A select vocal ensemble of mixed voices that studies and performs art music from the medieval through modern genres. Offered Every Semester.

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. Offered Fall Only.

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. Required for music majors. Offered Spring Only. Equivalent course: MUS 319W.

MUS 321
COMPOSITION, IMPROVISATION AND ARRANGING
2, 3/0
Prerequisite: 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. Offered Every Semester.

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. Offered Spring Only.
MUS 323
VOCAL JAZZ ENSEMBLE
1, 0/2
Prerequisites: Instructor permission. Study and perform vocal jazz music within an ensemble of 12-16 auditioned musicians. Traditional approach and skills to the performance and study of vocal jazz music will be developed while significantly expanding the student’s knowledge of vocal jazz repertoire, performance practice and vocal techniques. Offered Every Semester.

MUS 326
JAZZ ENSEMBLE
1-12, 0/0
Prerequisite: Audition. Training and supervised performance in jazz and dance band combination. May be repeated. Offered Every Semester.

MUS 330
MUSIC THEORY III
3, 0/0
Prerequisite: MUS 231. Corequisite: MUS 318. Analysis and theoretical understanding of compositional techniques of Western art music of the late seventeenth, eighteenth, and nineteenth centuries. Required for music majors. Offered Fall Only.

MUS 331
MUSIC THEORY IV
3, 3/3

MUS 333
CHORAL CONDUCTING
2, 2/0
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. Offered Fall Only.

MUS 334
PERCUSSION ENSEMBLE
1, 1/0
Prerequisite: Audition or permission of instructor. An exploration of sophisticated percussion literature by modern composers or transcriptions of other works for percussion instruments. The ensemble performs on standard percussion instruments, such as timpani, marimba, vibraphone, snare drum, tom toms, and other struck objects. Repeatable. Offered Every Semester.

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. Offered Every Semester.

MUS 337
STRING ENSEMBLE
1, 1/0
Prerequisite: Audition or permission of instructor. A performing ensemble surveying standard chamber music repertoire for string instruments, such as quartet, quintet, or piano trios. Repeatable. Offered Every Semester.

MUS 338
BRASS ENSEMBLE
1, 1/0
Prerequisite: Audition or permission of instructor. Chamber group consisting of trumpets, trombones, French horns, euphoniums, baritones and tubas. Explores body of chamber music written or transcribed for brass instruments. Repeatable. Offered Every Semester.

MUS 339
WOODWIND ENSEMBLE
1, 1/0
Prerequisite: Audition or permission of instructor. Chamber group consisting of combinations of woodwind instruments, including clarinet choir, flute quartet, saxophone quartet, mixed trios, quartets, quintets, or larger. Explores body of chamber music written or transcribed for woodwind instruments. Repeatable. Offered Every Semester.

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. Offered Fall Only.

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. Offered Fall Only.

MUS 347
THE HISTORY OF PSALMODY
3, 3/0
A comprehensive survey of music based on the texts of the Biblical Book of Psalms. Analyses of the origins, literary structures, content and organization of the psalms; the development of various music performance practices; the tracing of the historical musical development of their settings; and the past and continuing influence of this repertoire on the cultural development of Western Civilization. Offered Fall Only.

MUS 349
WEST AFRICAN DRUMMING ENSEMBLE
1, 1/0
Prerequisite: Instructor permission. Introduction to traditional West African rhythms on djembes, dundun drums, and iron bells. Students explore cultural contexts and learn to give and respond to rhythmic signals, learn to play different rhythms simultaneously, and learn culturally and rhythmically appropriate improvisation techniques. Offered Every Semester.

MUS 351
THE AMERICAN MUSICAL
3, 3/0
Historical study of the American musical focusing on the interrelationship between the disciplines of music, theatre, and dance. Offered Occasionally. Equivalent courses: MUS 351 W, PAR 350

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. Offered J Term Only.

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. Offered Fall Only.

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. Offered Fall Only.

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. Offered Spring Only.
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. Offered Spring Only.

MUS 364
FIELD EXPERIENCE IN COMMUNITY MUSIC
1, 0/0
Prerequisite: Instructor Permission. Develop pedagogical skill and knowledge through teaching in an after-school music program. Working closely with a mentor, students will gain valuable pre-service teaching experience as they prepare for student teaching and careers as music educators.

MUS 371
APPLIED MUSIC
1-2, 1/0
Prerequisite: Music Major only and audition. Individual lessons for voice or instrument. Required for music education majors. Private lesson fee possible. Concert attendance required. Offered Every Semester.

MUS 373
APPLIED MUSIC
1-2, 1/0
Prerequisite: Music Major and audition. Individual lessons for voice or instrument. Required for music education majors. Private lesson fee possible. Concert attendance required. Offered Every Semester.

MUS 410
REITAL ACCOMPANIST
1, 0/1

MUS 422
SEMINAR IN MUSIC LEADERSHIP, MANAGEMENT, AND ADMINISTRATION
3, 3/0
Prerequisite: MUS 273. Seminar course in theoretical and applied concepts of leadership, management, and administration for musicians and music educators. Case studies, frameworks, and practical scenarios of music classrooms, orchestras, and community arts organizations will be presented, discussed, researched, and analyzed.

MUS 440
ETHNOMUSICOLOGY
3, 3/0
Prerequisites: MUS 302 and MUS 303 or permission of instructor. Lectures, readings, recordings, and hands-on participation in class, with emphasis on understanding the theories and methodologies used to study music as an aspect of human culture. Examination and discussion of case studies from different regions of the world, as well as independent fieldwork research. Required for music majors. Offered Every Semester. Equivalent courses: MUS340, MUS340W, MUS440W

MUS 457
STUDENT TEACHING IN ELEMENTARY MUSIC
5, 0/0
Prerequisites: Successful completion of all music coursework, including 100 documented observation hours, the piano proficiency exam, the Music Department Student Teaching Application, and Criteria for Student Teaching. Corequisites: MUS 458 and MUS 460. Supervised full-time teaching internship for a half semester in an elementary school setting. Required culminating experience for music education majors seeking New York State certification. Offered Every Semester.

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. Offered Every Semester.

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. Offered Every Semester.

MUS 471
APPLIED MUSIC
1-2, 1/0
Prerequisite: Music Major and audition. Individual lessons for voice or instrument. Required for music education majors. Private lesson fee possible. Concert attendance required. Offered Every Semester.

MUS 473
APPLIED MUSIC
1, 1/0
Prerequisite: Music Major and audition. Individual lessons for voice or instrument. Private lesson fee possible. Concert attendance required. Offered Every Semester.

MUS 488
INTERNSHIP
1-6, 0/0
Prerequisites: Permission of Internship Coordinator; Minimum 2.5 GPA in Major, Minimum 2.0 GPA Overall. Guided and supervised experience. Professional and supervised exposure to professional artistic administration and/or operations through on-the-job work experience in an authorized administrative, business, or performance setting. Will write a written report of the work experience based on journal entries, and receive written evaluations from the Internship Site Supervisor and Internship Coordinator. Offered Every Semester.

MUS 491
CAPSTONE IN MUSIC
1-3, 0/0
Prerequisite: MUS 273 and permission of the instructor. Independent capstone project under the direction of an instructor. Equivalent course: DMP 491

MUS 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Permission of instructor. Required for B.A. music students in the final semester of study. For current music B.A. capstone guidelines, please visit www.buffalostate.edu/music/documents/capstoneproposaldraft.pdf. Offered Every Semester.

MUS 499
INDEPENDENT STUDY
3-12, 0/0
Offered Every Semester.

NFS - DIETETICS AND NUTRITION

NFS 100
INTRODUCTION TO FOOD PREPARATION
3, 2/2
A study of the composition of food and scientific principles of food preparation and cookery. Students learn food selection, storage, and preparation skills. Offered Every Semester.

NFS 102
INTRODUCTORY NUTRITION
3, 3/0; NS14
A basic science in human nutrition focuses on knowledge of chemical structure, dietary sources, requirements, functions, digestion, absorption, transportation, utilization, and excretion of essential nutrients and other substances. Offered Every Semester.
NFS 105
FOOD AND PEOPLE
3, 3/0
The use of technology and science for food production, preservation, processing, and safety profoundly influences nutritional, economic, social, ethical, legal, and personal issues. Concerns about the impact of technology on environment, health, culture, and hunger/malnutrition are addressed. Course prepares students to understand the concepts of food, nutrition, food culture, and food safety for optimal health. Offered Every Semester.

NFS 108
FOOD CULTURE AND CIVILIZATION IN THE FAR EAST
3, 3/0; NW14
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. Offered Every Semester.

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. Offered Every Semester. Equivalent course: NFS361

NFS 111
APPLIED MANAGEMENT IN DIETETICS I
3, 3/0
Prerequisites: Majors only. First of a four course sequence, this course focuses on advanced management principles and concepts as they apply to health care, dietetics and food services. Student will engage in assignments that will prepare them to become skilled in specific areas of dietetics practice and food service management. Offered Every Semester.

NFS 200
APPLIED FOOD CHEMISTRY
3, 2/2
Prerequisites: NFS 100 and CHE 112, recommended co-requisite CHE 321. 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. Offered Fall Only

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. Offered Fall Only

NFS 211
APPLIED MANAGEMENT IN DIETETICS II
3, 3/0
Prerequisites: NFS 111. Majors only. Second of a four course sequence, this course focuses on concepts and practices consistent with the practice of human resource management, financial management, safety, and infection control as they apply to health care food service management. Students will engage in assignments that will prepare them to become skilled in specific areas of dietetics practice and food service management. Offered Spring Only.

NFS 230
INTRODUCTION TO DIETETICS
2, 2/0
Overview of the dietetics profession: career options, professional development, career portfolio development, professional organization, code of ethics, standards of practice, professional values, creativity, Academy of Nutrition and Dietetics position papers, introduction to legislative process, professional issues and trends, and professional references and resources. Offered Fall Only

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. Offered Occasionally.

NFS 300
FOOD PROCESSING I
2, 2/0
Prerequisite: NFS 200. A study of the commercial food preservation and packaging techniques, storage, food safety and food laws, and genetic engineering. Offered Fall Only

NFS 302
ADVANCED NUTRITION
3, 3/0
Prerequisite: NFS 102 or equivalent and CHE 321, recommended co-requisite CHE 322. 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. Offered Spring Only. Equivalent course: NFS440

NFS 310
PERSONNEL MANAGEMENT IN DIETETICS/FOOD SERVICES
3, 3/0
Prerequisite: NFS 210. Management concepts and practices consistent with the management of human resources in a health care organizational setting. The application of operational strategy in terms of fulfilling the mission of an organization competing in today's market. Offered Spring Only.

NFS 311
APPLIED MANAGEMENT IN DIETETICS III
3, 3/0
Prerequisites: NFS 100; NFS 102. Majors only. Third of a four course sequence, this course focuses on food service systems and related subsystems involving an in depth analysis of menu development and modifications for disease states. Procurement, food production, distribution and service, and marketing applicable to dietetics and health care food service management are also covered.

NFS 315
LIFE CYCLE AND COMMUNITY NUTRITION I
3, 3/0
Prerequisites: NFS 102 Introduction to Nutrition. A study of the physiological changes during pregnancy, lactation, and older adult aging; growth and development during infancy, preschool, school age and adolescence; the food and nutrition needs, specific nutritional concerns and nutritional services and nutritional programs available. Offered Spring Only.

NFS 316
LIFE CYCLE AND COMMUNITY NUTRITION II
2, 2/0
Prerequisites: NFS 315 Life Cycle and Community Nutrition I. A study of the nutritional issues and chronic disease prevention in adult life; community nutrition services available to adults and identifying and developing community nutrition programs. Offered Fall Only

NFS 330
INTEGRATIVE AND FUNCTIONAL NUTRITION
1, 1/0
Prerequisites: NFS 102 or equivalent and junior or senior standing or permission of instructor. A one-credit course provides an introduction to integrative and functional nutrition (IFN) and complementary and alternative medicine (CAM). The course focuses on dietary supplements that include vitamins, minerals, functional foods, phytochemicals, nutraceuticals for disease prevention and treatment. An emphasis will be
given to the regulatory (legal, ethical and moral) issues of dietary supplements. The goal of the course is to prepare students to have competency in IFN as a part of medical nutrition therapy. Offered Spring Only.

NFS 334
CONTEMPORARY NUTRITION
3, 3/0
Explanation of nutrition. The functions, requirements, food sources, and results of deficiency and excess for each nutrient. Topics of current interest, such as weight control. Food fads and government nutrition policies. Not open to dietetics majors. Offered Fall Only, Offered Occasionally.

NFS 389
TOPICS COURSE
3, 0/0
Offered Occasionally.

NFS 401
MEDICAL NUTRITIONAL THERAPY I
4, 2/4
Prerequisites: NFS 302, CHE 322, BIO 308, BIO 309. Co-requisites: For students in Coordinated Program in Dietetics NFS 445. First of three course sequence examining interrelationships of pathophysiology, biochemistry, genetics and nutrition as related to medical nutritional therapy. Emphasis will be given to the nutrition care process, nutritional assessment and role of nutrition in preventing and treating diseases/disorders: obesity/weight management, cardiovascular disease, drug-nutrient interactions, and disordered eating. Offered Fall Only

NFS 402
MEDICAL NUTRITIONAL THERAPY II
3, 2/2
Prerequisites: NFS 401 and for DEP co-requisite NFS 446. Second of a three course sequence examining the interrelationships of pathophysiology, biochemistry, genetics and nutrition as related to medical nutritional therapy. Emphasis on role of nutrition in preventing and treating disease/disorders: diabetes mellitus, hypoglycemia, renal, dysphagia, chronic obstructive pulmonary disease, and cystic fibrosis. Offered Spring Only. Equivalent course: NFS 442

NFS 403
MEDICAL NUTRITIONAL THERAPY III
3, 3/0
Prerequisites: NFS 402 and for DEP co-requisite NFS 447. Third of a three-course sequence examining the interrelationships of pathophysiology, biochemistry, genetics, and nutrition as related to medical nutritional therapy (MNT). Addresses MNT for cancer, upper and lower gastrointestinal (GI) disorders, exocrine pancreas, hepatobiliary, and pulmonary disease, metabolic stress (including sepsis, SIRS, head trauma, and burns), acid/base disorders, acquired immune deficiency syndrome (AIDS), parenteral and enteral nutrition. Offered Fall Only

NFS 405
PRINCIPLES OF NUTRITION EDUCATION
2, 2/0
Prerequisites: NFS 316 and NFS 401. Co-requisites: For students in Coordinated Program in Dietetics NFS 402 and 446. Theories and methods of learning communication, and counseling as they apply to nutrition education and counseling settings; development, implementation, and assessment of instructional unit utilizing various forms of multimedia. Offered Spring Only.

NFS 411
APPLIED MANAGEMENT IN DIETETICS
2, 1/2
Prerequisites: NFS 311. Majors only. Fourth of a four course sequence, this course focuses on the principles of health care quantity recipe development, therapeutic modification of recipes and food production, with hands on food preparation opportunities. Students will learn the importance of facility equipment and design. Students will be taught principles of food safety and become ServSafe® certified.

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. Offered Fall Only

NFS 420
DIETETIC EXPERIENCE
3, 1/0
Prerequisites: NFS 403. Formalized observation/experience in a variety of health care settings such as clinical, community, food service, regulatory agencies, etc.; research paper and consumer education. Offered Spring Only.

NFS 430
INTRODUCTION TO NUTRITION RESEARCH
3, 3/0
Prerequisites: NFS 402, MAT 311. An introduction to nutrition research. Students explore various research designs and characteristics of quantitative nutrition studies. Places emphasis on the evidence analysis process with regard to clinical trials and use of information technologies to locate and apply evidence-based guidelines. Offered Fall Only

NFS 445
NUTRITIONAL CARE A
3, 0/9
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. Offered Fall Only

NFS 446
NUTRITIONAL CARE B
4, 0/12

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. Offered Fall Only

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. Offered Spring Only.

NFS 449
NUTRITIONAL CARE E (NUTRITIONAL CARE OF LONG-TERM PATIENTS)
2, 0/0
Prerequisites: NFS 447 and co-requisites NFS 448, NFS 450 and NFS 451. 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. Offered Spring Only.
PHI 101
INTRODUCTION TO PHILOSOPHY
3, 3/0; HU14
Introduction to the literature and problems of philosophy. Offered Every Semester.

PHI 102
INTRODUCTION TO ETHICS
3, 3/0; HU14
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. Offered Every Semester. Equivalent course: PHI102W

PHI 103
INTRODUCTION TO LOGIC
3, 3/0
Introduction to practical reasoning and argumentation relevant to everyday life; recognition, classification, evaluation, and construction of everyday arguments. Offered Alternate Years.

PHI 107
INTRODUCTION TO MATHEMATICAL LOGIC
3, 3/0; MQ14
Prerequisite: Basic proficiency in mathematics as specified by the requirements for the Mathematics and Quantitative Reasoning component of Intellectual Foundations. Introduction to two types of mathematical models for assessing the correctness of reasoning. Venn diagrams discussed as geometric mathematical models for assessing categorical syllogisms. Sentential logic and monadic predicate logic discussed as systems of algebraic mathematical models for assessing the reasoning associated with these systems. Offered Alternate Years.

PHI 110
THE MEANING OF LIFE
3, 3/0; HU14
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. Offered Alternate Years.

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. Offered Alternate Years.

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. Offered Alternate Years. Equivalent course: PHI207W

PHI 210
EXISTENTIALISM
3, 3/0
The problem of the meaning and value of life considered in a context of various philosophical and literary works of religious and nonreligious existentialists, including Kierkegaard, Nietzsche, Heidegger, and Sartre. Offered Alternate Years. Equivalent course: PHI210W

PHI 300
PROBLEMS OF PHILOSOPHY
3, 3/0
Selected problems in epistemology, metaphysics, ethics, and certain movements in contemporary philosophy. Offered Occasionally. Equivalent course: PHI300W

PHI 301
HISTORY OF POLITICAL PHILOSOPHY
3, 3/0; WC14
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. Offered Occasionally. Equivalent course: PHI301W

PHI 302
PHILOSOPHY OF ART AND BEAUTY
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. The basic concepts presupposed in any critical examination of the arts, including painting, literature, and music. Offered Occasionally. Equivalent course: PHI302W

PHI 304
PHILOSOPHY OF LAW
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. The nature and justification of legal institutions; emphasis on the problem of legal punishment and on the legal enforcement of morality. Offered Occasionally. Equivalent course: PHI304W

PHI 305
PHILOSOPHY OF LANGUAGE
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Recent works by analytical philosophers in the foundations of language; meaning, reference, and necessity. Offered Occasionally.

PHI 307
SYMBOLIC LOGIC
3, 3/0
Prerequisites: PHI 107 or Instructor Permission. First-order logic with identity and its uses in evaluating ordinary language arguments. Syntax, semantics, and system of natural deduction. Offered Occasionally.

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.
Offered Occasionally.
Equivalent course: PHI308W

PHI 309
KNOWLEDGE AND JUSTIFICATION
3, 3/0
Prerequisites: One PHI course or Instructor Permission. Investigation of
knowledge and justification; topics may include perception, memory,
consciousness, reason, and testimony as sources of knowledge and
justification, the nature, structure, and scope of knowledge and
justification, and skepticism. Offered Occasionally.
Equivalent course: PHI309W

PHI 310
HISTORY OF ETHICS
3, 3/0; WC14
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.
Offered Annually.
Equivalent course: PHI310W

PHI 312
PHILOSOPHY OF MIND
3, 3/0
Prerequisites: One PHI course or Instructor Permission. Investigation of
the mind-body problem; Cartesian dualism, logical behaviorism, the
identity theory, functionalism, eliminative materialism, property dualism,
quaia, and intentionality. Offered Alternate Years.

PHI 314
CONTEMPORARY ETHICS
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Historical
and analytical study of important developments in twentieth-century
ethical theory; naturalism, noncognitivism, prescriptivism, rationalism;
the ideas of Rawls, Nozick, Gauthier, and Gewirth. Offered Occasionally.
Equivalent course: PHI314W

PHI 317
ANCIENT PHILOSOPHY
3, 3/0
Prerequisites: Upper-division status or one course in Philosophy.
Readings in selected primary texts (in translation) of significant
philosophers of Ancient Greece and Rome. Particular emphasis on Plato
and Aristotle and their contribution to the intellectual development of
Western thought. Offered Fall Only.

PHI 318
MODERN PHILOSOPHY
3, 3/0
Prerequisites: PHI 317. Readings in selected primary texts from modern
philosophers such as Descartes, Spinoza, Leibniz, Locke, Berkeley,
Hume, and Kant; focus on the original visionary contribution of each
thinker to the intellectual development of Western thought; learning to
read a philosophical work. Offered Spring Only.
Equivalent course: PHI318W

PHI 324
ZEN BUDDHISM
3, 3/0
Prerequisite: Upper-division status or one course in philosophy. Zen as a
paradoxical method by which suffering of existence is transformed into
everyday enlightenment; contemporary practices of Zen and its historical
origins in Buddha's "complete and unexcelled" enlightenment and in
Lao-tzu's living in harmony with the Tao. Offered Occasionally.
Equivalent course: PHI324W

PHI 333
PHILOSOPHY OF NATURAL SCIENCES
3, 3/0
Prerequisites: CWP 102. The structure and nature of science.
Epistemological and ontological implications of scientific theories (e.g.
quantum mechanics, evolutionary biology). The role of evidence,
confirmation, falsification in science. Offered Occasionally.

PHI 334
PHILOSOPHY OF SOCIAL SCIENCES
3, 3/0
Prerequisites: CWP 102. The structure and nature of the social sciences.
Epistemological and ontological implications of social scientific theories.
Analysis of socially constructed facts and institutions. Rational-choice
and decision-theory models of explanation. Offered Occasionally.

PHI 347
WESTERN THOUGHT: HOMER TO ALEXANDER
3, 3/0; WC14
Prerequisites: CWP 101 and CWP 102. The development of Hellenic and
Hellenistic thought and its influence on the modern world. Examination of
tensions between naturalistic, conventional, and religious worldviews.
Special emphasis on the role such tensions played in the development of
philosophy. Offered Alternate Years.

PHI 351
ETHICS BOWL
3, 3/0
Prerequisite: One PHI course or instructor permission. Preparation for a
competition in which students are judged on their ability to deploy
intricate ethical reasoning in addressing case studies from practical and
professional ethics. Students develop well-informed opinions about
ethically complex, everyday scenarios, orally present these opinions and
supporting arguments, and provide critical oral responses to the opinions
and arguments of other students and judges. Some students compete in the
regional and/or national Intercollegiate Ethics Bowl, others in the Buffalo
State Ethics Bowl. Offered Occasionally.

PHI 401
PROBLEMS IN PHILOSOPHY SEMINAR
3, 3/0
Prerequisite: Fulfillment of English composition/basic communication
requirement, PHI 317 and PHI 318. Intensive analysis of selected topics
in philosophy. Offered Occasionally.
Equivalent course: PHI401W

PHI 402
SEMINAR IN HISTORY OF PHILOSOPHY
3, 3/0
Prerequisites: Fulfillment of English composition/basic communication
requirement, PHI 317, and PHI 318. Figures and periods in the history of
Western and Eastern philosophy. Offered Occasionally.
Equivalent course: PHI402W

PHI 495
SPECIAL PROJECT
1-3, 0/0
Offered Occasionally.

PHI 498
HONORS RESEARCH
1-3, 0/0
Offered Occasionally.

PHI 499
INDEPENDENT STUDY
3-12, 0/0
Offered Occasionally.

PHY - PHYSICS

PHY 100
PHYSICS FOR NON-SCIENCE MAJORS
3, 3/0; NS14
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. Offered Every
Semester.
PHY 103
UNDERSTANDING SOUND
3, 2/2; NS14
The basics of sound, intended for non-science majors. Wave characteristics and behavior, applied to sonic phenomena. Interfaces of sound with humans and society (music, hearing, sound production and recording). Offered Every Semester.

PHY 104
PHYSICS FOR K-8 TEACHERS
3, 2/2; NS14
Prerequisite: Acceptance to Pre-K-8 teaching majors or pre-majors. High school algebra and writing. Nature of science, energy transfer, force interactions, systems, Newton's Laws, magnetic, gravitational, light, and thermal interactions, conservation of energy, and simple circuits as appropriate for teachers of K-8 science. Meets National Science Education Standards S (NRC) and the New York State Education Department (NYSED) learning standards for Math Science and Technology and elementary and intermediate physical standards (Standard 4). Inquiry-based classroom co-mingles laboratory with lecture. Offered Every Semester.

PHY 105
INTRODUCTION TO PHYSICS
3, 3/0
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. Offered Fall Only.

PHY 107
GENERAL PHYSICS I
4, 3/2; NS14
Algebra-based study of mechanics, measurement, kinematics, Newton's laws, gravity, conservation of energy and momentum, and rotation; laboratory. Offered Every Semester.

PHY 108
GENERAL PHYSICS II
4, 3/2
Prerequisite: PHY 107. Algebra-based study of electricity and magnetism: static electricity (including electricity fields and potential), current, electricity and circuits, magnetism and electromagnetic interactions; laboratory. Offered Every Semester.

PHY 111
UNIVERSITY PHYSICS I
5, 4/2; NS14
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 physics majors. Offered Every Semester.

PHY 112
UNIVERSITY PHYSICS II
5, 4/2
Prerequisite: PHY 111 or equivalent. Continuation of PHY 111. Calculus-based introduction to heat, electricity, magnetism, and optics; laboratory. Required for physics majors. Offered Every Semester.

PHY 189
TOPICS COURSE
1-3, 1-3/0
Offered Occasionally.

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. Offered Every Semester.

PHY 304
OPTICS AND VISION FOR TEACHERS AND ARTISTS
3, 2/2
Prerequisites: Any college or high school introductory physics course; CWP 101; any first-year MAT or instructor permission. Phenomena of light, vision, color, and photography, as appropriate for teachers of science and visual arts majors. Meets the National Science Education Standards S (NRC) and the New York State Education Department (NYSED) learning standards for Math, Science and Technology and elementary and intermediate physical setting standards (Standard 4). Inquiry-based classroom co-mingles laboratory with lecture using handheld apparatus and demonstrations in the lecture theater and take-home laboratory activities using everyday materials. Can be used as a sequence with PHY 104. Offered Occasionally.

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. Offered Fall Only.

PHY 306
MODERN PHYSICS II
3, 0/0
Prerequisite: PHY 305. Molecular structure; solid state; nuclear physics. Offered Spring Only.

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. Offered Occasionally.

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. Offered Fall Only.

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. Offered Occasionally.

PHY 320
INTRODUCTION TO THEORETICAL PHYSICS
4, 4/0

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. Offered Occasionally.

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. Offered Spring Only. Equivalent course: PHY324W
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. Offered Fall Only. Equivalent course: PHY 410W

PHY 412
PHYSICS SEMINAR
1-3, 1-3/0
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. Offered Occasionally.

PHY 425
CLASSICAL MECHANICS
4, 4/0
Prerequisites: PHY 320 or equivalent and PHY 310. 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. Offered Alternate Years.

PHY 435
INTRODUCTION TO QUANTUM MECHANICS
3, 3/0
Prerequisites: PHY 305, PHY 320, or equivalent and PHY 310. Postulates of quantum mechanics with selected examples; uncertainty principle; operator formalisms; Heisenberg and Schroedinger representations; angular momentum; spin. Offered Alternate Years.

PHY 440
ELECTRICITY AND MAGNETISM I
3, 3/0
Prerequisite: PHY 320, MAT 263, or equivalent. Faraday's law; magnetism; electromagnetic wave propagation; radiation. Prerequisite: PHY 440. Continuation of PHY 440. Vector potentials; Faraday's law; magnetism; electromagnetic wave propagation; radiation. Offered Alternate Years.

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. Offered Alternate Years.

PHY 445
NUCLEAR PHYSICS
3, 3/0
Prerequisites: 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. Offered Occasionally.

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. Offered Occasionally.

PHY 450
SUPERVISED PHYSICS LABORATORY TEACHING
1-2, 0/0
Prerequisites: Physics major; upper-division status; minimum cumulative GPA of 3.0, 3.25 in major coursework; physics faculty permission based on academic performance, maturity, and potential. Supervised in-classroom introduction to college laboratory teaching techniques and procedures for selected upper-division physics majors. Offered Occasionally.

PHY 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Faculty sponsor approval. Physics and physics-related areas. Offered Occasionally.

PHY 499
INDEPENDENT STUDY
3, 0/0
Prerequisite: Faculty sponsor approval. Physics and physics-related areas. Offered Occasionally.

PLN 215
INTRODUCTION TO URBAN AND REGIONAL PLANNING
3, 3/0; DI14
Introduction to the practice, history and theory, critical issues, and tools and methods of planning of urban and regional planning. Topics covered include sustainability, land use, housing, community and neighborhood planning, and transportation.

PLN 310
URBAN TRANSPORTATION PLANNING
3, 3/0
Prerequisite: GEG 309 or PLN 315. Comparative study of the modes of transportation, transportation planning, and the benefits and effects of transportation. Emphasis on application to urban transportation. The importance of accessibility to the development of a modern metropolitan transportation system. Offered Alternate Years. Equivalent course: GEG 310

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. Offered Fall Only.

PLN 325
MAPS AND MAPMAKING USING GIS
3, 3/0
Maps as essential form of communication. Geographic information systems (GIS) tools for creating digital and hardcopy maps. Spatial thinking, concepts, principals and methods of mapmaking; map development and display using technology. Offered Every Semester. Equivalent course: GEG 325

PLN 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. Offered Alternate Years. Equivalent course: GEG 330

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. Offered Alternate Years.

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. Offered Alternate Years.

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
PLN 370  
WATER RESOURCE PLANNING  
3, 3/0  
Prerequisite: GEG 375 or GES 452. Introduction to water resource planning in the United States. Emphasis on project management and planning processes used by federal water resources agencies. Field trip and group project required. Offered Occasionally.

PLN 405  
URBAN ANALYSIS USING GIS  
3, 3/0  
Prerequisite: GEG or PLN 325. 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. Equivalent Course: GEG 405  
Equivalent course: GEG405

PLN 390  
QUANTITATIVE METHODS IN GEOGRAPHY AND PLANNING  
3, 3/0  
Prerequisites: Upper-division status and GEG199 or CIS101 or competence in computing. 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. Offered Spring Only. Equivalent course: GEG390

PLN 396  
RESEARCH METHODS  
3, 3/0  
Prerequisites: CIS101 or GEG 199, GEG 390 OR PLN390, and 6 upper-division credits in GEG/PLN courses. Research theories, designs, and methods relevant to conducting research in geography and planning. Research designs and methodologies for approaches with human subjects, human/social geography, physical geography, field-based research, and planning projects. Development of a research project proposal. Offered Fall Only. Equivalent courses: GEG396, GEG396W, PLN396W

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. Offered Alternate Years.

PLN 405  
URBAN ANALYSIS USING GIS  
3, 3/0  
Prerequisite: GEG or PLN 325. 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. Equivalent Course: GEG 405  
Equivalent course: GEG405

PLN 412  
COMMUNITY PLANNING AGENCIES AND ISSUES  
3, 3/0  
Prerequisite: PLN 315 and GEG 199 or CIS 101 or competence in computing. 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. Offered Fall Only.

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. Offered Occasionally.

PLN 430  
SENIOR THESIS  
3, 3/0  
Prerequisites: GEG/PLN 390 and GEG/PLN 396 C or better and senior geography or planning major. Research in geography or planning and presentation of selected research-related topics. Offered Spring Only. Equivalent courses: GEG430, GEG430W, PLN430W

PLN 488  
INTERNSHIP  
1-15, 0/0  
Prerequisites: PLN 315, 6 credit hours of geography or planning coursework at the upper-division level, minimum cumulative GPA of 2.5, background of courses or experience within area of interest, adviser and department chair permission. Guided, supervised field experiences that complement the academic program. Offered Every Semester.

PLN 495  
SPECIAL PROJECT  
3, 0/0  
Offered Occasionally.

PLN 499  
INDEPENDENT STUDY  
3, 0/0  
Offered Occasionally.

PSC - POLITICAL SCIENCE

PSC 101  
INTRODUCTION TO GOVERNMENT AND POLITICS  
3, 3/0; SS14  
The nature and scope of political science; ideological foundations of politics; comparative study of the governments of constitutional and developing systems; the development and adaptation of democracy; the dynamics of politics and functions of political institutions. Offered Every Semester and Summer.

PSC 102  
INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS  
3, 3/0; AH14  
Historical development of American government and politics. Conceptual studies of the key transformative phases of institutions (U.S. Constitution, federalism, Congress, the courts, the presidency), politics (political parties, interest groups, media, social movements), political economy (regulation, federal bureaucracy) and political culture (citizenship and identity, public opinion, political behavior). Offered Every Semester.

PSC 103  
GREAT POLITICAL ISSUES  
3, 3/0; SS14  
Examines great political issues such as civic engagement, civil disobedience, democracy, freedom, equality, ideology, identity, law, morality, and political obligation and discusses them in light of their various historical contexts and political implications. Offered Every Semester and Summer.

PSC 203  
POLITICAL ANALYSIS  
3, 3/0  
Prerequisite: PSC 102 or PSC 101. Design, execution, and interpretation of research in the field of political science including quantitative and qualitative research methods, theory building, and constructing and testing hypotheses; data collection techniques including survey research methods. Offered Every Semester and Summer. Equivalent courses: PSC203W, PSC300
PSC 204  
**POLITICAL STATISTICS**  
3, 3/0  
Prerequisite: PSC 102 and PSC 203. Introduction to quantitative political science research methods, univariate, bivariate and multivariate analysis, statistical inference, sampling, hypothesis testing, measures of association, tests of statistical significance and model assumptions. Offered Every Semester and Summer.  
Equivalent course: PSC301

PSC 210  
**THE AMERICAN PRESIDENCY**  
3, 3/0  
The contemporary presidency, constitutional roles, political powers and the factor of personality, the executive and other political and social institutions, problems and prospects for the presidency. Offered Fall and Summer Only.  
Equivalent course: PSC210W

PSC 215  
**URBAN GOVERNMENT**  
3, 3/0  
Introduction to the political economy of urban areas in the United States; focus on explanation of current urban public policies; public vs. private political power, bureaucracy, citizen organization. Offered Fall Only.  
Equivalent course: AAS218, PSC215W

PSC 218  
**AFRICAN AMERICAN POLITICAL CULTURE**  
3, 3/0  
Political beliefs, attitudes, and practices that pertain to African American politics in a cultural context; causality and linkage inherent in the reciprocal relationship between African Americans and the American political system. Offered Fall Only.  
Equivalent courses: AAS218, PSC218W

PSC 225  
**WOMEN IN AMERICAN POLITICS**  
3, 3/0; DI14  
Influences of female participation in the American political system; the political behavior of American women; the implications of these influences and behaviors. Offered Occasionally.

PSC 230  
**INTERNATIONAL RELATIONS**  
3, 3/0; SS14  
Elements of national power, religion, global balance of power and collective security systems; instruments of international politics: diplomacy, propaganda, and war; forces of nationalism. Offered Every Semester.

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. Offered Occasionally.

PSC 250  
**INTRODUCTION TO LAW**  
3, 3/0  
Basics of law, the judicial system, courtroom procedures, distinctions between different kinds of law, and the importance of these distinctions. Constitution and rights defined in the Constitution. Responsibilities of attorneys in the judicial system and to their clients. Skills involved in learning and practicing law; writing legal briefs; oral presentation of legal arguments. Offered Every Semester and Summer.  
Equivalent course: PSC350

PSC 302  
**INTERNATIONAL CONFLICT AND PEACEFUL RESOLUTION**  
3, 3/0  
Prerequisites: Junior or senior standing. Key theoretical traditions and research in international and intrastate conflict and conflict resolution through in-depth empirical analysis. Offered Fall Only.

PSC 305  
**ENVIRONMENTAL POLICY**  
3, 3/0  

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. Offered Occasionally.

PSC 308  
**INTERNATIONAL ORGANIZATIONS AND INTERNATIONAL LAW**  
3, 3/0  
Prerequisite: Junior or senior standing or instructor permission. Political and legal viewpoints of international organizations; political and administrative concepts and theories concerning international organizations and law such as roles and effects of international organizations and law in foreign policy making, international cooperation, and competition. Offered Spring Only.

PSC 309  
**INTERNATIONAL POLITICAL ECONOMY**  
3, 3/0  
Prerequisite: PSC 101 or PSC 102. A political analysis of the global economy. Emphasis on learning and using different theories of international political economy to explore contemporary global economic issues such as trade, trade agreements, monetary policies, and the impact of international finance organizations. Offered Fall Only.  
Equivalent course: PSC309W

PSC 310  
**AMERICAN POLITICAL PARTIES**  
3, 3/0  
The American party systems: two-party competition and third party challenges; suffrage rules and electoral processes; changing patterns of party organization, nomination, campaigning, and finance; party identification and voter behavior; the role of parties in governing; parties and the future of American politics. Offered Spring Only.

PSC 311  
**INTEREST GROUPS**  
3, 3/0  
Introduction to the democratic political process, methods and operations of various interest groups; roles of citizens groups. Offered Occasionally.

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. Offered Spring and Summer Only.  
Equivalent course: PSC312W

PSC 313  
**CIVIC ENGAGEMENT**  
3, 3/0  
Prerequisites: PSC 101 or PSC 102. Development of an understanding and appreciation of modern, intellectual civic engagement. Overview of the democratic traditions and Constitutional framework that encourages American civic participation. Analysis of past and current citizen campaigns. Evaluation of leadership, external resources, economic conditions, media impact and alternative strategies. Development and presentation of advocacy letters, petitions, position papers and campaign strategies.

PSC 315  
**STATE AND LOCAL GOVERNMENT AND POLITICS**  
3, 3/0  
Functions of state and local governments, parties, interest groups, and elections; constitutional and governmental structures; intergovernmental
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. Offered Occasionally.

PSC 317
U.S. CONSTITUTIONAL LAW
3, 3/0
Prerequisite: Junior or senior standing or instructor permission. Foundations of American Constitutionalism; judicial review and its use throughout history; the Supreme Court's interaction with Congress, the president, and the states; evolving concepts of federalism; development of governmental regulation of private property and contracts; the evolution of the principles of constitutional due process and equal protection. Offered Fall Only. Equivalent courses: PSC220, PSC317W

PSC 318
DEMOCRACY AND PEACE: PRINCIPLES AND PRACTICES IN THE URBAN EXPERIENCE
3, 3/0
Prerequisite: PSC 101 or PSC 102 or PSC 103. Development of politics, democracy, and justice from the experience of urban communities, particularly in light of economics, peace, and race issues. Offered Occasionally.

PSC 319
GAY, LESBIAN, BISEXUAL, TRANSGENDER, QUESTIONING POLITICS
3, 3/0
Prerequisite: Upper-division status. This course provides a cross-cultural, longitudinal perspective of U.S. GLBTQ movements and interest-based organizations. It examines queer legal theory, human rights, and constitutional issues surrounding GLBTQ rights. The course considers GLBTQ politics in the context of federalism, with examination of federal legislation such as the Defense of Marriage Act and individual state laws with respect to GLBTQ rights. Offered Fall Only.

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. Offered Spring Only. Equivalent course: PSC320W

PSC 321
CIVIL PROCEDURE
3, 3/0
Prerequisites: PSC 101. Imparts knowledge of, interest in and an appreciation for the civil litigation process in the federal and state court systems of the United States and provides students with a guided tour of the litigation process including but not limited to: pre-complaint actions, subject and personal jurisdiction, complaints and answers, pre-trial motions, discovery, dispositive motions, trial preparation and organization, jury selection and appeal decisions. Offered Occasionally.

PSC 325
POLITICS OF WELFARE
3, 3/0
America's social insurance and support systems. 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. Offered Occasionally.

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. Offered Occasionally.

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. Offered Occasionally.

PSC 330
AMERICAN FOREIGN POLICY
3, 3/0
Prerequisite: PSC102. Basic ideas that shape American foreign policy; isolationism, domestic and international pressures, cold war, peaceful coexistence and détente, major problems. Offered Spring Only. Equivalent course: PSC330W

PSC 333
AFRICAN INTERNATIONAL RELATIONS
3, 3/0
African international politics vis-à-vis international relations theory, models, and concepts; power; multipolarity; bipolarity; pan-Africanism; North-South debate; approaches to international politics; and state and international organizations as international actors. Equivalent course: AAS333

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. Offered Occasionally. Equivalent course: PSC335W

PSC 336
LATIN AMERICA IN WORLD POLITICS
3, 3/0
Prerequisite: Jr./Sr. Status. Politics in the region of Latin America within the context of international relations theory. Development of the Latin American subsystem; major actors and movements within the region, including human rights and democratization; globalization and free trade; the influence of the United States; and the legacy of colonialism and the Cold War. Offered Occasionally.

PSC 337
POLITICS OF GLOBALIZATION
3, 3/0; NW14
Prerequisites: Upper-division status; PSC 101 or PSC 102. Interdependent global political economy; complex process by which governments, corporations, individuals, and information technology are integrated and interconnected on a global scale; costs vs. benefits of globalization. Offered Fall Only.

PSC 340
POLITICS OF DEVELOPING COUNTRIES
3, 3/0; NW14
Prerequisite: PSC 101 or PSC 230. Problems of developing countries, political process, and its relation to societal transformation; the role of the army and bureaucracy in political development; problems of nation-building and democracy in developing countries; and globalization. Offered Spring Only.

PSC 341
GOVERNMENT, POLITICS, AND POLICIES OF THE EUROPEAN UNION
3, 3/0
Prerequisites: Upper-division status; PSC 101 or PSC 102 or PSC 240. Government, politics, and policies of the European Union. Origins and development of European integration, European identity, theories of economic and political integration, treaties and law-making, institutions and decision-making, internal and external policies and policy-making. Offered Occasionally.
PSC 342
RUSSIAN POLITICS
3, 3/0
Prerequisite: PSC 101 or instructor permission. Theory and practice of Russian political institutions and processes in light of Russian history; Soviet efforts to redirect that history; recent political, social, and economic changes in Russia today. Offered Fall Only.

PSC 345
POLITICS AND HISTORY OF THE MIDDLE EAST
3, 3/0
Geographic, cultural, and political settings; historical development since the nineteenth century; the disintegration of the Ottoman Empire and Western colonialism; nationalism, independence, and turmoil; Arab-Israeli question; oil and its impact and problems; great power and inter-area politics. Offered Fall Only.
Equivalent courses: HIS313, PSC345W

PSC 351
HISTORY OF POLITICAL THOUGHT I
3, 3/0; WC14
Prerequisite: PSCI101 or PSCI103. Main problems of political theory examined through the writings of major political thinkers from Aquinas. Offered Fall Only.
Equivalent course: PSCI351W

PSC 352
HISTORY OF POLITICAL THOUGHT II
3, 3/0; WC14
Prerequisite: PSCI101 or PSCI103. Main problems of political theory examined through the writings of major political thinkers from Machiavelli to Rawls. Offered Spring Only.
Equivalent course: PSCI352W

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. Offered Occasionally. Offered Fall Only.

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. Offered Fall Only.

PSC 364
AMERICAN PUBLIC POLICY
3, 3/0
Governmental policy with emphasis on the sources of policy, the policymaking process in national political institutions, and the social impact of policy choices. Offered Fall Only.

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. Offered Spring Only.

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. Offered Occasionally.

PSC 375
RACE, SEX, AND POLITICS OF MYTH AND STORY
3, 3/0
Prerequisites: Upper-division status and successful completion of English basic skills competency requirement; PSC 101 or PSC 103. 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. Offered Spring Only.
Equivalent course: PSC375W

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, environmental policy, political communication, health policy, and human rights. Offered Every Semester.

PSC 390
THE ITALIAN-AMERICAN EXPERIENCE: POLITICS, SOCIETY, & IDENTITY
3, 3/0; DIIF
Examination of the experience of Italians in the United States from an interdisciplinary perspective beginning with the peak years of emigration (1870-1920) including the culture, society, economy, and government of Italy (push factors) and the promise of America (pull factors). Identity, citizenship, worldview, family structure, expressive culture, politics, economics, crime, and social relations in the Italian-American community.
Equivalent course: PSC390W

PSC 399
RESEARCH SKILLS
1, 1/0
Prerequisites: PSC 203, PSC 204, and junior or senior standing; or instructor permission. Preparation to study selected topics in political science through in-depth examination and analysis. Offered Occasionally. Offered Every Semester and Summer.

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. Offered Occasionally.
Equivalent courses: SOC406, SOC440

PSC 415
URBAN PUBLIC POLICY
3, 3/0
Prerequisite: Upper-division status. Urban problems and government policy responses to them: economic development, poverty, and crime; roles of all levels of government; policy analysis. Offered Occasionally.

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. Offered Occasionally.
Equivalent course: PSC420W

PSC 421
DISCRIMINATION AND THE U.S. CONSTITUTION
3, 3/0
Prerequisite: PSC 101. The role the equal protection clause plays in prohibiting and allowing discrimination in the United States. The development of equal protection jurisprudence throughout the past century and a half. The reach and potentialities of equal protection analysis: fundamental rights, suspect classes, expansion and retreatment. Offered Occasionally.
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. Offered Occasionally.
Equivalent course: PSC450W

PSC 470
SENIOR SEMINAR
3, 3/0
Prerequisites: PSC 203, PSC 204, PSC 399, and junior or senior standing; or instructor permission. Selected topics in political science examined and analyzed in depth. Offered Spring Only.
Equivalent course: PSC470W

PSC 485
MOOT COURT
3, 3/0
Prerequisite: Upper-division status or permission of instructor. Simulation of a trial court or appellate court proceeding involving teams of students acting as prosecutors/plaintiffs' attorneys, defense attorneys, and witnesses. Students develop case strategy, analyze evidence, integrate legal precedent, prepare a written brief, question witnesses, and present oral arguments to the court in opening and closing statements. Final project is a mock trial presentation held in a formal courtroom setting. Offered Every Semester. Equivalent courses: CRJ485, SOC485

PSC 488
INTERNSHIP
1-15, 0/0
Prerequisites: PSC 203, 204, and 399.Field experiences that supplement departmental academic offerings; geared to students' interests. Faculty intern supervisor and department chair permission necessary. Offered Every Semester and Summer.

PSC 495
SPECIAL PROJECT
1-3, 0/0

PSC 497
WASHINGTON SEMESTER
1-16, 0/0
State University of New York's Washington semester program. Class work, seminars, and internship work; selection based on college-wide competition; contact Political Science Department chair for information and application forms. Offered Every Semester and Summer.

PSC 499
INDEPENDENT STUDY
3-12, 0/0

---

PSY - PSYCHOLOGY

PSY 101
INTRODUCTION TO PSYCHOLOGY
3, 3/0; SS14
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. Offered Every Semester.

PSY 205
INDEPENDENT READING
1, 0/0
Prerequisites: PSY 101 grade of C, 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. Offered Occasionally.

PSY 304
LEARNING: THEORY AND RESEARCH
3, 3/0
Prerequisite: PSY 101 grade of C. 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. Offered Every Semester.

PSY 306
STATISTICS IN PSYCHOLOGICAL RESEARCH
3, 3/1
Prerequisite: PSY 101, grade of C. Completion of the IF mathematics and quantitative reasoning requirement. 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. Completion of PSY 306 with a grade of C or better is a prerequisite for the required major course PSY 450. Offered Every Semester.

PSY 308
SENSATION AND PERCEPTION
3, 3/0
Prerequisite: PSY 101, Grade of C. 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. Offered Every Semester.

PSY 311
PERSONALITY: THEORY AND RESEARCH
3, 3/0
Prerequisite: PSY 101, Grade of C. 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. Offered Every Semester.

PSY 321
COMPARATIVE ANIMAL BEHAVIOR
3, 3/0
Prerequisite: PSY 101, Grade of C. 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. Offered Spring Only.

PSY 325
SOCIAL BEHAVIOR
3, 3/0
Prerequisite: PSY 101, grade of C. 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. Offered Every Semester.

PSY 327
ADULT DEVELOPMENT AND AGING I
3, 3/0
Prerequisite: PSY 101, grade of C. 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. Offered Fall Only.
Equivalent course: PSY327W

PSY 330
THE PSYCHOLOGICAL POWER OF LANGUAGE
3, 3/0
Prerequisites: PSY 101, Grade of C. Study of language 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. Offered Fall Only.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 340</td>
<td>COGNITIVE PSYCHOLOGY</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, Grade of C. 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. Offered Every Semester.</td>
</tr>
<tr>
<td>PSY 355</td>
<td>LIFESPAN DEVELOPMENTAL PSYCHOLOGY</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, Grade of C. 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. Offered Every Semester.</td>
</tr>
<tr>
<td>PSY 356</td>
<td>CHILD DEVELOPMENT</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, Grade of C. 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. Offered Every Semester.</td>
</tr>
<tr>
<td>PSY 357</td>
<td>ADOLESCENT AND YOUNG ADULT DEVELOPMENT</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, Grade of C. 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. Offered Every Semester.</td>
</tr>
<tr>
<td>PSY 365</td>
<td>PSYCHOLOGY IN THE WORKPLACE</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, Grade of C. 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. Offered Fall Only.</td>
</tr>
<tr>
<td>PSY 370</td>
<td>ENVIRONMENTAL PSYCHOLOGY I</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, Grade of C. 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. Offered Occasionally.</td>
</tr>
<tr>
<td>PSY 375</td>
<td>FORENSIC PSYCHOLOGY</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, Grade of C. 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. Offered Every Semester.</td>
</tr>
<tr>
<td>PSY 376</td>
<td>HEALTH PSYCHOLOGY</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, C or Better. 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. Offered Every Semester.</td>
</tr>
<tr>
<td>PSY 381</td>
<td>PSYCHOLOGY OF CULTURE</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, C or Better. 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. Offered Occasionally.</td>
</tr>
<tr>
<td>PSY 382</td>
<td>PSYCHOLOGY OF THE CONSUMER</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, C or Better. 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. Offered Occasionally.</td>
</tr>
<tr>
<td>PSY 383</td>
<td>THE PSYCHOLOGY OF HUMAN SEXUAL BEHAVIOR</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, C or Better. 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. Offered Alternate Years.</td>
</tr>
<tr>
<td>PSY 384</td>
<td>PSYCHOLOGY OF AGGRESSION AND VIOLENCE</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, C or Better. Reasons for aggression; biological vs. environmental causes of aggression; definitions and scientific study of aggression; methods to control aggression. Offered Occasionally.</td>
</tr>
<tr>
<td>PSY 387</td>
<td>PSYCHOLOGY OF GENDER</td>
<td>3, 3/0; DI14</td>
<td>Prerequisite: PSY 101, C or Better. 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. Offered Fall Only.</td>
</tr>
<tr>
<td>PSY 388</td>
<td>PSYCHOLOGY OF DEATH AND DYING</td>
<td>3, 3/0</td>
<td>Prerequisite: PSY 101, C or Better. 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. Offered Occasionally.</td>
</tr>
<tr>
<td>PSY 411</td>
<td>ABNORMAL PSYCHOLOGY</td>
<td>3, 3/0</td>
<td>Prerequisites: PSY 101, Grade of C, 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. Offered Every Semester.</td>
</tr>
</tbody>
</table>
PSY 412
COMMUNITY PSYCHOLOGY
3, 3/0
Prerequisites: PSY 101, Grade of C, 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. Offered Occasionally.

PSY 415
THE COMPETENT INFANT
3, 3/0
Prerequisites: PSY 101, Grade of C, and PSY 355 or PSY 356. The psychological world of the normal human infant. Primary empirical research and theoretical problems relating to the field of infant development; biological processes of development, prenatal development, birth, characteristics of the neonate, speech and language, cognition and learning, interactions and socialization, sex differences in behavior, theoretical models of early development. Offered Fall Only.

PSY 416
ABNORMAL CHILD PSYCHOLOGY
3, 3/0
Prerequisites: PSY 101 Grade of C, and PSY 355 or PSY 356; PSY 411 recommended. Significant issues and problems related to child psychopathology. Taxonomy of childhood behavior disorders, role of the family, assessment of psychopathology in children, mental retardation, aggressive behavior, poverty and psychopathology, learning disorders, neurosis and psychosis in children, developmental disorders, therapeutic approaches. Offered Fall Only.

PSY 417
THE ATYPICAL INFANT
3, 3/0
Prerequisites: PSY 101, Grade of C, and PSY 355 or PSY356. 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 trauma and defects, perinatal 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. Offered Spring Only.

PSY 421
PHYSIOLOGICAL PSYCHOLOGY
3, 3/0
Prerequisites: PSY 101 grade of C, 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. Offered Fall Only.

PSY 427
ADULT DEVELOPMENT AND AGING II
3, 3/0
Prerequisites: PSY 101 grade of C, 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. Offered Occasionally.

PSY 430
PSYCHOLINGUISTICS
3, 3/0
Prerequisites: PSY101 Grade of C, and PSY 330 or PSY 340. Empirical approach to how we produce and understand language. Major theories, looking at language sounds, words, sentences, conversation, and discourse. Integrates language representation and processing into the general framework of cognitive science. Includes laboratory exercises and final project. Offered Spring Only.

PSY 432
HUMAN MOTIVATION AND EMOTION
3, 3/0
Prerequisites: PSY 101 Grade of C, and PSY 304 or PSY376. Motivation and the fundamental, empirical, and logical basis for its postulation and use in psychological explanations of animal and human behavior; motivation and how motivational processes interact with other psychological processes. Offered Occasionally.

PSY 440
ADDACTIVE BEHAVIORS
3, 3/0
Prerequisites: PSY 101 Grade of C, 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. Offered Every Semester.

PSY 441
INTRODUCTION TO NEUROPSYCHOLOGY
3, 3/0
Prerequisites: PSY 101 Grade of C, 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. Offered Every Semester.

PSY 450
RESEARCH METHODS IN PSYCHOLOGY I: INTRODUCTION TO RESEARCH METHODS
3, 2/2
Prerequisites: 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. Offered Every Semester. Equivalent course: PSY450W

PSY 460
ADVANCED LEGAL PSYCHOLOGY
3, 3/0
Prerequisites: PSY 101 Grade of C, and PSY 375 or PSY325. How behavior in legal contexts is influenced by social psychological, cognitive, and developmental processes. Social and cognitive influences on eyewitness testimony and memory, false confessions, jurors' decision making and evaluation of trial evidence. Social influence among jury members, children's participation in the legal system, and discrimination in the legal system. Offered Spring Only.

PSY 466
PERSONNEL PSYCHOLOGY
3, 3/0
Prerequisites: PSY 101 grade of C, 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. Offered Occasionally.

PSY 471
HISTORY AND SYSTEMS OF PSYCHOLOGY
3, 3/0
Prerequisites: PSY 101 Grade of C, 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. Offered Every Semester. Equivalent course: PSY445

PSY 472
SEMINAR ON PSYCHOLOGY
3, 3/0
Prerequisites: PSY 101 Grade of C, 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. Offered Every Semester. Equivalent course: PSY472W
PSY 480
PSYCHOTHERAPY: THEORY, RESEARCH, AND PROCEDURES
3, 3/0
Prerequisites: PSY 101 Grade of C, 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. Offered Occasionally.

PSY 481
PSYCHOLOGICAL TESTS AND MEASUREMENTS
3, 3/0
Prerequisites: PSY 101 Grade of C, 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. Offered Spring Only.

PSY 488
INTERNERSHIP
3-15, 3/0
Prerequisite: Approval of the faculty supervisor. Supervised field experience in a variety of settings to supplement classroom instruction. Offered Every Semester.

PSY 495
SPECIAL PROJECT
1-3, 0/0
Prerequisite: Faculty supervisor permission. Research conducted under the supervision of a faculty member. Offered Occasionally.

PSY 496
HONORS THESIS I
3, 0/0
Prerequisites: PSY 450, 72 credit hours, and permission of instructor. Honors psychology students initiate research that is formally presented in thesis form. Formal research proposals (oral and written) presented to supervisors and honors thesis committee. Extensive library research. Required for students in the departmental honors program. Offered Occasionally.

PSY 498
HONORS THESIS II
3, 0/0
Prerequisites: PSY 496 with a minimum grade of B and permission of instructor. Honors psychology students conduct research proposed in PSY 496 and submit a formal thesis in written form. Oral defense of work before faculty supervisor, thesis committee, and interested faculty members. Required for students in the departmental honors program. Offered Occasionally.

PSY 499
INDEPENDENT STUDY
3-12, 0/0
Prerequisite: Faculty adviser permission. Offered Occasionally.

REL 104
INTRODUCTION TO RELIGIOUS STUDIES
3, 0/0; HU14
Introduction to the rational study of religion, including religious practices and philosophies and concepts basic to religious experience. Offered Occasionally. Equivalent course: PHI104

REL 105
INTRODUCTION TO CHRISTIAN THOUGHT
3, 3/0; WC14
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. Offered Occasionally. Equivalent course: PHI105

REL 121
INTRODUCTION TO JEWISH THOUGHT
3, 3/0; WC14
Examination of basic Judaism, major trends in Jewish thought, the Bible, and its influence on Western Civilization; Jewish ideas of God, time, Messiah, and history and their influence on Western Civilization. Offered Occasionally. Equivalent course: PHI121

REL 205
INTRODUCTION TO THE OLD TESTAMENT
3, 3/0; HU14
The Old Testament, the backgrounds and cultures from which it grew, and the philosophies and literature it contains. Offered Occasionally.

REL 206
INTRODUCTION TO THE NEW TESTAMENT
3, 3/0; HU14
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. Offered Occasionally. Equivalent course: REL326

REL 303
WOMEN IN GLOBAL RELIGIONS
3, 3/0; NW14
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. Offered Occasionally.

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. Offered Occasionally. Equivalent course: REL306W

REL 321
WORLD RELIGIONS
3, 3/0; NW14
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. Offered Fall Only. Equivalent course: REL321W

REL 329
CONTEMPORARY CHRISTIAN THOUGHT
3, 3/0
Prerequisite: Upper-division status or one course in religion. Worship, ministry, and theology of various Christian traditions and the context in which they developed, from the sixteenth to the twentieth centuries; contemporary challenges to Christianity. Offered Occasionally.

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. Offered Occasionally.

REL 488
INTERNERSHIP
1-12, 0/0
Prerequisites: Upper-division status; minimum cumulative GPA of 2.5, with at least one-third of philosophy major or religious studies minor coursework completed. Supervised field experience (experiential learning) consisting of supervised on-site activities and an academic component consisting of training sessions, seminars, and reports. Offered Occasionally.
## SAF - SAFETY STUDIES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAF 305</td>
<td>Fundamentals of Safety</td>
<td>3, 3/0</td>
<td></td>
<td>Fundamentals of accident prevention as applied to areas of living, with consideration of human and environmental factors, legal aspects, and home and fire safety. Offered Every Semester. Equivalent course: SAF400</td>
</tr>
<tr>
<td>SAF 310</td>
<td>Personal Safety and First Aid</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Fall Only</td>
</tr>
<tr>
<td>SAF 320</td>
<td>Product Safety</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Spring Only.</td>
</tr>
<tr>
<td>SAF 333</td>
<td>Occupational Safety</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Occasionally.</td>
</tr>
<tr>
<td>SAF 340</td>
<td>Community Safety</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Fall Only</td>
</tr>
<tr>
<td>SAF 360</td>
<td>Industrial Hygiene</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Fall Only</td>
</tr>
<tr>
<td>SAF 431</td>
<td>Organization, Administration, and Supervision of Industrial Accident Prevention Programs</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Occasionally.</td>
</tr>
<tr>
<td>SAF 450</td>
<td>Motor Fleet Safety Management</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Occasionally.</td>
</tr>
</tbody>
</table>

## SCIENCE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI 100</td>
<td>Contemporary Science</td>
<td>3, 3/0; NS14</td>
<td></td>
<td>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. Offered Every Semester. Equivalent course: HON102</td>
</tr>
<tr>
<td>SCI 105</td>
<td>Physical Science for Nonscience Students</td>
<td>3, 3/0; NS14</td>
<td></td>
<td>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. Offered Every Semester.</td>
</tr>
<tr>
<td>SCI 125</td>
<td>Introduction to College Science and Mathematics</td>
<td>3, 2/2</td>
<td></td>
<td>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. Offered Occasionally.</td>
</tr>
<tr>
<td>SCI 200</td>
<td>Field Experience in Secondary Science Education</td>
<td>3, 2/2</td>
<td></td>
<td>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. Offered Occasionally. Equivalent courses: FLE200, MED200, SED200</td>
</tr>
<tr>
<td>SCI 231</td>
<td>Pollution, the Environment, and Society</td>
<td>3, 3/0; NS14</td>
<td></td>
<td>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. Offered Alternate Years. Equivalent course: SCI231W</td>
</tr>
<tr>
<td>SCI 232</td>
<td>Energy, Environment, and Society</td>
<td>3, 3/0; NS14</td>
<td></td>
<td>Regional and global energy use and issues; environmental, economic, individual, and societal perspectives; major energy alternatives. Offered Alternate Years. Equivalent course: SCI232W</td>
</tr>
<tr>
<td>SCI 310</td>
<td>Teaching Science in the Middle School</td>
<td>3, 3/0</td>
<td></td>
<td>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. Offered Alternate Years. Equivalent course: SED310</td>
</tr>
</tbody>
</table>
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. Offered Alternate Years.

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. Offered Alternate Years.

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. Offered Alternate Years.

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. Offered Occasionally. Equivalent course: SCI323W

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. Offered Occasionally.

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. Offered Occasionally. Equivalent course: SCI340W

SCI 445
LITERACY FOR TEACHING SCIENCE
3, 2/2
Prerequisites: SED 200, SPF 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. Offered Every Semester.

SCI 495
PROJECT
1-3, 0/0
Prerequisite: Faculty sponsor permission. Environment, energy, science, society, and science education-related areas. Offered Occasionally.

SCI 499
INDEPENDENT STUDY
3, 0/0
Prerequisite: Faculty sponsor permission. Environment, energy, science, society, and science education-related areas. Offered Occasionally.

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. Offered Occasionally. Equivalent courses: FLE200, MED200, SCI200

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. Offered Occasionally. Equivalent course: SCI310

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, SPF 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. Offered Occasionally.

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. Interrelation- ships of secondary science programs; micro-teaching experience and 40 hours of fieldwork. Offered Occasionally. Equivalent courses: FLE405, SED405W

SED 407
PRACTICE TEACHING SCIENCE IN THE MIDDLE SCHOOL
6, 0/0
Prerequisites: SED 405 (minimum grade of B), minimum cumulative 2.75 grade point average in major coursework (3.0 in the earth sciences), completion of the NYSTCE LAST exam, successful completion of English and mathematics basic skills competency. If referred, satisfactory completion, or exemption from SLA 100, Student Speech Clinic. Teaching under supervision at least five days a week for one quarter in a middle school science classroom; individual and group instruction; planning unit teaching; classroom management and routine classroom procedures; audiovisual aids, computer technology, evaluation and assessment of student progress; participation in total school program. A series of student teaching seminars. Offered Occasionally. Equivalent courses: FLE407, MED407

SED 408
PRACTICE TEACHING SCIENCE IN THE HIGH SCHOOL
6, 0/0
Prerequisites: SED 405 (minimum grade of B), minimum cumulative 2.75 grade point average in coursework (3.0 in earth science), completion of the NYSTCE LAST exam, successful completion of English and
mathematics basic skills competency. If referred, satisfactory completion, or exemption from SLA 100 Student Speech Clinic. Teaching under supervision at least five days a week for one quarter in the high school science classroom; individual and group instruction; planning unit teaching; classroom management and routine classroom procedures; audiovisual aids, computer technology, evaluation and assessment of student progress; participation in total school program. A series of student teaching seminars. Offered Occasionally. Equivalent courses: FLE408, MED408

SED 409
SEMINAR IN SECONDARY SCIENCE EDUCATION
3, 2/2
Prerequisites: SED 405 (minimum grade of B), 2.75 GPA in science major coursework (3.0 in earth sciences), secondary majors SED 407 and SED 408 concurrently; elementary science extension SED 407 concurrently. Assist student teachers in analysis of their "real" classroom experiences-from management issues to content presentation. Conflicting philosophies in current education. Portfolio development and ongoing development of personal teaching philosophy and practices. Develop interview techniques and make application for NYS teacher certification. Taken concurrently with SED 407 and SED 408. Offered Occasionally.

SED 488
INTERNSHIP
1-6, 0/0
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. Offered Occasionally.

SLP - SPEECH LANGUAGE PATHOLOGY

SLP 100
STUDENT SPEECH CLINIC
1, 0/0
Accent reduction services for non-native speakers of American English. Hours by arrangement. Offered Fall and Spring Only. Equivalent course: SLA100

SLP 101
AMERICAN SIGN LANGUAGE I
3, 3/0; GE14
Fundamentals of American Sign Language (ASL), including basic grammatical features, language functions, and finger spelling. Students will gain adequate receptive and expressive skills for communicating with deaf individuals using ASL. Supplemental lectures focus on issues related to deafness, deaf culture, and signed languages. Offered Every Semester.

SLP 102
AMERICAN SIGN LANGUAGE II
3, 3/0; GE14
Prerequisite: SLP 101. Continuation of SLP 101. Students gain additional knowledge of American Sign Language (ASL) and the deaf community; increases competence in ASL conversational skills. NOTE: For some majors, SLP 101 AND SLP 102 serve as a foreign language equivalent. Check with your department. Offered Every Semester.

SLP 206
LANGUAGE DEVELOPMENT
3, 3/0; SS14
Introduction to the nature and scope of language development in children; children's acquisition of language, speech sounds, words, sentence structure, and meaning; factors that influence language development. Not open to speech-language pathology majors except by advisement. Equivalent course: SLA206

SLP 220
INTRODUCTION TO COMMUNICATION DISORDERS
3, 3/0; NSIF
Classification and causes of speech, language, and hearing disorders in children and adults; methods of treatment for communication disorders and suggestions for prevention; basic information on typical and atypical speech, language, and hearing development; videotaped observation of individuals presenting various communication disorders. Not open to speech-language pathology majors except by advisement. Offered Spring Only. Equivalent course: SLA220

SLP 302
CLINICAL PHONETICS
3, 3/0
Production, acoustic analysis, and representation of American English speech sounds, including the various English dialects; application of phonetics to deviations in speech. Students will use International Phonetic Alphabet (IPA) symbols to transcribe typical and atypical speech. Sophomores must obtain permission of instructor. Offered Fall Only. Equivalent course: SLA302

SLP 303
LANGUAGE ACQUISITION
3, 3/0
Prerequisite: SLP 302. Co-requisite: SLP 329. Children's acquisition of phonology, morphology, syntax, semantics, and pragmatics; structure and function of language of normal children at different levels of development; comparison and contrast of theories of language acquisition. International and cultural variations are considered. Offered Spring Only. Equivalent course: SLA303

SLP 304
ANATOMY AND PHYSIOLOGY OF SPEECH AND HEARING MECHANISMS
3, 3/0
Anatomy and physiology of normal speech and hearing mechanisms; possible deviations; embryonic development; neurology associated with production and reception of oral language. Offered Fall Only. Equivalent course: SLA304

SLP 305
COMMUNICATION DISORDERS I
3, 3/0
Prerequisites: SLP 302 and 304. Provides students with knowledge of the scope and responsibilities of the speech-language pathologist; 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. Offered Spring Only. Equivalent course: SLA305

SLP 314
AUDIOLOGY
3, 3/0

SLP 328
AUDIOLOGY LAB
1, 0/2
Corequisite: SLP 314. Operation and listening check of the pure-tone audiometer, pure-tone air-conduction threshold testing, screening, otoscopy, tympanometry, and reporting test results. Offered Spring Only.

SLP 329
LANGUAGE ACQUISITION LAB
1, 0/2
Corequisite: SLP 303. Observation of language used by typical children. Practice with procedures to collect and analyze typical language. Offered Spring Only.

SLP 400
LANGUAGE AND LITERACY FOR SPEECH-LANGUAGE PATHOLOGISTS
3, 3/0
Prerequisites: SLP 303 and 329. Elective. Connection between language and literacy; role of the speech-language pathologist relative to working with children with language-based literacy impairments; similarities and differences between spoken and written language; linguistic components required for spoken and written literacy. Offered Occasionally.
SLP 401
AURAL REHABILITATION
3, 3/0
Prerequisites: SLP 302, SLP 303, SLP 314. Effects of hearing loss upon speech perception, speech production, and language development; amplification options and intervention strategies for the hearing impaired; classroom acoustics; definition, diagnosis, and management of central auditory processing disorders. Offered Fall Only.

SLP 405
COMMUNICATION DISORDERS II
3, 3/0
Prerequisites: SLP 304, SLP 305, SLP 412. Etiology, assessment, and intervention techniques related to voice disorders, developmental and acquired motor speech disorders, aphasia, traumatic brain injury, dysphagia, and augmentative communication. Cultural and bilingual issues are considered. Offered Spring Only.

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. Cultural and bilingual issues are considered. Offered Fall Only. Equivalent course: SLA411.

SLP 412
SPEECH ACOUSTICS AND PERCEPTION
3, 3/0
Prerequisites: SLP 302, SLP 304, SLP 314. Corequisite: SLP 428. 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. Offered Fall Only. Equivalent course: SLP312.

SLP 424
SPEECH-LANGUAGE PATHOLOGY PROGRAMS IN SCHOOLS
3, 3/0
Prerequisites: SLP 305, SLP 314, SLP 411. In-depth examination of speech-language pathology in schools, including legislative foundations, current models of service delivery, assessment and intervention procedures, organization and administration of programs, emerging trends shaping the future of school speech-language pathology programs. Offered Spring Only. Equivalent course: SLA424.

SLP 428
ACOUSTICS LAB
1, 0/2
Corequisite: SLP 412. Direct and guided use of special instrumentation essential to the collection, measurement, and/or analysis of the acoustic components of speech sounds. Focus areas are respiration, phonation, articulation, and resonance. Offered Fall Only.

SLP 429
CLINICAL ACTIVITY
1, 0/3
Prerequisites: SLP 303, SLP 305, SLP 314. Observation of evaluation and treatment sessions in speech-language pathology. Offered Fall and Spring Only. Equivalent course: SLA429.

SLP 495
SPECIAL PROJECT
1-3, 0/0
Offered Occasionally.

SLP 497
WORKSHOP
1-3, 0/0
Offered Fall and Spring Only.

SLP 499
INDEPENDENT STUDY
3, 0/0
Offered Fall and Spring Only.

SOC 100
INTRODUCTION TO SOCIOLOGY
3, 3/0; SS14
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. Offered Every Semester.

SOC 208
SOCIOLOGY OF CONTEMPORARY CHINA
3, 3/0
Contemporary China from various sociological perspectives; brief history of China; recent developments of social structure, cultural values and norms in China; comparison of China and Western societies; practical outcomes of China studies. Offered Occasionally.

SOC 212
FEMINIST THEORY
3, 3/0
Background in feminist social theory and changes in feminism over time. Introduction to theoretical analysis from a feminist perspective. Equivalent course: WGS212.

SOC 240
ANALYZING SOCIAL PROBLEMS
3, 3/0; DI14, SS14
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. Offered Every Semester.

SOC 250
SOCIOLOGY OF BUFFALO, NEW YORK
3, 3/0
Prerequisite: SOC 100. The city of Buffalo from the perspectives of socio-historical development, socioeconomic conditions, environmental conditions, and neighborhood development. Use of secondary data and field experiences to better understand the condition of the city and its neighborhoods. Includes a field component as part of regular class time and outside assignments. Students complete term papers based on readings, research, and field work. Offered Occasionally.

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. Offered Every Semester. Equivalent course: SOC300W.

SOC 301
SOCIAL STATISTICS
3, 3/0
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. Offered Every Semester.

SOC 302
QUALITATIVE METHODS
3, 3/0
Prerequisites: SOC 100. Introduces students to the basics of conducting qualitative field research. Requires original qualitative research projects. Prepares students for senior-level capstone coursework. Offered Every Semester. Equivalent course: SOC302W.
SOC 310
SOCIOLOGY OF SEX AND GENDER
3, 3/0; DI14
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. Offered Every Semester.

SOC 312
WOMEN IN SOCIETY
3, 3/0; DI14
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. Offered Spring Only.
Equivalent course: SOC210

SOC 320
SOCIOLOGY OF THE FAMILY
3, 3/0
Prerequisite: SOC 100. The family as a social institution, its historical development, function and structure, and interaction with other institutions; cross-cultural comparisons are made. The current status of the family, diversity in contemporary American families, as well as stability and change in the life course of families. Offered Every Semester.
Equivalent course: SOC320W

SOC 321
THE AFRICAN AMERICAN FAMILY
3, 3/0; DI14
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. Offered Spring Only.
Equivalent course: AAS321

SOC 322
SOCIOLOGY OF CHILDHOOD AND YOUTH
3, 3/0
Prerequisite: SOC 100. The social construction of childhood and adolescence; interactive nature of the socialization process; children's production of peer culture; global social problems faced by children and youth. Offered Spring Only.

SOC 323
SOCIOLOGY OF EDUCATION
3, 3/0
Prerequisite: SOC 100. The social organization of education in the U.S. and elsewhere, and schools as social institutions reflecting and influencing society; roles and behaviors of participants in the educational system, including educational goals, theories, philosophies, and methods; educational achievements, historical developments, and future trends. Offered Fall Only.
Equivalent course: SSE323

SOC 324
SOCIOLOGY OF SPORT
3, 3/0
Presents an application of the sociological perspective to sport; focuses on the social organization of sports-related activities; the norms, goals, and values of sport using theoretical frameworks and empirical tools of the social sciences. Offered Occasionally.
Equivalent courses: HEW319, HPR319

SOC 328
SOCIOLOGY OF RELIGION
3, 3/0
Prerequisite: SOC 100. Theories in the sociology of religion will be examined. Emphasis is upon religion and social change; religion in society; church and sect; social class and religion; the role of the minister, priest and rabbi. Offered Fall Only.
Equivalent course: SOC420

SOC 330
SOCIAL PSYCHOLOGY
3, 3/0
Prerequisite: SOC 100. Human motivation and the nature of attitudes, including attitude change and stability; social phenomena, such as interpersonal perception and behavior, role prescriptions and role conflict, prejudice, and conflict resolution. Offered Every Semester.

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. Offered Spring Only.
Equivalent course: AAS331

SOC 333
SOCIOLOGY OF SOCIAL MOVEMENTS
3, 3/0; DI14
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. Offered Spring Only.

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. Offered Fall Only.

SOC 350
POWER, CLASS, AND INEQUALITY
3, 3/0; DI14
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. Offered Spring Only.

SOC 351
SOCIOLOGY OF RACE AND ETHNICITY
3, 3/0; DI14
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. Offered Every Semester.
Equivalent course: AAS351

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. Offered Fall Only.

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. Offered Fall Only.
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. Offered Fall Only.

SOC 366
CULTURAL PROFICIENCY AND PUBLIC ACHIEVEMENT
4, 3/0; DI14
Public achievement serves as a framework for analyzing diverse student perspectives, opinions, and assets to identify and meet the needs of different cultural groups and to learn to work effectively in cross-cultural settings. Students will be provided with practical experiences in implementing a project with children in a local school district. Equivalent course: SPF366

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. Offered Every Semester.

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. Offered Every Semester.

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. Offered Occasionally.

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. Offered Occasionally.

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. Offered Occasionally.

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. Offered Occasionally.

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. Offered Fall Only.

SOC 392
SOCIOLOGY OF SEXUAL BEHAVIOR
3, 3/0
Prerequisite: SOC 100. Recent sociological findings concerning sexual behavior as a social process; the nature of various sexual practices, such as homosexuality and sadomasochism in light of sociological theory; sociological literature concerning sexual behavior with special emphasis on the interactionist approach. Offered Spring Only.

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. Offered Fall Only.

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. Offered Every Semester. Equivalent course: SOC400W

SOC 408
CONTEMPORARY SOCIOLOGICAL THEORY
3, 3/0
Prerequisites: SOC 100 and 6 additional credit hours of sociology. The significance and uses of sociological theory; includes the major current approaches to understanding society and social life, such as contemporary Marxism, conflict theory, functionalism, and the interpretive theories, such as symbolic interactionism, phenomenological sociology, and ethnography; and theories of rational choice such as behavioral sociology and exchange theory. Newly developing perspectives such as feminist theory and postmodernism. Offered Every Semester. Equivalent course: SOC408W

SOC 430
SOCIOLOGY OF INTERNATIONAL DEVELOPMENT AND UNDERDEVELOPMENT
3, 3/0
Prerequisites: SOC 100 and upper-division status. Societal development and change on an international level, with emphasis on the third world; topics include the major sociological theoretical models, conceptual frameworks and assumptions of development; the emergence and dynamics of the world system; the international division of labor; the interplay of development with gender, race, and ethnicity; social policy alternatives and strategies of social change and liberation. Offered Occasionally.

SOC 448
PRACTICUM IN TEACHING SOCIOLOGY
3, 3/0
Prerequisites: SOC 100 and 15 additional credit hours in Sociology; 3.0 GPA and 3.0 in Sociology. How sociology classes are constructed and administered. Instruction in lecture development, exam construction, and record keeping. Experience in mentoring and helping to prepare students for exams. Required journal and analysis paper. Offered Occasionally.

SOC 485
MOOT COURT
3, 3/0
Prerequisite: Upper-division standing or permission of instructor. Simulation of a trial court or appellate court proceeding involving teams of students acting as prosecutor/plaintiffs' attorneys, defense attorneys, and witnesses. Students develop case strategy, analyze evidence,
integrate legal precedent, prepare a written brief, question witnesses, and present oral arguments to the court in opening and closing statements. Final project is a mock trial presentation held in a formal courtroom setting. Offered Every Semester. Equivalent courses: CRJ485, PSC485

SOC 486 PRACTICUM IN APPLIED SOCIOLOGY 3, 3/0
Prerequisite: SOC 100. The study of field research techniques in the classroom, subsequently applied during the completion of 75 hours of field experience working with an agency or organization in the community. Offered Every Semester.

SOC 488 INTERNSHIP IN SOCIOLOGY 1-15, 0/0
Prerequisites: SOC 300 or SOC 302; SOC 400; senior standing; 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. Offered Every Semester.

SOC 490 SEMINAR IN SOCIOLOGY 3, 3/0
Prerequisites: SOC 300 or SOC 302; SOC 400; senior standing. Research in selected area(s) of sociology. Required for B.A. sociology majors with senior status. Offered Every Semester. Equivalent course: SOC490W

SOC 491 3, 3/0
Prerequisites: SOC 100, 6 credit hours of sociology in a related field, and permission of instructor. In-depth special problems in sociology. Interested students should contact a member of the sociology faculty, who will secure approval from the Sociology Department. The course is then listed in the master schedule with a subtitle indicating the area of special concentration.

SOC 495 SPECIAL PROJECT 1-3, 0/0
Offered Occasionally.

SOC 499 INDEPENDENT STUDY 3-12, 0/0
Offered Occasionally.

SPA - SPANISH

SPA 101 BEGINNING SPANISH I 3, 3/0; GE14
Fundamentals of Spanish with emphasis on the spoken and written language. Offered Every Semester.

SPA 102 BEGINNING SPANISH II 3, 3/0; GE14
Prerequisite: SPA 101. Continuation of SPA 101. Offered Every Semester.

SPA 106 SPANISH FOR EDUCATION PROFESSIONALS I 3, 3/0
Prerequisites: SPA102 or three full years of 7-12 Spanish study. Targets ACTFL Novice-High-level proficiency in Spanish with a focus on educational contexts. Taught in Spanish with the exception of outside readings in relevant professional literature. Offered Every Semester.

SPA 201 INTERMEDIATE SPANISH I 3, 3/0
Prerequisite: SPA 102. Further development of basic skills with emphasis on reading and writing. Offered Every Semester. Equivalent course: SPA204

SPA 202 INTERMEDIATE SPANISH II 3, 3/0
Prerequisite: SPA 201. Continuation of SPA 201. Offered Every Semester. Equivalent course: SPA205

SPA 206 SPANISH FOR EDUCATION PROFESSIONALS II 3, 3/0
Prerequisites: SPA106 or SPA201 or four full years of 7-12 Spanish study. Targets ACTFL Intermediate-Low-level proficiency in Spanish with a focus on educational contexts and field-based work with P-12 Latino students. Taught in Spanish with the exception of outside readings in relevant professional literature. Offered Every Semester.

SPA 301 INTRODUCTION TO HISPANIC CULTURES 3, 3/0
Prerequisite: SPA 202 or equivalent, instructor permission. Intermediate-High-level study of the Spanish language through exploration of Spanish-speaking cultures. Taught in Spanish. Offered Every Semester.

SPA 302 INTRODUCTION TO HISPANIC MEDIA 3, 3/0
Prerequisites: SPA301 or equivalent. Advanced-Low-targeted study of the Spanish language through exploration of Spanish-speaking cultures. Taught in Spanish. Offered Every Semester.

SPA 303 INTRODUCTION TO READING HISPANIC LITERATURE 3, 3/3
Prerequisites: SPA301. Introduction to the reading of literature written in Spanish, from both Spain and Latin America. Practice in reading and analyzing literary texts. Further development toward American Council on the Teaching of Foreign Languages (ACTFL) Advanced-Low language proficiency. Taught in Spanish. Offered Fall Only.

SPA 304 SPANISH FOR SPANISH SPEAKERS 3, 3/0
Prerequisites: Placement test for Spanish speakers. An overview of those aspects of Spanish grammar that will enhance bilingual students' effectiveness in oral and written communication in Spanish. Special attention will be given to Anglicisms. Offered Occasionally.

SPA 305 SPANISH PHONETICS 3, 0/0
Prerequisites: SPA 301 and SPA 302. The speech sounds of Spanish. Comprehension and pronunciation difficulties caused by differences in the sound systems of English and Spanish. Exercises aimed at improvement of pronunciation and intonation. Offered Fall Only.

SPA 306 CIVILIZATION AND CULTURES OF SPAIN 3, 3/0

SPA 307 SPANISH AUTHORS PRE-1800 3, 3/0
Prerequisites: SPA 302. Taught in Spanish. Overview of representative prose, poetry and theatrical works by authors from Spain from the eleventh through eighteenth centuries, studied in historical and broad artistic context. Further development toward the American Council on
the Teaching of Foreign Languages Advanced-Mid language proficiency. Offered Fall Only.

SPA 308
SPANISH AUTHORS 1800-PRESENT
3, 3/0
Prerequisites: SPA 302. Taught in Spanish. Overview of representative prose, poetry and theatrical works by authors from 19th century Spain to the present, studied in historical and broad artistic context. Further development at the American Council on the Teaching of Foreign Languages Advanced-Mid language proficiency. Offered Spring Only.

SPA 309
CULTURE AND CIVILIZATION OF LATIN AMERICA
3, 3/0
Prerequisites: SPA 302. Taught in Spanish. Cultural diversity of the Latin American people, with emphasis on their achievements, customs and ways of life as affected by geographic, historical, political, and economic factors. Further development toward American Council on the Teaching of Foreign Languages Advanced-Mid proficiency level. Offered Occasionally.

SPA 310
SPANISH AMERICAN AUTHORS: 1492 TO 1810
3, 3/0
Prerequisite: SPA 302. Taught in Spanish. Literature-centered overview of representative prose and poetry and essays by authors from Spanish America from the late fifteenth through early nineteenth centuries, studied in historical and broad artistic context. Further development into the American Council on the Teaching of Foreign Languages (ACTFL) Advanced-Mid language proficiency in Spanish. Offered Spring Only.

SPA 311
SPANISH AMERICAN AUTHORS 1810S-PRESENT
3, 3/0
Prerequisite: SPA 302. Literature-centered overview of representative prose and poetry and essays by authors from Latin America from the nineteenth through the present, studied in historical and broad artistic context. Further development into the American Council on the Teaching of Foreign Languages (ACTFL) Advanced-Mid language proficiency in Spanish. Taught in Spanish. Offered Fall Only.

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 321
ISSUES AND THEMES IN CONTEMPORARY HISPANIC CULTURES
3, 3/3
Prerequisites: SPA 302 or equivalent. In Spanish, Development and practice of Spanish language through exploration of current issues facing Latin America and Spain. Targeted toward the American Council on the Teaching of Foreign Languages (ACTFL) Advanced-Mid-level. Offered Occasionally.

SPA 389
TOPICS COURSE
3, 0/0
Offered Occasionally.

SPA 401
SPANISH FOR SPANISH TEACHING
3, 3/0
Prerequisites: Must be officially admitted to the Spanish Education BS or Post-Baccalaureate 7-12 Spanish Certification Program. Survey of classroom use of Spanish and professional literature on Spanish pedagogy. Offered Fall Only.

SPA 404
CERVANTES
3, 3/0
Prerequisite: SPA 307. Reading and analysis of Don Quixote or the Novelas Exemplares. Offered Alternate Years.

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. Offered Occasionally.

SPA 410
LITERACY FOR SPANISH TEACHERS
3, 3/3
Prerequisites: SPA 301. Emphasis on the promotion of literacy skills in Spanish instruction. Offered Spring Only.

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. Offered Occasionally.

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. Offered Alternate Years.

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. Offered Spring Only.

SPA 421
STRUCTURE OF MODERN SPANISH
3, 0/0
Prerequisites: SPA302 or equivalent. Taught in Spanish. A thorough analysis of Spanish linguistics, including its diachronic, phonemic, phonological, morphosyntactic and sociopragmatic aspects. Targeted toward the American Council on the Teaching of Foreign Languages (ACTFL) Advanced-Mid-level. Offered J Term and Summer Only.

SPA 495
SPECIAL PROJECT
1-3, 0/0
Offered Occasionaly.

SPA 496
SEMINAR I
3, 3/0
Prerequisite: Permission of instructor. Topic chosen by instructor. Offered Occasionally.

SPA 497
SEMINAR II
3, 3/0
Prerequisite: Permission of instructor. Topic chosen by instructor. Offered Occasionally.

SPA 499
INDEPENDENT STUDY
3, 0/0
Offered Occasionally.

SPC - SPEECH COMMUNICATION

SPC 103
INTRODUCTION TO HUMAN COMMUNICATION
3, 3/0; HU14
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. Offered Every Semester. Equivalent course: COM103
SPC 205
INTRODUCTION TO ORAL COMMUNICATION
3, 3/0
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. Offered Every Semester and Summer. Equivalent course: COM205

SPC 306
PUBLIC SPEAKING
3, 0/0
Prerequisite: SPC 205. Organization, delivery, and evaluation of public speech from a performance and analytical framework for professional, social, public, and small group situations. Offered Fall Only. Equivalent course: COM306

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. Offered Every Semester. Equivalent course: COM307

SPC 309
PERSUASION AND PROPAGANDA
3, 3/0
Theory and practice of persuasion in various media contexts; analysis of social implications, ethical base, and impact of persuasive messages; analysis of contemporary propaganda in media contexts. Offered Fall Only.

SPC 311
INTERCULTURAL COMMUNICATION
3, 3/0; Di14
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. Offered Every Semester.

SPC 315
MEDIA PERFORMANCE
3, 3/3
Prerequisite: SPC205. Principles and theories of voice performance for radio and other forms of media technology; techniques for marking and reading written scripts; focus on body language and vocal nuance; application to animation, storytelling, and commercial voiceovers. Offered Every Semester.

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. Offered Fall Only. Equivalent course: SPC321W

SPC 326
FILM ANALYSIS AND EVALUATION
3, 2/1
Prerequisite: junior or senior standing. Aesthetic and philosophical analysis and evaluation of media; focus on ethical issues and themes found in films and media; considering film as an art form; reflection on values; morals; relationships relating to social questions.

SPC 333
RACE, CLASS AND GENDER IN THE MEDIA
3, 3/0; Di14
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). Offered Occasionally. Equivalent course: COM333

SPF 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. Offered Every Semester.

SPF 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. Offered Every Semester. Equivalent course: SPF203W

SPF 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. Offered Occasionally. Equivalent course: AAS221
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. Offered Occasionally.
Equivalent course: AAS222

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. Offered Occasionally.
Equivalent course: AAS225

EDUCATIONAL PSYCHOLOGY: ELEMENTARY EDUCATION
3, 3/0
Prerequisites: SPF 202, CWP 101, CWP 102, upper-division status. Learners, the learning process, evaluating learning, and establishing a classroom environment to maximize learning. Offered Every Semester.
Equivalent course: SPF302W

EDUCATIONAL PSYCHOLOGY: MIDDLE AND SECONDARY EDUCATION
3, 3/0
Prerequisites: 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 observaton. Offered Every Semester.
Equivalent course: SPF303W

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. Offered Occasionally. Offered Occasionally.
Equivalent courses: SOC311, SPF311W

CULTURAL DIVERSITY IN CLASSROOMS
3, 3/0
Prerequisite: SPF203. Focus will be placed on the impact of culture on schooling through examination of the major conceptualizations of multicultural education and understanding of approaches that may be utilized by pre- and in-service teachers in ensuring that diverse cultures are addressed, respected, and integrated into classroom teaching, learning, and assessment.

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. Offered Occasionally.
Equivalent course: SPF345W

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. Offered Occasionally.

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.

CULTURAL PROFICIENCY AND PUBLIC ACHIEVEMENT
4, 3/0; DI14
Public achievement serves as a framework for analyzing diverse student perspectives, opinions, and assets to identify and meet the needs of different cultural groups and to learn to work effectively in cross-cultural settings. Students will be provided with practical experiences in implementing a project with children in a local school district.
Equivalent course: SOC366

THEMES AND ISSUES IN URBAN EDUCATION
3, 3/0
The contemporary social contexts of urban education; theory, schooling, and strategies for improved ways of teaching in relation to the community are explored. Offered Occasionally.

HISTORICAL AND PHILOSOPHICAL FORCES INFLUENCING SECONDARY EDUCATION
3, 3/0
Equivalent course: SPF403W

SPECIAL PROJECT
3, 0/0
Equivalent course: SPF495

WORKSHOP
1-3, 0/0
Equivalent course: SPF497

INDEPENDENT STUDY
3, 0/0
Equivalent course: SPF499

SSE - SOCIAL STUDIES EDUCATION

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. Offered Every Semester.
Equivalent course: SST200

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). 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. Offered Every Semester. 
Equivalent course: SST303

SSE 309 METHODS AND MATERIALS IN TEACHING HIGH SCHOOL SOCIAL STUDIES 3, 3/0
Prerequisites: Upper-division status, SSE 200, minimum cumulative GPA of 2.75 (overall and in major coursework). 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. Offered Every Semester.

SSE 350 THE TRADITIONS OF THE PEOPLE OF THE LONGHOUSE (THE HO DO NO SAU NEE) 3, 3/0
An introduction to the traditions of the People of the Longhouse (Haudenosaunee); pre-Columbian founding of the League, clan system, early colonial relationships, role in American Revolution, state of the Nations, and primary current issues. Offered Occasionally. Equivalent course: SST350

SSE 363 AMERICAN IDENTITY IN TRANSITION: DIVERSITY AND PLURALISM IN THE UNITED STATES 3, 3/0; DI14
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. Offered Occasionally. Equivalent courses: HIS363, SST363

SSE 370 COMPUTER TECHNOLOGY IN THE SOCIAL STUDIES CLASSROOM 3, 3/0
Prerequisite: History and social studies education major. Familiarizes students with relevant software and methodology for its use in the social studies classroom. All students have the opportunity to participate on the microcomputer. Offered Every Semester. Equivalent course: SST370

SSE 402 HISTORICAL AND PHILOSOPHICAL FOUNDATIONS OF SOCIAL EDUCATION 3, 3/0
Prerequisite: Upper-division status. The development of the social studies curriculum in relation to the larger social, economic, educational, and political forces operating in American society; enduring philosophical issues as to what is the “good” society, the “good” citizen, and the best curriculum and instructional methods to create them. Offered Occasionally.

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. Offered Occasionally.

SSE 407 THE TEACHING OF HISTORY 3, 3/0
Prerequisite: Upper-division status. The curriculum and practice of teaching history, the historical role of history in the social studies, the political uses of the teaching discipline; provides a research foundation as to how historical meaning is constructed as a base for instructional practice; serves as a link between the material presented in content and pedagogical courses in the program. Offered Every Semester.

Equivalent courses: HIS407, SST407

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. Supervised teaching experience five full days a week for approximately seven consecutive weeks. Effective demonstration of content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflectivity of practice required. Offered Every Semester.

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), grade of C or higher in SSE 303 and SSE 309, successful completion of English composition/basic communication and mathematics competency requirements. Supervised teaching experience five full days a week for approximately seven consecutive weeks. Effective demonstration of content knowledge, pedagogical preparation, instructional delivery, classroom management, knowledge of student development, collaboration with school professionals, and reflectivity of practice required. Offered Every Semester.

SSE 488 INTERNSHIP 1-12, 0/0
Prerequisites: SSE 409 and SSE 410, 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. Offered Every Semester. Equivalent course: HIS488

SSE 495 SPECIAL PROJECT 3, 0/0
Offered Occasionally.

SSE 497 WORKSHOP 1-2, 0/0
Offered Occasionally.

SSE 499 INDEPENDENT STUDY 3, 0/0
Offered Occasionally.

SWK - SOCIAL WORK

SWK 105 INTERPERSONAL RELATIONS 3, 3/0
The impact of societal, cultural, and professional values on interpersonal relationships; increased awareness of interpersonal skills and examination of ways to overcome barriers to healthy interpersonal relationships. Offered Occasionally.

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. Offered Every Semester.
SWK 301
POVERTY AND PUBLIC POLICY
3, 3/0; DI14
Prerequisite: Sophomore, Junior or Senior standing. Social welfare policies and social welfare programs. Historical treatment of poverty and the poor. Theories of poverty causation. Measurement of poverty and poverty demographics including race, age, gender, immigration status, socioeconomic status. Social change strategies and advocacy. Requires 20 hours of volunteer work in addition to coursework. Offered Fall Only

SWK 307
HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT I
3, 3/0
Prerequisites: SWK Majors Only, Junior/Senior standing, BIO 101, CWP 102, MAT 311. Conceptual frameworks for client assessment; theories and perspectives of life span development; professional communication, professional reflection, social work assessment, library research. Offered Fall Only
Equivalent course: SWK307W

SWK 308
HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II
3, 3/3
Prerequisites: SWK Majors only, Junior/Senior standing, BIO 101, CWP 102, MAT 311. As a second course in the Human Behavior and Social Environment curriculum, SWK308 focuses on deepening the student’s knowledge of the theoretical frameworks that attempt to explain behavior and enlighten effective work with individuals, families, groups, organizations, and communities as a generalist social worker. Maladaptive patterns of adult psychological functioning are examined with a biopsychosocial perspective in order that students may contextualize the information. Although students concentrate upon problematic human functioning, the course is presented in a manner that encourages them to view the strengths of clients along with their difficulties. Offered Fall Only
Equivalent course: SWK308W

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. Offered Occasionally.

SWK 317
RESEARCH IN SOCIAL WORK
3, 3/0
Prerequisites: SWK Majors Only, Junior/Senior standing, BIO 101, CWP 102, MAT 311, SWK 220, SWK 301, SWK 307, SWK 308, and SWK 422. Application of research methods to generalist social work practice. Research ethics, evidence based practice. Offered Spring Only.
Equivalent course: SWK317W

SWK 320
SOCIAL SERVICES ORGANIZATIONS
3, 3/0
Prerequisites: SWK Majors Only, Junior/Senior standing, BIO 101, CWP 102, MAT 311, SWK 220, SWK 301, SWK 307, SWK 308, and SWK 422. History, descriptions, and functions of social services organizations; creation, implementation of social welfare policy and programs; social justice, human rights, NASW Code of Ethics. Offered Spring Only.
Equivalent course: SWK320W

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. Offered Occasionally.

SWK 335
MENTAL HEALTH AND SOCIAL WORK
3, 3/0
Prerequisite: SWK 307 and CWP102 and (BIO101 or BIO308) and (MAT103 or ECO305 or MAT114 or MAT122 or MAT126 or MAT161 or MAT311 or PHI107) 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. Offered Occasionally.

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. Offered Occasionally.

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 systems; intervention and treatment issues; the role of other disciplines and the larger society. Offered Occasionally.

SWK 419
SOCIAL WELFARE POLICY
3, 3/0
Prerequisites: SWK Majors Only, Senior standing, SWK 220, SWK 301, SWK 307, SWK 308, SWK 317, SWK 320, SWK 422, SWK 423, SWK 424, CWP 102, BIO 101, MAT 311. This course addresses the American social welfare state and its historical responses to need, in addition to the concepts of discrimination, oppression, social welfare policy, policy research, policy analysis, policy creation, grant proposals, and legislative briefs. Offered Fall Only.
Equivalent course: SWK419W

SWK 422
ASSESSMENT AND ENGAGEMENT
3, 3/0
Prerequisites: SWK Majors Only, Junior/Senior standing, BIO 101, CWP 102, MAT 311. Fundamental skills of social work practice; communication, engagement, and assessment skills with individuals and families. Offered Fall Only
Equivalent course: SWK422W

SWK 423
INTERVENTION METHODS
3, 3/0
Prerequisites: SWK Majors Only, Junior/Senior standing, SWK 220, SWK 301, SWK 307, SWK 308, SWK 422, BIO 101, CWP 102, MAT 311. Models of generalist social work intervention; evidence-based practice with diverse populations; ethical guidelines for practice and self-reflection. Offered Spring Only.
Equivalent course: SWK423W

SWK 424
GROUPS
3, 3/0
Prerequisites: SWK Majors only, Junior/Senior standing, BIO 101, CWP 102, MAT 311, SWK 220, SWK 301, SWK 308, and SWK 422. Outlines the basic issues and key concepts of group process and practice. Offered Spring Only.
Equivalent course: SWK424W

SWK 425
SOCIAL WORK WITH FAMILIES
3, 3/0
Prerequisites: SWK 308 and SWK 422 and CWP102 and (BIO101 or BIO308) and (MAT103 or ECO305 or MAT114 or MAT122 or MAT126 or MAT161 or MAT311 or PHI107). Focus on family and family intervention; family theory and practice principles studied through examination of families in specialized problem contexts. Offered Occasionally.

SWK 429
POLICY PRACTICE
3, 3/0
Prerequisites: SWK Majors Only, Senior standing, SWK 220, SWK 301, SWK 307, SWK 308, SWK 317, SWK 320, SWK 419, SWK 422, SWK 423, SWK 424, SWK 493, SWK 496, CWP 102, BIO 101, MAT 311. Generalist macro policy practice skills. Social welfare policy research,
policy briefs, grant proposals, policy presentations to governing bodies (e.g., Congress).

**SWK 485**  
SENIOR SEMINAR  
3, 3/0  
Intensive analysis of selected topics in social work. Offered Occasionally.

**SWK 493**  
FIELD PRACTICUM I  
6, 6/0  
Prerequisite: SWK220 AND SWK307 AND SWK308 AND SWK319 AND SWK422 AND (BIO101 OR BIO308) AND CWP102 AND BIO101 AND MAT311 or equivalent. First semester of supervised field experience in a professional social work setting. Concurrent weekly on-campus integrative seminar. Restricted to social work majors. Offered Fall Only

**SWK 494**  
FIELD PRACTICUM II  
6, 6/0  
Prerequisites: SWK Majors Only, Senior standing, SWK 220, SWK 301, SWK 307, SWK 308, SWK 317, SWK 320, SWK 419, SWK 422, SWK 423, SWK 424, SWK 491, SWK 493, BIO 101, CWP 102, MAT 311, and a minimum 2.5 GPA in the SWK major and cumulative. This course involves a supervised internship where students develop and complete a learning contract in conjunction with their fieldwork agency that includes demonstrating mastery of the required social work practice behaviors. Additionally, it involves a concurrent on-campus seminar that integrates and supports all previous social work coursework and demonstration of mastery. Offered Spring Only.

**SWK 495**  
SPECIAL PROJECT  
1-3, 0/0  
Offered Occasionally.

**SWK 496**  
INTEGRATIVE SEMINAR I  
3, 3/0  
Prerequisites: SWK Majors Only, Senior standing, SWK 220, SWK 301, SWK 307, SWK 308, SWK 317, SWK 320, SWK 422, SWK 423, SWK 424, SWK 491, SWK 493, BIO 101, CWP 102, MAT 311. Integration of coursework and the demonstration of social work practice behaviors and skills required by the Council on Social Work Education. Emphasis on the engagement and assessment phases of generalist practice.

**SWK 497**  
INTEGRATIVE SEMINAR II  
3, 3/0  
Prerequisites: SWK Majors Only, Senior standing, SWK 220, SWK 301, SWK 307, SWK 308, SWK 317, SWK 320, SWK 422, SWK 423, SWK 424, SWK 491, SWK 493, BIO 101, CWP 102, MAT 311. Integration and demonstration of social work practice behaviors and skills required by the Council on Social Work Education. Emphasis on intervention and evaluation of generalist practice.

**SWK 499**  
INDEPENDENT STUDY  
3-9, 0/0  
Offered Occasionally.

**TEC - TECHNOLOGY**

**TEC 101**  
TECHNICAL DRAWING  
3, 2/3  
Prerequisites: none. Drawing techniques and part modeling techniques for 3D parametric solid modeling systems; multiview projections using 2- and 3-D geometry, drawing annotation including text, dimensioning and layouts of a variety of drawing types suitable for plotting to scale; part modeling techniques including Industry-standard parametric modeling; introduction to geometric dimensioning and tolerancing; required for industrial technology, electrical engineering technology (smart grid), mechanical engineering technology, and technology education majors. Offered Every Semester.

**TEC 150**  
TECHNOLOGY IN EVERYDAY LIFE  
3, 3/0  
The applied physics and technology involved in everyday life in order to gain an understanding of basic science and engineering principles; Newton's laws of motion as they apply to an ice skater and bumper cars; principles of fluid mechanics like water flowing from a garden hose and the buoyancy of ships; heat transfer and phase transitions like water in its three phases and home heating systems; thermodynamic efficiency of automobile engines as well as air conditioners; resonance and mechanical waves developed by music instruments; basic electricity and its many applications from how it is produced by water and wind to how it is used to produce light; light and optics, for example, splitting the colors of sunlight to focusing light in a camera lens. Offered Occasionally.

**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. Offered Fall Only  
Equivalent course: TEC200W

**TEC 201**  
MATERIALS PROCESSING  
3, 2/3  
Prerequisite: TEC 101. Processes and problems associated with the conversion of materials into useful forms and goods; laboratory activities exemplify the major processes studied. Offered Every Semester.

**TEC 260**  
DEVELOPMENT OF TECHNOLOGY  
3, 3/0  
The history of science and technology; the evolution of technology and its effects on humanity, for example, advances in agriculture and health care; era-specific technology such as weapons developed for defense and building processes to construct small communities and large cities; evolution of energy and power leading to current alternatives such as solar energy, wind power, hydroelectric power, fuel cells, and biomass energy; how technology has affected and been affected by ecology, climatology, health care, ethics, war, and politics. Offered Occasionally.  
Equivalent course: TEC260W

**TEC 301**  
MATERIALS PROCESSING II  
3, 2/3  
Prerequisite: TEC 201. Continuation of TEC 201. Emphasis on numerical controlled and computerized numerical controlled materials processing. Offered Occasionally.

**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. Offered Fall Only

**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. Offered Every Semester.

**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. Offered Spring Only.
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. Offered Fall Only.

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. Offered Every Semester.

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. Offered Occasionally. Equivalent course: TEC319W

TEC 321
MEASUREMENT SYSTEMS
3, 3/0
Prerequisite: TEC 313. Theory and application of measurement; tolerancing, variable, and attribute measurement devices; gauge variation, automated measurement input equipment, and gauge control systems. Offered Fall Only

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. Offered Spring Only.

TEC 351
ENERGY SYSTEMS
3, 3/0
Prerequisites: MAT 124 and PHY 107. Energy and power from sources through conversion systems and mechanisms to the application of power for manufacturing. Offered Fall Only Equivalent course: TEC351W

TEC 400
MARKETING
3, 3/0
Prerequisite: Upper-division status. Conceptual framework for marketing; the movement of goods and services through channels from source to consumer; product formulation; market research; prudent pricing; distribution channels; promotion systems. Industrial technology (manufacturing option) majors. Offered Occasionally. Equivalent course: TEC400W

TEC 402
ERGONOMICS
3, 3/0
Prerequisite: Upper-division status. The interaction of people and machines; development and use of human factors information including sensory, cognitive, and psychomotor processes as they influence the design of displays, controls, and work space; environment and safety considerations necessary to achieve desired machine outputs. Offered Fall Only

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. Offered Spring Only. Equivalent course: TEC403W

TEC 404
INDUSTRIAL SYSTEMS APPLICATIONS
3, 2/3
Prerequisite: Upper-division status. Investigation of management science and communication principles leading to a series of hands-on laboratory projects, case studies, and group problem-solving/decision-making activities; building positive management communications abilities as applied to the components of contemporary work settings; cultivation and personalization of leadership behaviors such as team building, coaching, and conflict resolution. Offered Fall Only. Equivalent course: TEC404W

TEC 405
MANUFACTURING TECHNOLOGY
3, 2/3
Prerequisites: TEC 312 and final semester senior status. Hands-on experience in the manufacturing cycle of a product from the engineering drawing stage through project and processing planning, prototype manufacture and testing; experience in setting time standards and taking time studies. Offered Spring Only. Equivalent course: TEC405W

TEC 465
SAFETY MANAGEMENT
3, 3/0
Prerequisite: Upper-division status. Development of the industrial safety movement; psychology in accident prevention; appraisal of accident cost factors, severity, and frequency; job safety analysis and corrective measures; plant inspection and preventive maintenance; storage and handling of materials; fire prevention; education and training of employees. Offered Spring Only. Equivalent course: TEC465W

TEC 488
QUALITY INTERNSHIP
1-12, 3/0
Prerequisite: Completion of 12 credit hours in quality minor or all TEC-prefixed courses in industrial technology quality option. Analysis of a quality problem at a local manufacturing/service organization on or off campus; evaluation is based on a formal written and oral report presentation. Offered Every Semester. Equivalent course: TEC488W

TEC 495
SPECIAL PROJECT
1-3, 0/0
Offered Occasionally.

TEC 497
WORKSHOP
3, 0/0
Offered Occasionally.

TEC 499
INDEPENDENT STUDY
3, 0/0
Offered Every Semester.

TED - TECHNOLOGY EDUCATION

TED 100
INTRODUCTION TO TECHNOLOGY EDUCATION
3, 3/0
Prerequisite: Major status. An introduction to technology education for students considering a career as a public school technology teacher; provides information relating to core issues such as New York State Learning Standards, contemporary ideas and practices in the technology classroom; introduces and prepares students for the field service requirement. Offered Every Semester.
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. Offered Fall Only. Equivalent course: TEC100

TED 123
PRINCIPLES OF MANUFACTURING
3, 2/3
Operative principles common to the majority of manufacturing industries; research and development, manufacturing, organization and management; industrial relations; engineering; production; labor; financial control; marketing; quality control. Presentations by leading industrialists. Offered Spring Only. Equivalent course: TEC123

TED 253
FUNDAMENTALS OF BOAT BUILDING
3, 0/6
Prerequisite: DES 105. Fundamentals of boat design, lofting, and construction through lectures, demonstrations, and the construction of a small boat. Offered Occasionally. Equivalent course: TEC253

TED 300
CONSTRUCTION SYSTEMS
3, 2/3
Exploration of habitable structures through hands-on laboratory experiences. For technology education majors and those who wish to meet certification requirements of New York for teaching technology education in the state's public schools. Offered Fall Only. Equivalent course: TEC300

TED 320
HISTORY AND THEORY OF WATERCRAFT DESIGN
3, 3/0
Prerequisite: DES 215 or permission of instructor. A survey of the history and theory of naval architecture and watercraft design with special attention to the development of design solutions within specific cultural contexts; special emphasis on American small craft and local traditional designs. Offered Occasionally. Equivalent course: DES119

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. Offered Fall Only. Equivalent course: TEC349

TED 360
TECHNOLOGY EDUCATION METHODS AND EVALUATION
3, 3/0
Prerequisites: OEC 301, OEC 302, and SPF 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. Offered Every Semester. Equivalent course: TED360W

TED 450
PROFESSIONAL SEMESTER
6, 0/0
Prerequisites: CWP 102, BME/CTE 301, BME/CTE 302, SPF 303, TED 360, EXE 372, EDU 416; minimum cumulative GPA of 2.5. Students must have completed 105 credit hours, including all 33 credit hours of approved technology core courses. 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, oral communication delivery and other aspects of teaching technology education; guided full-time teaching experience including the use of electronic recording to analyze teaching; participation in school and professional activities. Offered Every Semester. Equivalent course: TED450W

TED 451
PROFESSIONAL SEMESTER II
6, 0/0
Prerequisites: SPF 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, oral communication delivery and other aspects of teaching technology education; guided 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. Offered Every Semester. Equivalent course: TED451W

TED 453
WOOD/EPOXY BOATBUILDING
3, 2/0
Prerequisite: DES 251. Theory and application of wood/epoxy boatbuilding materials and techniques through the construction of a wood/epoxy skiff. Offered Occasionally. Equivalent course: DES453

TFA - TELEVISION AND FILM ARTS

TFA 189
TOPIC COURSE
3, 3/0
Topic course. Offered Occasionally.

TFA 201
INTRODUCTION TO TELEVISION AND FILM ARTS
3, 3/0
Introduction to the history of storytelling and the various ways in which stories can be told today. Emphasis on television, film, theater, and other visual media. Offered Spring Only. Equivalent course: TVA201

TFA 301
TV AND FILM CRITICISM
3, 3/0
Students study great directors and the screenplays they have produced, focusing on analyzing story structure, characters, and theme of screenplays that compose the established canon. Directors include Spielberg, Kubrick, Hitchcock, Wilder, Allen and Tarantino. Offered Spring Only.
Equivalent course: TVA200

TFA 389
TOPIC COURSE
3, 3/0
Topic course. Offered Occasionally.

TFA 401
PRODUCING SHORT FILMS I
3, 3/0
Prerequisites: TFA 301, TFA 304 and TFA 329. Students form virtual video production companies and work collaboratively with other students, alternately assuming the roles of writer, producer, director, and production crew. In the process, students develop the ability to assess their strengths, weaknesses, and interests. Offered Fall Only.
Equivalent course: TVA401

TFA 420
PRODUCING SHORT FILMS II
3, 3/0
Students function as true "auteurs" using advanced techniques to write, produce, direct, and edit their own single-camera short video project. Emphasis on the effectiveness of the story rather than production quality. Critiques from peers and instructors focus on developing storytelling skills. Offered Spring Only.

TFA 450
SENIOR PROJECT
3, 3/0
Prerequisite: TFA 420. Students write a short script, partner with other students (for acting and production services) and faculty, and bring their short scripts to life in a professional, multi-camera studio production. Final projects are shown in a public forum. Offered Fall Only.
Equivalent course: TVA450

TFA 460
ADAPTATION
3, 3/0
Students adapt literature for television or film. They choose a short story, poem, or other piece of literature and translate it into a short script. Offered Occasionally.
Equivalent course: TVA460

TFA 480
ADVANCED DIRECTING/PRODUCING I
3, 3/0
Students focus on directing the actor for a single-camera production. Each student directs short scenes from selected plays, then shoots a scene (single camera) as a final project. The class and students from other departments act as the "Acting Company." Offered Spring Only.
Equivalent course: TVA480

TFA 481
ADVANCED DIRECTING/PRODUCING II
3, 3/0
Prerequisite: TFA 480. Students direct a scene or series of scenes from a previously produced film, television program, or play and shoot it (multicamera) as a final project. The class and students from other departments act as the "Acting Company" and "Production Company." Offered Occasionally.
Equivalent course: TVA481

TFA 495
SPECIAL PROJECT
1-3, 0/0
Equivalent course: TVA495

TFA 499
INDEPENDENT STUDY
3, 0/0

THA - THEATER ARTS

THA 105
INTRODUCTION TO THEATER ARTS
3, 3/0; AR14
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. Offered Every Semester.

THA 107
THEATER PERFORMANCE FOR NON-MAJORS
3, 2/2; AR14
Prerequisite: Instructor permission. Participation in the rehearsal and performance of a Buffalo State College Theater Department production. Offered Occasionally.

THA 189
TOPICS COURSE
1-3, 0/0
Offered Occasionally.

THA 200
INTRODUCTION TO ACTING: THE ACTOR'S INSTRUMENT
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. Offered Every Semester.

THA 216
THEATER FUNDAMENTALS
3, 3/0; AR14
Introduction to the art of theater for department majors. Examines elements of production, history, genres, and styles of theater. Attendance at live theater production required. Offered Fall Only.

THA 218
SCRIPT ANALYSIS I: PLAY READING
3, 3/0
Prerequisite: THA 216 or instructor permission. Pivotal plays, classic and modern, that have had an impact on theater. Play structure will be examined and analyzed. Attendance of live performances is required. Offered Spring Only.

THA 222
MOVEMENT I
3, 2/2
Prerequisite: Successful completion of THA 200. Introduction to basic movement for actors. Develop skills and knowledge associated with organic physical practice and the range and physical capacity of the moving body, and develop awareness of the potential for precise and expansive actor presence.
Equivalent course: THA260

THA 232
STAGE MANAGEMENT
3, 3/0
Prerequisites: THA 106 or THA 216 or Instructor Permission. Instruction of the student in the duties, responsibilities, and techniques of a successful stage manager. Preparation of all materials needed to run a rehearsal and maintain a performance as the stage manager. Participation in one of the departmental productions to explore hands-on work and interactive experiences. Offered Alternate Years.

THA 236
DRAFTING FOR THE THEATER
3, 3/0
Prerequisite: Instructor permission. A study of basic drafting principles as they relate to theatrical design. Computer-aided ground plans, elevations, and sections. Offered Occasionally.

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. Offered Every Semester.

THA 227
ACTING II: SCENE STUDY
3, 2/2
Prerequisite: Instructor Permission or 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. Offered Every Semester.
Equivalent course: THA326

THA 230
THEATER PRACTICUM I
3, 1/3
Laboratory experience in the preparation of costumes, scenery, lighting, or props for departmental theater production. Offered Every Semester.

THA 231
THEATER PRACTICUM II
1, 0/3
Laboratory experience as a run-crew member for a departmental theater production. Offered Every Semester.

THA 234
THEATER DESIGN AND TECHNOLOGY
3, 1/4
Technical elements of costume, scenery, and lighting design; participation in at least one preparation or run-crew for performing arts production. Offered Fall Only.
Equivalent course: THA208

THA 235
COSTUME CONSTRUCTION I
3, 2/2
Prerequisite: THA 234. The foundation of costume construction. Basic costuming from the ground up with emphasis on period construction, theatrical techniques, and unconventional methods used in theater, dance, and screen through vocabulary, demonstration, and hands-on production. Offered Fall Only.

THA 245
STAGE COMBAT I
3, 2/1
The study of unarmed stage combat techniques, the creation and performance of choreographed fight scenes, physical control and safety. This course is the first of three required for Society of American Fight Directors Actor/Combatant certification.

THA 300
VOICE AND MOVEMENT II
3, 2/2
Prerequisite: THA 200 and THA 226. Intermediate voice and movement course for actors, integrates previously learned voice and movement vocabularies with a variety of acting styles. Introduction of the International Phonetic Alphabet and the General American accent. Offered Spring Only.
Equivalent course: THA320

THA 316
SCRIPT ANALYSIS
3, 3/0
Prerequisites: THA 106 or THA 216 and CWP 102. Analysis of dramatic works for structure, theme and style. Offered Fall Only.

THA 317
THEATRE HISTORY: ANCIENT TO BAROQUE
3, 3/0; WC14
Origins and development of physical theater and theater literature from the ancient period to the baroque period; its function in society and its historical context in both Western and global civilizations. Students examine how theater as an art form is a reflection of or reaction to the socioeconomic, scientific, political, philosophical, and other artistic forms of its surroundings. Students attend live performance. Offered Fall Only.
Equivalent course: THA317W

THA 318
THEATER HISTORY: BAROQUE TO MODERN
3, 3/0; WC1F
Prerequisites: Majors Only and THA 106 or THA 216. The origins and development of physical theater and theater literature from the baroque period to contemporary theater; its function in society and its historical context in both Western and global civilizations. Students read plays and examine how theater as an art form is a reflection of or reaction to the socioeconomic, scientific, political, philosophical, and other artistic forms of its surroundings. Students attend live performances. Offered Spring Only.

THA 325
THE BUSINESS OF PERFORMING ARTS
3, 3/0
Prerequisites: THA 106 or THA 216 or Instructor Permission. Comprehensive overview of the numerous aspects of business relating to the performing arts of drama, dance and music. Offered Fall Only.
Equivalent course: PAR325

THA 327
ACTING III: STYLES
3, 2/2
Prerequisites: THA 227 or Audition. 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. Offered Fall Only.

THA 328
VOICE ACTING FOR ANIMATION AND VIDEO GAMES
3, 2/1
Prerequisites: THA 200 and THA 226. A studio class focusing on voice acting, developing vocal quality and characterization for a variety of genre and media.

THA 329
ACTING IV: SOLO SHOW
3, 2/2
Prerequisite: THA 327 and THA 350, or Instructor Permission. Advanced acting course involving the creation and performance of solo work. Students apply previous theater training in script analysis, directing, rehearsal practices and performance. Offered Occasionally.

THA 330
THEATER PRACTICUM III
1, 0/3
Prerequisite: THA 231. Laboratory experience as a crew leader for a departmental theater production. Offered Every Semester.

THA 331
THEATER PRACTICUM IV
1, 0/3
Prerequisite: THA 330. Laboratory experience in the student's area of specialization for a departmental theater production. Offered Every Semester.

THA 332
PERIOD STYLES FOR THE THEATER
3, 3/0; WC14
Prerequisite: Junior or Senior status. A survey of style from early civilization to the present day. Students identify and describe characteristics of architecture and fashion from a variety of viewpoints. From Ancient Egypt through the 20th century visual information is evaluated based on historical roots and evolution. The course provides the vocabulary and identification of period style necessary to examine and evaluate the translation of a period style to the stage or screen. Offered Every Semester.
Equivalent course: THA315

THA 333
SCENE PAINTING
3, 2/2
Prerequisite: College-level arts course or upper-division status. Basic scene-painting techniques applicable to theater, film, and video production; hands-on exploration; creating full-scale painted scenery from scaled drawings; paint mixing; faux finishes, including marble, wood grain, brick, and stone; and specialty paint finishes. Offered Occasionally.

THA 334
COSTUME CONSTRUCTION II
3, 2/2
Prerequisite: THA 235. Continuation of Costume Construction I. Advanced costuming techniques emphasizing dyeing, painting, footwear/hosiery, undergarments, accessories, and hat and wig
construction as they apply to theater, dance, opera, film, and television. Offered Occasionally.

THA 335
COSTUME DESIGN FOR THEATER  
3, 2/2  
Prerequisites: THA 234 or Instructor Permission. Introduction to costume design for a variety of period and contemporary genres; script analysis, design theory, historical research, rendering skills, fabric selections. Offered Alternate Years.  
Equivalent course: THA311

THA 336
LIGHTING TECHNIQUES  
3, 2/2  
Prerequisite: THA 234 or Instructor Permission. 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. Offered Alternate Years.  
Equivalent course: DES318

THA 337
SET DESIGN I  
3, 2/2  
Prerequisite: THA 234 or Instructor Permission. 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. Offered Alternate Years.  
Equivalent course: DES317

THA 338
DIGITAL DESIGN MEDIA FOR THEATER  
3, 3/0  
Prerequisites: Instructor Permission. Introduction to fundamental skills in area current area-specific software programs for the realization and presentation of theatrical designs. Offered Alternate Years.

THA 340
PLAYWRITING  
3, 3/0  
Prerequisite: THA 316W or Instructor Permission. Students will use research, script analysis and writing skills to develop and refine the script for a stage or screenplay. Offered Spring Only.  
Equivalent courses: ENG340, THA319, THA340W

THA 345
STAGE COMBAT II  
3, 2/1  
Prerequisite: THA 245 Stage Combat I or Instructor Permission. The study of weapon specific stage combat techniques, performing choreographed fight scenes with the single weapon. This is the second of three courses required for Society of American Fight Directors Actor/Combatant certification.

THA 346
STAGE COMBAT III  
3, 2/1  
Prerequisite: THA 345 Stage Combat II or Instructor Permission. Multiple weapon Stage Combat techniques with an emphasis on choreography and application for stage and screen. This is the Third of three courses required for Society of American Fight Directors Actor/Combatant certification.

THA 350
DIRECTING I  
3, 3/0  
Prerequisites: THA 316W and THA 227 or THA 234, or Instructor Permission. Examination of the theater director's craft and responsibilities through lecture and hands-on projects. Offered Fall Only.

THA 370
STAGE MAKEUP  
3, 3/0  
Prerequisite: THA 234 or Instructor Permission. Principles and techniques of theatrical makeup application and design. Offered Alternate Years.

THA 400
VOICE AND MOVEMENT III  
3, 2/2  
Prerequisite: THA 300. Advanced study of physical, vocal and phonetic skills as they apply to stage and screen. Offered Spring Only.  
Equivalent course: THA322

THA 416
SEMINAR IN THEATER ARTS  
1, 1/0  
Prerequisite: 24 credits in THA with Senior status or Instructor Permission. Development of skills including defining professional and personal goals, sharpening of critical capacities, and creating and sharing a portfolio or audition presentation. Offered Fall Only.

THA 418
CREATIVE DRAMATICS  
3, 3/0  
Prerequisite: Instructor Permission. History, philosophy, methods, and materials of informal playmaking with children; observation and participation. Offered Alternate Years.

THA 421
BLACK DRAMA IN AMERICA  
3, 3/0  
Thematic and technical development of black American drama. Offered Occasionally.

THA 426
ADVANCED ACTING  
3, 3/0  
Prerequisite: THA 327. Styles, periods, and methods of acting. Offered Occasionally.

THA 435
COSTUME DESIGN II  
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. Offered Occasionally.  
Equivalent course: THA411

THA 437
SET DESIGN II  
3, 2/2  
Prerequisites: DES 318/THA 337 or permission of instructor. Continuation of DES 318/THA 337. Intensive exploration of advanced set-design techniques; continued development of set design skills, with concentration on different performance venues, model building techniques, portfolio-quality work, and presentation styles; advanced scenic considerations with the limits of budget, stage space, and technical support. Offered Occasionally.

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. Offered Spring Only.

THA 470
ENSEMBLE THEATER  
1-3, 3-9/0  
Prerequisite: Audition. Examination of ensemble theatrical production through preparation and performance of plays. Offered Every Semester.  
Equivalent course: THA407

THA 488
INTERNSHIP  
1-12, 0/0  
Prerequisites: Upper-division status and permission of instructor. Supervised field experience in a professional setting for students who have completed extensive academic preparation in the discipline; 50 hours of fieldwork in theater per credit. Offered Every Semester.
**THA 495**  
SPECIAL PROJECT  
1-3, 0/0  
Offered Every Semester.

**THA 499**  
INDEPENDENT STUDY  
3-12, 0/0  
Offered Every Semester.

---

**UNC - UNIVERSITY COLLEGE**

**UNC 100**  
MASTERING THE ACADEMIC ENVIRONMENT  
3, 3/0  
Strategies and skills for academic success at Buffalo State. Overview of the structure and benefits of a liberal arts education. Introduction to critical thinking. Application of critical thinking skills to various dimensions of college life to develop skills and increase likelihood of success.  
Equivalent courses: SPF207, INS207

**UNC 101**  
LEARNING COMMUNITY INTEGRATED HOUR  
1, 1/0  
Integral aspect of each learning community; provides students the framework to see connections among seemingly disparate courses and to make connections across disciplines. Faculty and students explore the theme of the learning community, integrate course material, and relate both to their lives outside of the classroom.  
Equivalent course: INS101

**UNC 111**  
CAREER PLANNING IN THEORY AND PRACTICE  
1, 1/0  
Multiple theories of career decision making processes. Includes lecture, discussion, and small-group activities. Students construct long-and short-term goals to assist them in the career-planning process.

**UNC 120**  
READING AND STUDY STRATEGIES  
1-3, 1-3/0  
Competency-based course designed to improve students' college reading and study skills. Includes lecture and laboratory work.  
Equivalent course: INS120

**UNC 150**  
ADVANCED READING AND STUDY STRATEGIES  
3, 3/0  
Strategies for effective learning; study, note-taking, and examination strategies; time management; preparing research papers.  
Equivalent course: EDU150

**UNC 189**  
TOPIC COURSE  
1-9, 0/0  
TOPIC COURSE

---

**WGS - WOMEN AND GENDER STUDIES**

**WGS 101**  
INTRODUCTION TO WOMEN AND GENDER STUDIES  
3, 3/0; DI14  
Prerequisites: None. Gender as a social construction that influences women and men and intersects with other social categories. Introduction to feminist theories. How gender affects childhood experiences, education, employment, family, bodies, and violence. Portrayal of gender in art, literature, and media. Gender in the social and natural sciences. Current issues related to women and gender. Offered Every Semester.

**WGS 212**  
FEMINIST THEORY  
3, 3/0  
Background in feminist social theory and changes in feminism over time. Introduction to theoretical analysis from a feminist perspective. Offered Every Semester.

**Equivalent course:** SOC212

**WGS 488**  
INTERNSHIP  
1-12, 3/0  
Prerequisite: Approval of the faculty supervisor. Supervised field experience in a variety of settings to supplement classroom instruction. Offered Every Semester.

**WGS 495**  
SPECIAL PROJECT  
1-3, 0/0  
Prerequisite: Faculty supervisor permission. Research conducted under the supervision of a faculty member. Offered Every Semester.

**WGS 499**  
INDEPENDENT STUDY  
3-12, 0/0  
Prerequisite: Faculty adviser permission. Offered Every Semester.
ADMINISTRATION

SUNY Buffalo State College Council

Howard A. Zemsky, Chair
James Brandys, '71,'73
Tod W. Brason, '85
Melissa Brinson
Gary M. Brost
Linda A. Dobmeier, '71
Myloius A. Hairston, '86
Charles J. Naughton, '85
Robert M. Zak
Muhammed S. Sumbundu , '13, '15, Student Representative

SUNY Buffalo State Administration
Katherine Conway-Turner, President
Ph.D.
Dennis K. Ponton, Ph.D
Susan P. Bair, P.E.D.

Karen A. Clinton Jones, Ph.D
Bonita R. Durand, Ph.D.
( Vacant )
Michael LeVine, M.B.A.

Hal D. Payne, J.D.
Benjamin C. Christy, A.Mus.D.
Scott L. Johnson, Ph.D.
Wendy Paterson, Ph.D.
Kevin J. Railey, Ph.D.
Mark W. Severson, Ph.D.

Rita M. Zientek, Ph.D.

State University of New York - Board of Trustees
H. Carl McCall, Chair
Jossepoh W. Belluck
Eric Corngold

Henrik N. Dulle
Ronald G. Ehrenberg
Angelo M. Fatta
Tina Good
Peter Knuepfer
Eunice A. Lewin
Marshall A. Lichtman
Lori Mould
John L. Murad, Jr.
Linda S. Sanford
Richard Socarides
Carl Spielvogel
Cary F. Staller
Lawrence Walman

System Administration - Chancellor's Cabinet

Nancy L. Zimpher, Chancellor

Elizabeth L. Bringsjord, Interim Provost and Executive Vice Chancellor

William F. Howard, Senior Vice Chancellor for Executive Leadership Development & General Counsel

James J. Malatras, Vice Chancellor for Policy & Chief of Staff

Robert Haelen, Interim Chief Financial Officer, Vice Chancellor for Capital Facilities, & General Manager of the Construction Fund

Kaitlin Gambrill, Associate Vice Chancellor for Academic Operations

Stacey Hengsterman, Associate Vice Chancellor for Government Relations

Jennifer LoTurco, Assistant Vice Chancellor for External Affairs

Sandra Casey, Deputy General Counsel

David Doyle, Assistant Vice Chancellor for Communications

Johanna Duncan-Poitier, Senior Vice Chancellor for Community Colleges and the Education Pipeline
Tina Good, President, Faculty Council of Community Colleges

Timothy Killeen, Vice Chancellor for Research & President of the Research Foundation

Peter Knuepfer, University Faculty Senate President

Jason Lane, Senior Associate Vice Chancellor and Vice Provost for Academic Affairs

Lora Lefebvre, Associate Vice Chancellor and Vice Provost for Health Affairs

Curtis L. Lloyd, Vice Chancellor for Human Resources

Carlos Medina, Chief Diversity Officer and Senior Associate Vice Chancellor for Diversity, Equity and Inclusion

Joel Pierre-Louis, Secretary of the University

Lori Mould
President, Student Assembly
SUNY Distinguished Teaching Professors
Andrea Guiati, Ph.D., Muriel A. Howard Honors Program Director, Modern and Classical Languages Department (2009)

Date indicates year award received.

SUNY Distinguished Service Professors
David A. Carson, Ph.D., History and Social Studies Education Department (2010)

Date indicates year award received.

SUNY Distinguished Professors
Ann C. Colley, Ph.D., English Department (2009)

Date indicates year award received.

Anthropology Department
Lisa Marie Anselmi, Ph.D., University of Toronto, Chair and Associate Professor (2004)
Lydia M. Fish, Ph.D., Indiana University, Professor (1967)
Dennis L. Gaffin, Ph.D., University at Buffalo, Professor (1989)
Kimberly L. Hart, Ph.D., Indiana University, Associate Professor (2007)
Susan E. Maguire, Ph.D., University at Buffalo, Assistant Professor (2004)
Julie A. Wieczkowski, Ph.D., University of Georgia, Associate Professor (2008)

Art Conservation Department
Patrick C. Ravines, M.L.S., Columbia University, Director and Associate Professor (2010)
Jiuian Jiuian Chen, C.A.S., SUNY Buffalo State, Assistant Professor (2012)
James F. Hamm, M.A., SUNY Oneonta, Professor (1986)
Rebecca Ploeger, Ph.D., Università degli Studi di Napoli Federico, Assistant Professor (2014)
Aaron N. Shugar, Ph.D., University College London, Andrew W. Mellon Professorship (2006)
Jonathan L. Thornton, M.A., SUNY Oneonta, Professor (1983)
Judith C. Walsh, M.A., SUNY Oneonta, Professor (2005)

Art Education Department
Michael E. Parks, Ed.D., Ball State University, Chair and Professor (1981)
Lucy Andrus, M.S.Ed., SUNY Buffalo State, Professor (1982)
Michelle S. Bae, Ph.D., University of Illinois, Assistant Professor (2010)

SUNY Distinguished Teaching Professors
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)
Candace P. Masters, M.F.A., Catholic University of America, Associate Professor (2008)
Alice C. Pennisi, Ed.D., Teachers College-Columbia University, Associate Professor (2005)
Joseph R. Piccillo, M.S., SUNY Buffalo State, Professor (1967)
John F. Siskar, Ph.D., University at Buffalo, Associate Professor and Director, Center for Excellence in Urban and Rural Education (1992)

Biology Department
I. Martha Skerrett, Ph.D., Flinders University, Chair and Associate Professor (2005)
Douglas P. Easton, Ph.D., University of Iowa, Professor (1977)
Amy M. McMillan, Ph.D., University of Kansas, Associate Professor (2003)
Christopher M. Pennuto, Ph.D., University of Kansas, Professor (2003)
Alicia Perez-Fuentetaja, Ph.D., College of Environmental Sciences, Associate Professor (2006)
Gary W. Pettibone, Ph.D., Bowling Green State University, Professor (1986)
Daniel L. Potts, Ph.D., University of Arizona, Associate Professor (2007)
Howard P. Riessen, Ph.D., Yale University, Professor (1988)
Randal J. Snyder, Ph.D., University of California, Davis, Professor (1990)
Edward A. Stadnora, Ph.D., University of Georgia, Professor (1985)
Gregory J. Wadsworth, Ph.D., North Carolina State University, Associate Professor (1992)
Robert J. Warren II, Ph.D., University of Georgia, Assistant Professor (2012)
Thomas D. White, Ph.D., University of California, Los Angeles, Professor (1991)

Business Department
Michael J. Littman, Ph.D., Ohio State University, Chair and Associate Professor (1986)
Soloehidi O.L. Ahiarah, Ph.D., University of Pittsburgh, Associate Professor (1990)
John L. DeNisco, M.B.A., Canisius College, Associate Professor (1982)
Daniel E. Gaygen, Ph.D., University at Buffalo, Assistant Professor (2009)
Uma G. Gupta, Ph.D., University of Central Florida, Professor (2007)
Joseph M. Kelly, J.D., Northern Illinois University, Professor (1990)
Christine A. Lai, Ph.D., University at Buffalo, Associate Professor (2007)
Edward J. Marecki, M.S., Canisius College, Lecturer (2005)
S. Diane McFarland, Ph.D., University at Buffalo, Associate Professor (2002)
Daniel S. Ricigliano, M.B.A., University at Buffalo, Assistant Professor (1979)
Benjamin D. Sackmary, Ph.D., University of Massachusetts, Professor (1988)
 Lynne M. Scalia, M.B.A., Niagara University, Associate Professor (1983)

**Career and Technical Education**

N. John Popovich, Ed.D., Wayne State University, Chair and Associate Professor (1974)

**Center for Excellence in Urban and Rural Education**

John F. Siskar, Ph.D., University at Buffalo, Director and Associate Professor (1992)
Kathy L. Wood, Ph.D., University at Buffalo, Associate Professor and Associate Dean, School of Education (2001)

**Center for Health and Social Research**

William F. Wieczorek, Ph.D., University at Buffalo, Director and Associate Professor, SUNY Chancellor’s Award for Excellence in Scholarship and Creative Activities (1997)

**Chemistry Department**

M. Scott Goodman, Ph.D., Arizona State University, Chair and Associate Professor (1996)
Zeki Al-Saigh, Ph.D., University of Birmingham, Professor (2002)
Kimberly A. Bagley, Ph.D., University of Illinois, Professor (1993)
William S. Durfee, Ph.D., Case Western Reserve University, Professor (1995)
Gregory W. Ebert, Ph.D., University of Nebraska, Professor (1985)
Jinseok Heo, Ph.D., Texas A & M University, Assistant Professor (2009)
Joonyeong Kim, Ph.D., Texas A & M University, Associate Professor (2005)
Alexander Y. Nazarenko, Ph.D., Kiev State University, Associate Professor (2000)
Maria D. Pacheco, Ph.D., University of Puerto Rico, Associate Professor (1985)
Douglas A. Ridolfi, M.S., San Francisco State University, Coordinator of Forensic Chemistry (2012)
Mark W. Severson, Ph.D., University of Minnesota, Professor and Dean, School of Natural and Social Sciences (2008)

**Coaching and Physical Education**

Stephen E. Schwartz, Ph.D., Ohio State University, Professor (1974)

**Communication Department**

Joseph J. Marren Jr., M.A., St. Bonaventure University, Chair and Associate Professor (1997)
Bruce G. Bryski, Ph.D., Pennsylvania State University, Associate Professor (1983)
Paul J. DeWald, M.A., University at Buffalo, Associate Professor (1967)
Annemarie Franczyk, Ed.D., D'Youville College, Associate Professor (1992)
Ruth B. Goldman, M.F.A., University at Buffalo, Assistant Professor (2013)
Jack V. Karlis, Ph.D., University of South Carolina Union, Assistant Professor (2013)
Marguerite E. Knowles, M.F.A., Temple University, Associate Professor (2006)

**Computer Information Systems Department**

William Lin, Ph.D., University at Buffalo, Chair and Associate Professor (1984)
Sarbani Banerjee, Ph.D., University at Buffalo, Associate Professor (2000)
Robert A. Barone, Ph.D., University at Buffalo, Associate Professor (2000)
Michael P. Barry, M.S., Nova Southeastern University, Lecturer (2002)
John T. Favata, Ph.D., University at Buffalo, Associate Professor (1997)
Steven E. Gareau, Ph.D., Mississippi State University, Professor (2005)
Ruth X. Guo, Ph.D., University of British Columbia, Associate Professor (2007)
Neal M. Mazur, Ph.D., Arizona State University, Associate Professor (2002)
Ramona R. Santa Maria, Ph.D., University at Buffalo, Assistant Professor (1999)
Barbara A. Sherman, Ph.D., University at Buffalo, Associate Professor (2007)

**Criminal Justice Department**

Michael A. Cretacci, Ph.D., University at Albany, Chair and Associate Professor (2006)
Jill M. D’Angelo, Ph.D., American University, Associate Professor (2007)
Shashi M. Gayadeen, Ph.D., University at Buffalo, Assistant Professor (2005)
James R. Gillham, Ph.D., University of Illinois, Professor (1977)
Scott L. Johnson, Ph.D., Pennsylvania State University, Associate Professor and Dean, University College (1994)
Dae-Young Kim, Ph.D., University of Nebraska, Assistant Professor (2012)
Melissa A. Menasco, Ph.D., University at Buffalo, Assistant Professor (2013)
Scott W. Phillips, Ph.D., University at Albany, Associate Professor (2001)
James J. Sobol, Ph.D., University at Albany, Associate Professor (2008)
John H. L. Song, Ph.D., University of California, Irvine, Professor (1988)
Elizabeth Szockyj, Ph.D., University of California, Irvine, Associate Professor (1991)
JawJeong Wu, Ph.D., University of Nebraska, Assistant Professor (2009)

**Design Department**

Jorg Schnier, M.A., Dresden University of Technology, Chair and Associate Professor (2002)
Jozef Bajus, M.F.A., Academy of Fine Arts and Design, Bratislava (Slovakia), Associate Professor (2002)
Stanley K. Friesen, M.F.A., Fort Hays State University, Associate Professor (2000)
Sun Hwa Kim, M.F.A., Savannah College of Art and Design, Associate Professor (2008)
Tara J. Nahabetian, M.F.A., Kent State University, Associate Professor (2002)
Brent D. Patterson, M.F.A., Washington State University, Assistant Professor (2013)
Richard J. Ross, M.F.A., University of Connecticut, Associate Professor (1995)
Stephen F. Saracino, M.F.A., Kent State University, Professor (1981)
Colleen Toledano, M.F.A., Ohio University, Assistant Professor (2013)
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, Associate Professor (1997)
Carol A. DeNysse, Ph.D., University at Buffalo, Associate Professor (2008)
Marie M. Murray, M.S., Emory University, Lecturer (2012)
Dennis K. Ponton, Ph.D., West Virginia University, Professor and Provost of SUNY Buffalo State (1977)
Tejaswini Rao, Ph.D., Pennsylvania State University, Associate Professor and Didactic Program Director (1976)

Earth Sciences and Science Education Department
Gary S. Solar, Ph.D., University of Maryland, Chair and Associate Professor, SUNY Chancellor's Award for Excellence in Teaching (2000)
Richard J. Batt, Ph.D., University of Colorado, Associate Professor (1989)
Elisa T. Bergslien, Ph.D., University at Buffalo, Associate Professor (2002)
Robin Lee Harris, Ph.D., University of Iowa, Associate Professor (1997)
Catherine Lange, Ph.D., University at Buffalo, Associate Professor (2007)
Bettina Martinez-Hackett, Ph.D., University at Buffalo, Assistant Professor (2004)
Jude S. Sabato, Ph.D., University of Chicago, Assistant Professor (2008)
Jill K. Singer, Ph.D., Rice University, Professor and Director of Undergraduate Research, SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities (1986)
Kevin K. Williams, Ph.D., Arizona State University, Associate Professor (2006)
Joseph L. Zawicki, Ph.D., University at Buffalo, Associate Professor (2002)

Economics and Finance Department
Theodore F. Byrley, Ph.D., University of Cincinnati, Chair and Associate Professor, SUNY Chancellor’s Award for Excellence in Teaching (1984)
Susan M. Davis, Ph.D., New School for Social Research, Associate Professor (1985)
Bruce L. Fisher, J.D., University at Buffalo, Visiting Professor and Director, Center for Economic and Policy Studies (2008)
Frederick G. Floss, Ph.D., University at Buffalo, Professor (1983)
William T. Ganley, Ph.D., University of California, Berkeley, Professor (1972)
Curtis Haynes Jr., Ph.D., University of Massachusetts, Associate Professor (1993)
Tae-Hee Jo, Ph.D., University of Missouri, Associate Professor (2007)
Victor Kasper Jr., Ph.D., Rutgers University, Associate Professor (2001)
Yung M. Kim, J.D./Ph.D., University at Buffalo, Professor (1968)
Joelle J. Leclaire, Ph.D., University of Missouri, Associate Professor (2004)
Xingwang Qian, Ph.D., University of California, Santa Cruz, Associate Professor (2008)

Ted P. Schmidt, Ph.D., University of California, Riverside, Associate Professor (1990)

E. H. Butler Library
Mary Ruth F. Glogowski, M.L.S., University at Buffalo, Librarian and Associate Vice President for Library and Instructional Technology (1975)
Marc D. Bayer, M.L.S., University at Buffalo, Associate Librarian (2007)
Katherine S. Bertel, M.L.S., University at Buffalo, Senior Assistant Librarian (2013)
Donna J. Davidoff, M.L.S., University at Buffalo, Associate Librarian and Assistant Director, Information Commons (1987)
Daniel M. Dilandro, M.L.S., SUNY Buffalo State, Associate Librarian and College Archivist (2006)
Jeremy J. Floyd, M.L.S., Indiana University, Senior Assistant Librarian and Processing Archivist (2013)
Marianne Foley, M.L.S., University at Southern California, Associate Librarian (2001)
Ken Fujiiuchi, M.L.S., University at Buffalo, Associate Librarian (2005)
Leah M. Galka, M.L.S., Syracuse University, Senior Assistant Librarian (2013)
Eugene J. Harvey, M.L.S., University at Buffalo, Senior Assistant Librarian (2012)
Constance C. Hsu, M.L.S., Emporia State University, Associate Librarian (1966)
Maureen A. Lindstrom, M.L.S., University at Buffalo, Librarian and Associate Director, Information Commons, SUNY Chancellor’s Award for Excellence in Librarianship (1986)
Marianne D. Muha, M.L.S., University at Buffalo, Associate Librarian (2001)
Amy D. Rockwell, M.L.S., University at Buffalo, Associate Librarian (1986)
Wanda M. Slawinska, M.L.S., Syracuse University, Associate Librarian (1973)

Elementary Education and Reading Department
Nancy A. Chicola, Ph.D., University of Colorado, Chair and Associate Professor (2000)
Rosemary Arioli M.S., SUNY Brockport, Lecturer (1999)
Maria A. Ceprano, Ph.D., University at Buffalo, Professor (1997)
Mary C. Cummings, M.A., University of Redlands, Lecturer (2006)
Pixita M. del Prado Hill, Ed.D., Harvard University, Associate Professor (1999)
Carla M. DiChristina, M.S., SUNY Buffalo State, Lecturer (1999)
Ellen S. Friedland, Ph.D., University at Buffalo, Associate Professor (1999)
Keli A. Garas-York, Ph.D., University at Buffalo, Associate Professor (2006)
David R. Henry, Ph.D., University at Buffalo, Associate Professor (1999)
Jevon D. Hunter, Ph.D., University of California, Los Angeles, Assistant Professor (2010)
Laura J. Klenk, Ph.D., University of Michigan, Assistant Professor (2009)
Peter W. Loehr, Ph.D., Kent State University, Associate Professor (1996)
Dianne S. McCarthy, Ed.D., University at Buffalo, Associate Professor (2005)
Wendy McLeish, M.S.Ed., Wheelock College, Lecturer (2001)
Nanci M. Monaco, Ph.D., University at Buffalo, Associate Professor (2000)
Hibajene Shandomo, Ph.D., Andrews University, Associate Professor (2000)
Christopher T. Shively, Ph.D., University at Buffalo, Assistant Professor (2001)
Coralee S. Smith, Ph.D., *University of Missouri*, Associate Professor (1999)
Jing Zhang, Ph.D., *University of Toronto*, Assistant Professor (2010)

**Engineering Technology Department**
James Mayrose, Ph.D., *University at Buffalo*, Chair and Associate Professor (1999)
D. Steven Barker, Ph.D., *University at Buffalo*, Associate Professor (1995)
Mohan S. Devgun, Ph.D., *Birmingham University*, Professor (1990)
John J. Earshen, Ph.D., *University at Buffalo*, Associate Professor (1980)
Slade Gellin, Ph.D., *Harvard University*, Professor (1999)
Stephanie R. Goldberg, Ph.D., *University at Buffalo*, Professor (1990)
David J. Kukulka, Ph.D., *University at Buffalo*, Professor (1982)
James M. Shea, M.S.Ed., *SUNY Buffalo State*, Associate Professor (1967)
Richard A. Stempien, Ph.D., *University at Buffalo*, Associate Professor (1974)

**English Department**
Lorna L. Perez, Ph.D., *University at Buffalo*, Acting Chair and Associate Professor (2008)
Barish Ali, Ph.D., *University at Buffalo*, Assistant Professor (2006)
Lisa Berglund, Ph.D., *University of Virginia*, Interim Associate Dean for the School of Arts and Humanities, and Professor (2001)
Timothy J. Bryant, Ph.D., *University at Buffalo*, Assistant Professor (2011)
James E. Cercone, Ph.D., *University at Buffalo*, Assistant Professor and Coordinator of English Education (2011)
Ann C. Colley, Ph.D., *University of Chicago*, SUNY Distinguished Professor (1985)
Adrienne M. Costello, Ph.D., *University at Buffalo*, Associate Professor (2006)
Heidi E. Dietz Faletti, Ph.D., *University of California, Berkeley*, Associate Professor (1984)
Mark K. Fulk, Ph.D., *Miami University of Ohio*, Associate Professor (2001)
Theresa A. Harris-Tigg, Ph.D., *University at Buffalo*, Assistant Professor (2006)
Michele Ninacs, Ph.D., *Indiana University*, Assistant Professor and Writing Program Director (2001)
Kevin Railey, Ph.D., *SUNY Stony Brook*, Professor and Associate Provost and Dean, Graduate School, SUNY Chancellor’s Award for Excellence in Scholarship and Creative Activities (1991)
Peter J. Ramos, Ph.D., *University at Buffalo*, Associate Professor (2005)
Jennifer D. Ryan, Ph.D., *University of Iowa*, Associate Professor (2005)
Karen Sands-O’Connor, Ph.D., *University of Wales*, Professor (1997)
Aimable Twagilimana, Ph.D., *University at Buffalo*, Professor (1995)
Ralph L. Wahlstrom, Ph.D., *Michigan Technological University*, Professor (1997)

**Exceptional Education Department**
Shannon E. Budin, Ph.D., *Pennsylvania State University*, Associate Professor (2005)
Warren L. Gleckel, Ph.D., *Syracuse University*, Associate Professor (1975)
Theresa M. Janczak, Ph.D., *University at Buffalo*, Associate Professor (2005)
Lawrence J. Maheady, Ph.D., *University of Pittsburgh*, Horace Mann Endowed Chair (2013)
Michaeline M. Meger, Ph.D., *University at Buffalo*, Associate Professor (1993)
Angela L. Patti, Ph.D., *University at Buffalo*, Assistant Professor (2012)
David J. Pomerantz, Ph.D., *University of Illinois*, Associate Professor (1977)
Mark P. Poslusny, Ed.D., *University of Kentucky*, Associate Professor (1985)
Lisa A. Rafferty, Ph.D., *University at Buffalo*, Associate Professor (2007)
Sharon L. Raimondi, Ph.D., *American University*, Professor (1990)
Awilda Ramos Zagaririgo, Ph.D., *University at Buffalo*, Assistant Professor (2008)
Raquel J. Schmidt, Ph.D., *University at Buffalo*, Associate Professor (2001)
Krista M. Vince Garland, Ph.d., *University of Central Florida*, Assistant Professor (2012)
Jennifer M. Westover, Ph.D., *University of Oregon*, Assistant Professor (2010)

**Fine Arts Department**
Sylvia D. Bakos, Ph.D., *Rutgers University*, Associate Professor (1990)
Harriet Blitzer, Ph.D., *Indiana University*, Professor (1997)
Frances M. Gage, Ph.D., *Johns Hopkins University*, Assistant Professor (2008)
Sarah B. Hinderlitter, Ph.D., *Columbia University*, Assistant Professor (2008)

**Geography and Planning Department**
Kelly M. Frothingham, Ph.D., *University of Illinois*, Chair and Associate Professor (2000)
Camille A. Holmgren, Ph.D., *University of Arizona*, Associate Professor (2007)
Jason C. Knight, Ph.D., *University at Buffalo*, Assistant Professor (2011)
Wende A. Mix, Ph.D., *University at Buffalo*, Associate Professor (2004)
Tao Tang, Ph.D., *University of Wisconsin*, Associate Professor (1998)
Vida Vanchan, Ph.D., *University at Buffalo*, Associate Professor (2006)
William F. Wieczorek, Ph.D., *University at Buffalo*, Professor and Director, Center for Health and Social Research, SUNY Chancellor’s Award of Excellence in Scholarship (1997)

**Health and Wellness Department**


**Higher Education Administration**

Kimberly A. Kline, Ph.D., *Indiana University*, Chair and Associate Professor (2007)
Carmen M. McCallum, Ph.D., *University of Michigan*, Assistant Professor (2013)
Amy B. Wilson, Ph.D., *University at Buffalo*, Assistant Professor (2012)

**History and Social Studies Education Department**

Andrew D. Nicholls, Ph.D., *University of Guelph*, Chair and Professor (1996)
John D. Abromeit, Ph.D., *University of California, Berkeley*, Associate Professor (2009)
David A. Carson, Ph.D., *Texas Christian University*, Professor, SUNY Chancellor’s Award for Excellence in Teaching (1983)
Bridget M. Chesterton, Ph.D., *SUNY Stony Brook*, Associate Professor (2007)
Cynthia A. Conides, Ph.D., *Columbia University*, Associate Professor (2000)
Martin F. Ederer, Ph.D., *University at Buffalo*, Associate Professor (1998)
Christianna D. Fryar, Ph.D., *Princeton University*, Assistant Professor (2013)
Jill M. Gradwell, Ph.D., *University at Buffalo*, Associate Professor (2004)
Michael C. Lazich, Ph.D., *University at Buffalo*, Associate Professor (1997)
Kenneth S. Mernitz, Ph.D., *University of Missouri*, Associate Professor (1985)
Albert L. Michaels, Ph.D., *University of Pennsylvania*, Professor (2009)
William I. Mitchell, Ph.D., *University of Missouri*, Associate Professor (1991)
York A. Norman, Ph.D., *Georgetown University*, Associate Professor (2007)
Misty D. Rodeheaver, Ed.D., *West Virginia University*, Assistant Professor (2010)

**Hospitality and Tourism Department**

Kevin F. Mulcahy, Ed.D., *University of California, Los Angeles*, Chair, Associate Professor (1992)
Rebecca Dowsey, M.S.Ed., *Niagara University*, Lecturer (2002)
Chenchen Huang, Ph.D., *University of Florida*, Associate Professor (2008)
Lori L. Till, Ed.D., *University at Buffalo*, Associate Professor (1985)

**Interior Design Department**

Jorg Schnier, M.A., *Dresden University of Technology*, Chair and Associate Professor (2002)

**International Center for Studies in Creativity**

Gerard J. Puccio, Ph.D., *University of Manchester*, Chair and Professor (1990)
Selcuk Acar, Ph.D., *University of Georgia*, Assistant Professor (2013)
Cynthia Burnett, Ph.D., *University of Toronto*, Assistant Professor (2000)
John F. Cabra, Ph.D., *University of Manchester*, Associate Professor (2005)

**Mathematics Department**

Hongliang Xu, Ph.D., *University at Buffalo*, Chair and Associate Professor (2009)
Saziye Bayram, Ph.D., *University at Buffalo*, Associate Professor (2006)
Valentin E. Brimkov, Ph.D., *University of Sofia*, Bulgaria, Professor (2005)
Joaquin O. Carbonara, Ph.D., *University of California, San Diego*, Professor (1992)
Daniel W. Cunningham, Ph.D., *University of California, Los Angeles*, Professor (1991)
Jane R. Cushman, Ph.D., *University of Texas at Austin*, Associate Professor (2006)
Chaitali Ghosh, Ph.D., *University at Buffalo*, Associate Professor (2000)
Tom M. Giambrone, Ed.D., *University at Buffalo*, Professor (1990)
Jodelle S. W. Magner, Ph.D., *University of Maryland*, Associate Professor (2000)
Lorena D. Mathien, M.B.A., *University at Buffalo*, Assistant Professor (2011)
Susan E. McMillen, Ph.D., *University at Buffalo*, Professor (2000)
Peter R. Mercer, Ph.D., *University of Toronto*, Professor (1997)
Robin Sue O’Dell, Ph.D., *University at Buffalo*, Associate Professor (2007)
Robin Sue Sanders, Ph.D., *University of Illinois*, Associate Professor (1997)
Bruce Q. Sun, Ph.D., *University of Pittsburgh*, Assistant Professor (2012)
Janine M. Viglietti, Ph.D., *University at Buffalo*, Assistant Professor (2012)
David C. Wilson, Ph.D., *University at Buffalo*, Associate Professor (2002)

**Modern and Classical Languages Department**

Michael Johnson, Ph.D., *University at Buffalo*, Interim Chair and Associate Professor, SUNY Chancellor’s Award for Excellence in Teaching (1975)
Andrea Guiati, Ph.D., *Rutgers University*, SUNY Distinguished Teaching Professor, Honors Program Director, SUNY Chancellor’s Award for Excellence in Teaching (1985)
Deborah L. Hovland, Ph.D., *University of Minnesota*, Associate Professor (1992)
Carol B. Kirby, Ph.D., *University of Kentucky*, Professor (1985)
Rafika Merini, Ph.D., *SUNY Binghamton*, Associate Professor (1990)
Raul F. Neira, Ph.D., University of Texas at Austin, Associate Professor (1991)
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 Professor (2005)
Ho Eui H. Bewlay, D.M.A., University of Rochester, Associate Professor (2005)
Emily W. Boyce, D.M.A., Eastman School of Music, Associate Professor (2003)
Benjamin C. Christy, A.Mus.D., University of Michigan, Professor and Dean, School of Arts and Humanities (2007)
Mark H. Filsinger, D.M.A., University of Rochester, Assistant Professor (2012)
Ricky L. Fleming, D.M.A., Florida State University, Associate Professor (2001)
Victoria J. Furby, Ph.D., Ohio State University, Associate Professor (2008)
Carolyn Guzski, Ph.D., City University of New York, Assistant Professor (2009)
J. Tomas Henriques, Ph.D., University at Buffalo, Associate Professor (2009)
Charles Mancuso, M.A., SUNY Buffalo State, Professor (1976)
Crystal H. Reinoso, D.M.A., University of Michigan at Ann Arbor, Professor (1989)
Thomas E. Wiatkowski, D.M.A., Indiana University, Associate Professor (1992)

Philosophy and Humanities Department
Kimberly A. Blessing, Ph.D., University at Buffalo, Chair and Professor (2004)
Julian C. Cole, Ph.D., Ohio State University, Associate Professor (2008)
John D. Draeger, Ph.D., Syracuse University, Associate Professor and Director, SoTL (2005)
Jason D. Grinnell, Ph.D, Bowling Green State University, Associate Professor (2007)

Physics Department
Michael J. DeMarco, Ph.D., University of Cincinnati, Chair and Professor (1981)
Dermot Coffey, Ph.D., University of Illinois, Associate Professor (2002)
David J. Ettestad, Ph.D., Cornell University, Associate Professor (1986)
Luanna S. Gomez, Ph.D., University of Washington, Assistant Professor (2007)
Daniel L. MacIsaac, Ph.D., Purdue University, Associate Professor (2002)
Ram C. Rai, Ph.D., University of Kentucky, Associate Professor (2007)

Political Science Department
Michael S. Pendleton, D.A., Idaho State University, Chair and Associate Professor (1979)
Kyeonghi Back, Ph.D., University of Mississippi, Associate Professor (2008)
Laurie A. Buonanno, Ph.D., Johns Hopkins University, Professor, SUNY Chancellor’s Award for Excellence in Teaching (2006)
Jyldyz Kasymova, Ph.D., Rutgers University, Assistant Professor (2013)
Patrick J. McGovern, Ph.D., University of Arizona, Associate Professor (2006)
Anthony T. Neal, Ph.D., Clark Atlanta University, Associate Professor (1988)

Psychology Department
Jill M. Norvilitis, Ph.D., Wayne State University, Chair and Professor, SUNY Chancellor’s Award for Excellence in Teaching (1997)
Robert P. Delpirno, Ph.D., Old Dominion University, Professor (1992)
Jean M. DiPirro, Ph.D., University at Buffalo, Associate Professor (1999)
Stephani M. Foraker, Ph.D., New York University, Associate Professor (2008)
Dwight A. Hennessy, Ph.D., York University, Associate Professor (2000)
Jennifer S. Hunt, Ph.D., University of Minnesota, Associate Professor (2007)
Jurgis Karuza Jr., Ph.D., Wayne State University, Professor (1978)
Michael G. MacLean, Ph.D., Arizona 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, SUNY Chancellor’s Award for Excellence in Faculty Service (1977)
Pamela Schuetze-Pizarro, Ph.D., Virginia Polytechnic Institute and State University, Professor (1996)
Michael J. Zborowski, Ph.D., Ohio University, Associate Professor (1991)

Social Work Department
Carolyn M. Hilarski, Ph.D., University at Buffalo, Chair and Professor (2006)
Christopher B. Aviles, Ph.D., University at Albany, Associate Professor (1985)
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, Associate Professor (1977)
Kimberley M. Zittel-Palamura, Ph.D., University at Buffalo, Associate Professor (2005)

Sociology Department
Eric J. Krieg, Ph.D., Simmons College, Chair and Associate Professor (1997)
Gerhard J. Falk, Ed.D., University at Buffalo, Professor, SUNY Chancellor’s Award for Excellence in Teaching (1957)
Lindsey A. Freeman, Ph.D., The New School, Assistant Professor (2013)
Rosalyn A. Lindner, Ph.D., University of Minnesota, Professor and Associate Vice President, Assessment and Curriculum (1974)
Staci Newmahr, Ph.D., SUNY Stony Brook, Associate Professor (2008)
Allen C. Shelton, Ph.D., University of Georgia, Associate Professor (1998)
Ron Stewart, Ph.D., Howard University, Professor (1990)
Amitra A. Wall, Ph.D., Texas Women’s University, Professor, SUNY Chancellor's Award for Excellence in Teaching (2000)
Thomas S. Weinberg, Ph.D., University of Connecticut, Professor, SUNY Chancellor’s Award for Excellence in Teaching (1969)
Gary S. Welborn, Ph.D., University at Buffalo, Associate Professor (1993)
Jie Zhang, Ph.D., Brigham Young University, Professor and Director, Center for China Studies, SUNY Chancellor’s Award for Excellence in Faculty Service (1997)

Speech-Language Pathology Department
Constance Dean Qualls, Ph.D., University of Memphis, Chair and Professor (2005)
Deborah M. Insalaco, Ph.D., University of Arizona, Associate Professor (2000)

Television and Film Arts Program
Jeffrey N. Hirschberg, M.A., Syracuse University, Associate Professor and Director (2006)

Theater Department
Donn M. Youngstrom, M.F.A., Brooklyn College, Chair and Associate Professor (1994)
Carol Y. Beckley, M.F.A., Southern Methodist University, Associate Professor (1994)
Ann R. Emo, M.F.A., New York University, Associate Professor (2006)
Joy A. Guarino, M.F.A., Temple University, Associate Professor (2004)
Carlos R. A. Jones, M.F.A., University of California, Irvine, Associate Professor (2007)
Drew J. Kahn, M.F.A., Southern Methodist University, Professor (2000)
Janet Reed, M.A., University at Buffalo, Associate Professor (1993)
Jennifer J. Toohey, M.F.A., Florida Atlantic University, Assistant Professor (2013)

Writing Program
Michele Ninacs, Ph.D., Indiana University of Pennsylvania, Director and Assistant Professor (2001)
Janice A. Carello, M.S.W., University at Buffalo, Lecturer (2007)
John M. McKinnis, M.A., University at Buffalo, Lecturer (1987)
Wendy Scott, M.A., University at Buffalo, Lecturer (1990)
This list is compiled from records of the SUNY Buffalo State Human Resource Management Office and was current as of June 2014.

**SUNY Chancellor’s Awards for Excellence in Professional Service Recipients**

**Date indicates year award received.**

Roswell Park IV, Ph.D. (1981)
Steven E. Shaffer, M.A. (1996)
Daniel C. Velez, Ph.D. (1999)

**Date indicates year hired at Buffalo State.**

David S. Abbott, Ph.D., North Carolina State University, Instructional Support Specialist, Physics Department (2006)
Josephine P. Adamo, M.Ed., University at Buffalo, Coordinator, First-Year Development Initiative, University College (1995)
Patricia A. Alessandrello, B.A., SUNY Buffalo State, Senior Staff Associate, Academic Affairs Office (1991)
Jon M. Alessandrino, B.S., SUNY Institute of Technology, Lead Programmer/Analyst (UNIX), Information Technology Exchange Center (2008)
David P. Alessi, Manager, Payroll Office (1998)
Ashley S. Allen, B.S., SUNY Buffalo State, Assistant for Mandated Programs, Weigel Health Center (2007)
Daniel C. Allen, B.S., SUNY Geneseo, Head Swimming and Diving Coach, Intercollegiate Athletics (2010)
Alla Andelman, P.S.Y.D., Nova Southeastern University, Psychologist, Counseling Center (2013)
Fajir 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)
Christine M. Auman, M.S., SUNY Buffalo State, Assistant Director, Financial Aid Office (2006)
Phillip Auman, M.S., SUNY Buffalo State, Senior Career Counselor, Career Development Center (1999)
Karen E. Bailey-Jones, M.A., University at Buffalo, Clinic Director, Speech-Language Pathology (1992)

Anthony L. Bannon, Ph.D., University at Buffalo, Director, Burchfield Penney Art Center (2012)
Paul J. Bardak, Senior Programmer/Analyst, Information Technology Exchange Center (1986)
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 Technology Technician, Instructional Resources (2001)
Robert L. Baumer, M.S.Ed., SUNY Buffalo State, Director, Accounts Payable and Travel Services (1991)
Mark T. Bausili, M.S., SUNY Buffalo State, Registrar, Registrar's Office (1985)
Clifford Bell, Senior Business Advisor, Small Business Development Center (1996)
Stefan E. Belliveau, M.A., University at Buffalo, Data Research Analyst, Institutional Advancement Office (2013)
William J. Benfanti, M.A., University of Maryland, Associate Vice President for Government Relations, Institutional Advancement Office (2007)
Elizabeth M. Benson, M.S., Niagara University, Assistant to the Vice President, Institutional Advancement Office (2008)
Todd R. Benzin, B.A., Canisius College, Classroom Technology Supervisor, Instructional Resources (2007)
Sherrie H. Bernat, D.N.S., University at Buffalo, Nurse Practitioner, Weigel Health Center (1989)
Ginger M. Bidell, M.A., SUNY Buffalo State, Instructional Designer, Instructional Resources (2013)
Terence D. Bitka, M.S., SUNY Buffalo State, Assistant Football Coach, Intercollegiate Athletics (1992)
Daniel S. Blachaniece, B.S., SUNY Buffalo State, Assistant Director, Systems Administration, Computing and Technology Services (1994)
John P. Bleech, B.S., University at Buffalo, Environmental Programs Coordinator, Environmental Health and Safety (2007)
Josh S. Blumberg, B.S., SUNY Buffalo State, General Manager, Campus House, Hospitality and Tourism Department (2002)
Marie E. Bogner, M.L.S., University at Buffalo, General Manager, Campus House, Campus Dining (2009)
Michelle J. Bonn, B.P.S., University at Buffalo, Visual Resources Librarian, Cultural Collections (2004)
Michael V. Bonfante, B.P.S., University at Buffalo, Facilities Project Manager, Facilities Planning (2010)
Michelle J. Bonn, B.P.S., University at Buffalo, Facilities Project Manager, Facilities Planning (2010)
Michelle J. Bonn, B.P.S., University at Buffalo, Facilities Project Manager, Facilities Planning (2010)
Barbara A. Boquard, M.S., SUNY Buffalo State, Assistant to the Dean, School of Natural and Social Sciences (1990)
Lauren A. Bostaph, M.A., SUNY Buffalo State, Staff Assistant, Campus Services (2007)
Jerry S. Boyes, M.S., Ithaca College, Director and Head Football Coach, Intercollegiate Athletics (1986)
Joseph L. Brandy, Ph.D., Union Institute and University, Coordinator for Community Education, Continuing Professional Studies (1998)
Paul J. Brennan, Lead Programmer/Analyst (UNIX), Information Technology Exchange Center (2014)
Curtis L. Brickhouse, M.A., Indiana University of Pennsylvania, Associate Director of Housing, Housing and Auxiliary Services (1989)
Daniel W. Brint, B.A., Brock University, Supervising Analyst for Administrative Services, Information Technology Exchange Center (2001)
Fred A. Bristol III, M.B.A., University at Buffalo, Advisor and Lecturer, Small Business Development Center (2004)
Booker T. Brooks, M.S., D'Youville College, Programmer/Analyst, Information Technology Exchange Center (2012)
Janelle A. Brooks, M.S., Canisius College, Assistant Director, Residence Life Office (2007)
Deepa Brown, M.A., English and Foreign Languages University, Lead Programmer/Analyst, Information Technology Exchange Center (2008)
Raffaello Brown, B.S., SUNY Buffalo State, New York City Regional Representative, Admissions Office (2013)
Sandra L. Burnham, M.L.S., University at Buffalo, Senior Admissions Advisor, Admissions Office (2000)
R. Scott Burns, B.A., Union College, Major Gift Officer, School of Education, Institutional Advancement Office (2014)
Roselyn Cabrera, B.S., SUNY Buffalo State, Complex Director, Residence Life Office (2012)
Colleen R. Callahan, M.S., Syracuse University, Associate Director, Web Community and Development, College Relations Office (2009)
Peter M. Carey, J.D., University at Buffalo, Chief of Police, University Police (1980)
Nicholas R. Carriere, B.S., Niagara University, Head Men's Ice Hockey Coach, Intercollegiate Athletics (2005)
Kristen J. Catalano, M.S., SUNY Buffalo State, Assistant Director, Student Life Office (2007)
Jeffrey D. Caughel, B.S., SUNY Brockport, Senior Programmer/Analyst, Information Technology Exchange Center (2006)
Anthony J.W. Chase, Ph.D., University at Buffalo, Assistant Dean, School of Arts and Humanities (1988)
Ralph A. Chille, B.S., Niagara University, Project Manager, Information Technology Exchange Center (2010)
Mark D. Clapsadl, M.S., College of Environmental Sciences, Field Station Manager, Great Lakes Center (2008)
Bernadette G. Clark, M.S.Ed., Saint Bonaventure University, Admissions Advisor, Admissions Office (2014)
Thomas E. Coates, B.A., SUNY Buffalo State, Director, Events Management Office (1987)
Renee E. Conners, M.A., University at Buffalo, Transfer and Articulation Advisor, Admissions Office (2008)
Sean F. Connors, M.S.Ed., SUNY Buffalo State, Distance Learning and COED Coordinator, Continuing Professional Studies (2010)
Angelo A. Conorozzo, M.S.W., University at Buffalo, Coordinator, NP Track of MPA Program, Political Science (1995)
Krista A. Constantino, B.S., SUNY Buffalo State, Guest Services Manager, Campus House, Hospitality and Tourism Department (2008)
Connie F. Cooke, M.S., SUNY Buffalo State, Director, Financial Aid Office (2011)
Paul M. Criswell, B.S., SUNY Buffalo State, Programmer/Analyst, Information Technology Exchange Center (2013)
Nancy A. Crown, M.S., Niagara University, Nurse Practitioner, Weigel Health Center (2000)
Sean M. Cunningham, M.A., University at Buffalo, Application Administrator, Enrollment Management Office (2014)
Marie C. Curran, M.L.S., University at Buffalo, Head Softball Coach, Intercollegiate Athletics (2011)
Jero T. Dahlgren, M.P.A., Park University, Public Relations Director, College Relations Office (2007)
Brian M. Dawley, B.S., SUNY Buffalo State, Programmer/Analyst, Information Technology Exchange Center (2013)
Robert C. Dege, B.S., University at Buffalo, Systems Programmer, Computing and Technology Services (2006)
Patrick T. DeWind, B.S., SUNY Buffalo State, Senior Programmer/Analyst, Computing and Technology Services (1998)
Trish R. Dillenbeck, M.Ed., University at Buffalo, Assistant Director for Transfer Admissions, Admissions Office (2011)
Leslie D. Dixie, M.A., SUNY Buffalo State, Associate Director, Student Accounts Office (1990)
Ivan Docenko Jr., B.F.A., University at Buffalo, Accompanist, Music Department (1992)
Lynda H. Donati, B.F.A., University at Buffalo, Art Director, College Relations Office (2000)
Rock D. Doyle, M.S.Ed., SUNY Buffalo State, Associate Director, Weigel Health Center (1997)
Robert J. Dray, B.S., SUNY Buffalo State, Instructional Support Technician, Design Department (1992)
Brian D. Dubenion, M.S., SUNY Buffalo State, Assistant Director, Student Success, Residence Life Office (2010)
Mary A. Durlak, M.A., University at Buffalo, College Relations Senior Writer, College Relations Office (2001)


Scot R. Ecklund, A.A.S., *Niagara County Community College*, Associate Director, Campus Services (1981)

Timothy R. Ecklund, Ph.D., *University at Buffalo*, Associate Vice President for Housing and Auxiliary Enterprises, Housing and Auxiliary Services (1997)

Karen E. Edmond, M.S.W., *University at Buffalo*, Field Education Coordinator, Social Work Department (2013)

Cynthia D. Eggleston, M.S.Ed., SUNY Buffalo State, Special Assistant to the Chair, Elementary Education and Reading Department (1979)


Cynthia M. Fasla, M.S.W., *University at Buffalo*, Associate Registrar, Registrar’s Office (2005)


Kelly M. Ferguson, B.S., SUNY Buffalo State, Director, IFR Recharge Accounting (2006)


Marie M. Ferraro, M.S., SUNY Buffalo State, Coordinator, Academic Advisement Center (2000)

Erica S. Fire, B.A., Bennington College, Costume Director/Shop Manager, Theater Department (2008)

Joshua M. Fisher, B.S., College of Environmental Sciences, Field and Lab Research Technician, Great Lakes Center (2013)

Wynnlie L. Fisher, M.S.Ed., SUNY Buffalo State, Senior Staff Assistant, English Department (2000)

Charlene M. Fontana SSI, M.S., SUNY Buffalo State, Assistant to the Director, Student Life Office (2005)

Brent D. Ford, B.S., SUNY Buffalo State, Athletics Facilities Manager, Intercollegiate Athletics (1999)

James C. Fowler, B.A., SUNY Fredonia, Athletics Budget and Ice Arena Manager, Intercollegiate Athletics (1996)


Christine A. Frezza, M.S., SUNY Buffalo State, Director, Special Programs Office (2005)


Carolyn S. Fusco, B.A., University at Buffalo, Executive Assistant to the Dean, School of Arts and Humanities (1989)

Yves M. Gachette, M.S., SUNY Buffalo State, Director, Institutional Research Office (1995)

Michael J. Gallo, B.S., SUNY Buffalo State, Instructional Support Assistant, Campus Services (2005)


Maria J. Garrett, B.A., University of Puerto Rico, Foreign Language Assistant, Modern and Classical Languages (1991)


Khaileel M. Gathers, B.S., SUNY Buffalo State, Assistant Director, Web Technologies, Computing and Technology Services (1994)


Ronald A. George, M.S., Niagara University, Case Manager and AOD Coordinator, Counseling Center (1986)


Patricia D. Ghee, M.S., University at Buffalo, Academic Advisement Associate, Academic Support Programs (1993)

Kenneth C. Giangreco, B.A., SUNY Buffalo State, Multimedia Specialist, Instructional Resources (2000)

Bernadette K. Gilliam, M.S., SUNY Buffalo State, Associate Events Manager, Events Management Office (2002)


Heather J. Goltz, B.A., SUNY Buffalo State, Instructional Support Assistant, Copy Center (2007)

Jill M. Gorski, M.A., University at Buffalo, Application Administrator, Enrollment Management Office (2014)

Jean F. Gournard, Ph.D., Universite Bordeaux, Director, International Student Affairs Office (1978)

Mary Jo Graham, B.A., University at Buffalo, Manager, User Account Services, Computing and Technology Services (2001)


Jeanne M. Guzy, M.B.A., Canisius College, Data Specialist, University College (1990)


Thomas J. Gwitt, M.P.A., SUNY Binghamton, Secretary to the President, President’s Office (2007)

Abdollah Hajikandi, M.A., University at Buffalo, Assistant Director, Academic Services, Educational Opportunity Program (1990)

Jeffrey R. Hammer, B.S., SUNY Buffalo State, Radiation Safety Officer, Environmental Health and Safety (2000)

Terry M. Harding, B.A., SUNY Buffalo State, Director, Campus Services (1977)

Jeffrey M. Hardy, M.S., Clarkson University, Lead Programmer/Analyst (UNIX), Information Technology Exchange Center (2014)

Andrew A. Harradine, B.A., SUNY Potsdam, Director, Administrative and Academic Services, Information Technology Exchange Center (2014)

Monica L. Heavey, B.S., University at Buffalo, Computer Lab Manager, Academic Skills Center (2000)

Paul J. Hebert, M.S.Ed., Medaille College, Senior Programmer/Analyst (DBA), Information Technology Exchange Center (2003)

Michael A. Heflin, M.S., SUNY Buffalo State, Director, Residence Life Office (2007)

Tami R. Heflin, M.S., SUNY Buffalo State, EOP Counselor, Educational Opportunity Program (2007)


Christopher M. Heximer, M.A., University at Buffalo, Clinic Supervisor, Speech-Language Pathology (2002)

Ronald P. Hicks, B.S., SUNY Buffalo State, Programmer/Analyst, Computing and Technology Services (2001)

Emmanuel J. Hillery, M.S., University at Buffalo, Associate Director, Human Resource Management Office (1985)

Christopher L. Hillman, M.A., Canisius College, Assistant Recreation and Intramurals Manager, Intercollegiate Athletics (2013)

Latonia D. Marsh, J.D., CUNY Queens College, Director, Judicial Affairs, Dean of Students Office (2005)
Jeffrey L. Marsha, B.A., SUNY Fredonia, Director of Operations, Performing Arts Center (2001)
Thaddeus J. Marsowicz III, B.S., University at Buffalo, Program/Analyst, Computing and Technology Services (2007)
Carolyn Martino, B.S., SUNY Buffalo State, Assistant to Provost, Academic Affairs Office (2001)
David A. Massaro, B.S., SUNY Buffalo State, Senior Program/Analyst, Information Technology Exchange Center (1984)
Ronald C. Matusiak, B.S., University at Buffalo, Instructional Support Technician, Engineering Technology Department (1994)
Maureen E. McCarthy, M.S.Ed., SUNY Buffalo State, CEURE Associate, Center for Excellence in Urban and Rural Education (2002)
Susan A. McCartney, Ph.D., 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, EOP Counselor, Educational Opportunity Program (1981)
Jeanita F. McKnight, B.S., University at Buffalo, Employee Benefits Administrator, Human Resource Management Office (1988)
Akit A. McLeod, M.S., SUNY Buffalo State, EOP Counselor, Educational Opportunity Program (2012)
Tamara L. McMillan, M.S., SUNY Buffalo State, Associate Director, Student Life Office (2009)
Robert W. Mead-Colegrove, M.Ed., University at Buffalo, Director, Orientation Office (2007)
Melissa Meehan, M.A., University at Buffalo, Web Administration Director, College Relations Office (1999)
Eileen Merberg, M.S., SUNY Buffalo State, Interim Director, Student Life Office (2001)
Diane E. Mercuri, Staff 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)
Brian C. Milbrand, B.A., University at Buffalo, Technical Assistant, Communication Department (2009)
David N. Miller, A.A.S., Erie Community College, Director, Environmental Health and Safety (1985)
Marcus T. Miller, B.A., SUNY Buffalo State, Program/Analyst, Information Technology Exchange Center (2012)
Carole J. Miller-Canestrari, M.S.Ed., SUNY Brockport, Senior EOP Counselor, Educational Opportunity Program (2013)
Paula J. Mis, Assistant to the Director, Accounts Payable and Travel Services (1981)
Melissa J. Miszkiewicz, M.S., University at Albany, Director, Academic and Research Technology Planning, Computing and Technology Services (2005)
Todd O. Morford, B.S., SUNY Buffalo State, Program/Analyst, Computing and Technology Services (2007)
Carolyn A. Morris-Hunt, Chief Operating Officer, Burchfield Penney Art Center (1997)
Lisa T. Morrison-Fronckowiak, J.D., University at Buffalo, Director, Disability Services Office (2009)
Candice E. Mosley, M.B.A., Niagara University, Head Women’s Hockey Coach, Intercollegiate Athletics (2013)
Jeanine E. Moyer, B.S., Rensselaer Polytechnic Institute, Programmer/Analyst, Computing and Technology Services (2005)
Diane E. Mulcahy, M.S., University of California, Los Angeles, Nurse Practitioner, Weigel Health Center (1993)
Margaret R. Mulloy, M.S.N., D’Youville College, Nurse Practitioner, Weigel Health Center (2010)
Carolyn M. Murphy, M.S., SUNY Buffalo State, Assistant Director, Admissions Office (2000)
Robert M. Murphy, Senior Desktop Systems Technician, Computing and Technology Services (1985)
Jennifer E. Murray, B.A., University at Buffalo, Staff Assistant, Graduate School (2012)
Anita Naumovski, M.A., Saint Bonaventure University, Purchasing Manager, Procurement Services (2012)
Kathryn C. Neeson, M.A., University at Buffalo, Development Assistant for Fundraising Events, Institutional Advancement Office (2008)
Tim G. Ngo, B.S., SUNY Buffalo State, Manager, Operations and Maintenance, Copy Center (1994)
Julie M. Nichols, M.S.N., University at Buffalo, Nurse Practitioner, Weigel Health Center (2008)
Michael Niedziela, Assistant Ice Arena Manager, Intercollegiate Athletics (1993)
Mark A. Norris, B.A., University at Buffalo, Web Administrator and Associate Director and Editor, College Relations Office (2006)
Michael B. Notarius, B.S., SUNY Buffalo State, ITEC Chief Information Officer, Information Technology Exchange Center (1994)
Lea A. Nuwer, M.S., SUNY Buffalo State, ITEC Chief Information Officer, Information Technology Exchange Center (1994)
Steven W. Olsen, B.A., SUNY Fredonia, Assistant to Comptroller for Procurement, Procurement Services (2010)
Karen O’Quin, Ph.D., Michigan State University, Associate Dean, School of Natural and Social Sciences (1982)
William Ortega, M.S., SUNY Buffalo State, Senior EOP Counselor, Educational Opportunity Program (1997)
Christian P. Ozolins, M.S., Alfred University, Assistant Football Coach and Recreation/Intramurals Manager, Intercollegiate Athletics (2003)
Linda Paine Hughes, M.A., University at Buffalo, Nurse Practitioner, Weigel Health Center (2006)
Roswell Park IV, Ph.D., University at Buffalo, Director, Academic Support Programs (1981)
Jason O. Parker, M.A., Missouri Baptist University, Diversity Program Coordinator, Equity and Diversity Office (2013)
Nancy B. Paschke, M.A., SUNY Buffalo State, Associate Director and Publications/Magazine Editor, College Relations Office (1996)
Carrie M. Pavis, Engineering Aid, Facilities Planning (2004)
Anne Marie Sokol, M.S., SUNY Buffalo State, Instructional Support Specialist, Chemistry Department (1978)
Theresa R. Stephan Hains, M.D., University at Buffalo, Director, Weigel Health Center (1992)
Peter Stergion, A.A., Corning Community College, Desktop Systems Engineer, Computing and Technology Services (2006)
Trudy E. Stern, M.S., D'Youville College, Nurse Practitioner, Weigel Health Center (2007)
Elizabeth A. Stevens, M.S.Ed., Saint Bonaventure University, Senior Academic Advisor, Academic Support Programs (1999)
Rebecca L. Straub, M.S., Central Connecticut State University, Complex Director, Residence Life Office (2013)
Colleen M. Sullivan, Database Coordinator, Registrar's Office (1976)
Joel P. Swisher, B.A., SUNY Buffalo State, Director, Systems Administration, Computing and Technology Services (1973)
Timothy M. Switalski, M.S., SUNY Buffalo State, Director, Leadership Development, Professional Development Office (2013)
Steven S. Sypniewski, A.A.S., SUNY Alfred, Instructional Support Assistant, Campus Services (2011)
Glen E. Taplin, M.S., SUNY Buffalo State, Admissions Assistant, Admissions Office (2007)
Mary F. Taylor, B.P.S., SUNY Empire State College, Travel Services Manager, Accounts Payable and Travel Services (2013)
Romney G. Taylor, B.S., SUNY Buffalo State, University Database Administrator, Computing and Technology Services (1982)
Carmela Thompson, Ph.D., University at Buffalo, Director, Admissions Office (2009)
James A. Thor, B.S., Rochester Institute of Technology, Associate Vice President and Comptroller, Comptroller's Office (1989)
Mary J. Toll, M.S., Miami University of Ohio, Complex Director, Residence Life Office (2013)
Michael J. Tracz, B.S., SUNY Buffalo State, Senior Programmer/Analyst, Computing and Technology Services (1998)
Nanette Tramont, A.A.S., Cazenovia College, Coordinator, Community Relations, Communication Department (1996)
Lisa M. Treman, M.S., SUNY Buffalo State, Associate Director, Financial Aid Office (1992)
Patrick A. Trinkle, B.A., SUNY Empire State College, TV Production Coordinator, Instructional Resources (1988)
Marie E. Unson, B.A., University at Buffalo, Senior Programmer/Analyst, Computing and Technology Services (1990)
Philip J. Vecchione, B.S., SUNY Brockport, Project Manager, Information Technology Exchange Center (2010)
Daniel C. Velez, Ph.D., University at Buffalo, Associate Vice President, Student Success (1999)
Sarah M. Velez, M.S., SUNY Buffalo State, Director, Campbell Student Union (1998)
Jeffrey M. Ventura, M.S., SUNY Buffalo State, Assistant Director of Athletics for Sports Information, Intercollegiate Athletics (1998)
Charlene J. Vetter, Ph.D., University at Buffalo, Psychologist, Counseling Center (2009)
Kaylene Waite, B.F.A., Old Dominion University, Graphic Design and Production Specialist, Instructional Resources (2001)
Timothy J. Walsh, M.S.Ed., Medaille College, Associate Vice President, College Relations Office (2008)
Israel J. Washington, B.S., SUNY Buffalo State, Senior Programmer/Analyst, Information Technology Exchange Center (2001)
Sandra D. Washington-Copeland, Ph.D., University at Buffalo, Director, McNair Scholars Program, McNair Scholars Program (1997)
Christopher W. Weber, B.A., University at Buffalo, Equipment Loan Coordinator, Instructional Resources (2012)
Gail V. Wells, B.S., University at Buffalo, Community Specialist, Dean of Students Office (1985)
Shetice L. Williams, B.S., SUNY Buffalo State, Kitchen Manager, Campus House, Hospitality and Tourism Department (2005)
Brian D. Wittmer, B.P.S., University at Buffalo, Assistant Design and Construction Coordinator, Facilities Planning (2000)
Kevin D. Wojtaszczyk, B.S.E.E., University at Buffalo, Lead Programmer/Analyst (UNIX), Information Technology Exchange Center (2012)
Kathy L. Wood, Ph.D., University at Buffalo, Associate Dean, School of Education (2001)
Ottie M. Woodruff, M.S., SUNY Fredonia, EOP Counselor, Educational Opportunity Program (1983)
Susan F. Wright, M.S., SUNY Buffalo State, Director, Student Accounts Office (2001)
Tina M. Wynne, B.S., SUNY Buffalo State, Instructional Support Associate, Chemistry Department (2003)
Sayi J. Yendrapalli, M.S., New Mexico State University, Lead Programmer/Analyst, Information Technology Exchange Center (2009)
Nathan Young, M.S., Florida International University, Strength and Conditioning Coach, Intercollegiate Athletics (2013)
Kevin S. Zeitler, B.S., SUNY Buffalo State, Senior Programmer/Analyst (Networking), Information Technology Exchange Center (2014)
Shiwei Zhang, M.S., Saint Mary's University of Minnesota, Manager, Networking and Communications, Computing and Technology Services (2007)
Susan A. Zilliox, B.A., University at Buffalo, Web Graphic Designer, College Relations Office (2001)
Wayne M. Zimmerman, B.S., SUNY Buffalo State, Major Gift Officer, Institutional Advancement Office (2014)
Eugene C. Zinni, M.A., University at Buffalo, Assistant Football Coach, Intercollegiate Athletics (1993)
Stephanie B. Zuckerman-Aviles, M.Ed., University at Buffalo, Director, Career Development Center (1982)