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Buffalo State College

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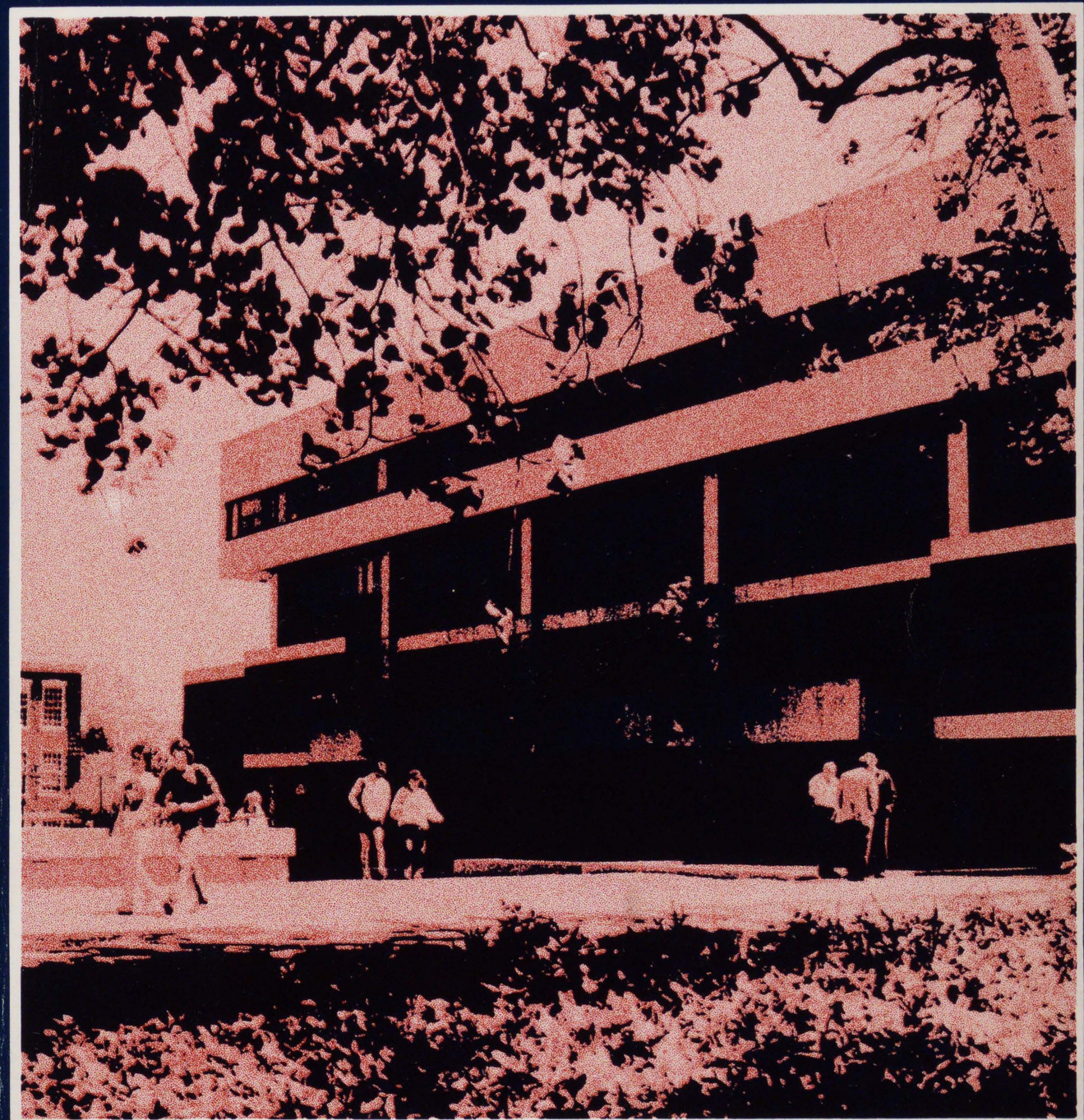
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B U F F A L O S T A T E C O L L E G E

1989-91

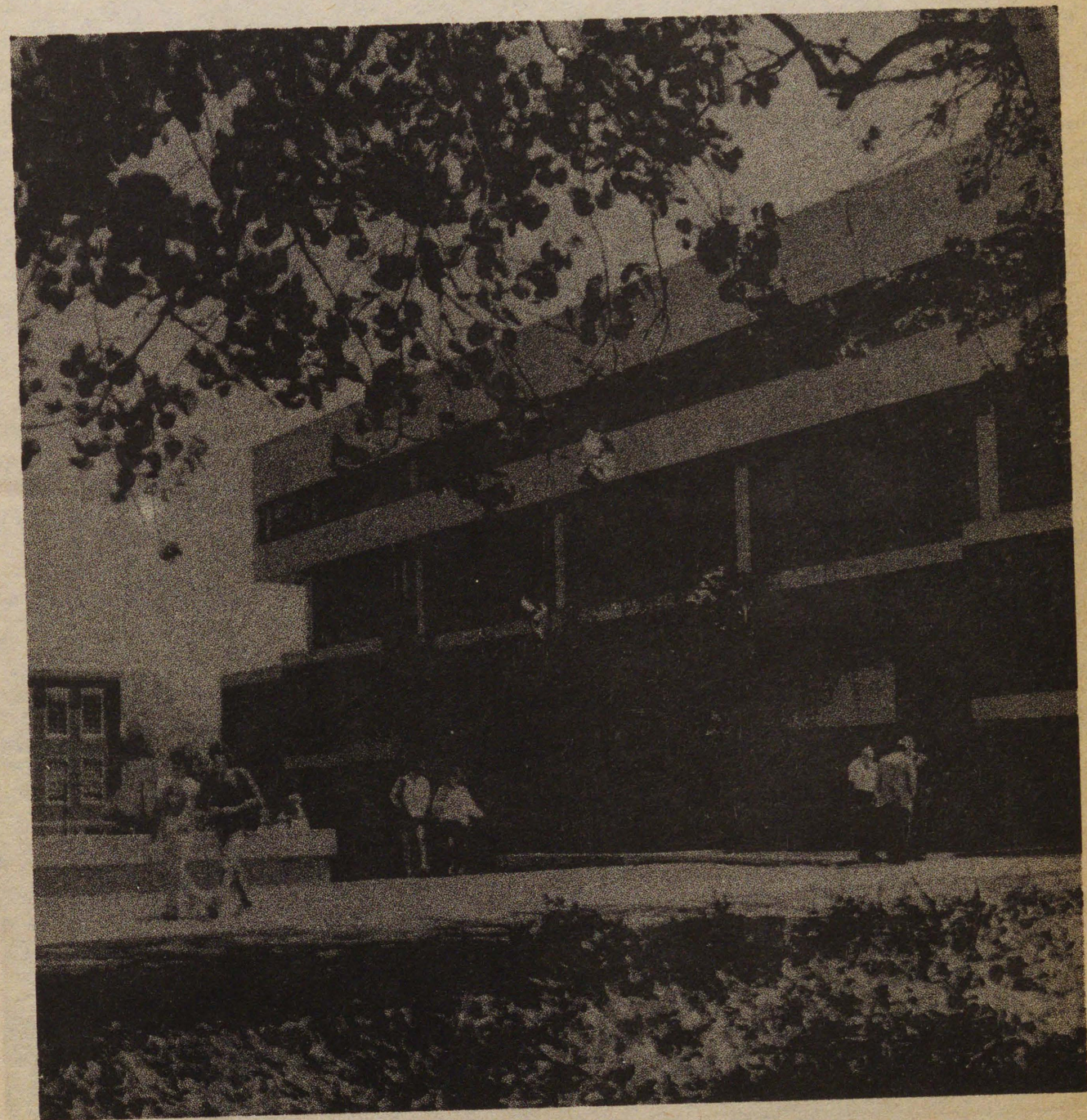
U N D E R G R A D U A T E
C A T A L O G



S T A T E U N I V E R S I T Y C O L L E G E A T B U F F A L O

B U F F A L O S T A T E C O L L E G E

1989-91
UNDERGRADUATE
CATALOG



S T A T E U N I V E R S I T Y C O L L E G E A T B U F F A L O



For Your Convenience

College Telephone (716) 878-4000

Academic Affairs, Vice President	878-5901
Academic Records, Registrar	878-4811
Admissions Office	878-4017
Bursar	878-4121
Career Development Center	878-5811
Educational Opportunity Program	878-4415 or 878-4429
Evening Student Assistance Center	887-5906
Financial Aid	878-4901
Library	878-6314
Lifelong Learning Center	878-5906
Residence Life	878-6806
Student Affairs, Vice President	878-4704
Summer Sessions — Registration	878-4905
Admissions	878-4017

Mailing Address:

State University College at Buffalo
1300 Elmwood Ave.
Buffalo, N.Y. 14222-1095

This catalog is current as of December 1988. 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 months, consult the summer session schedule.

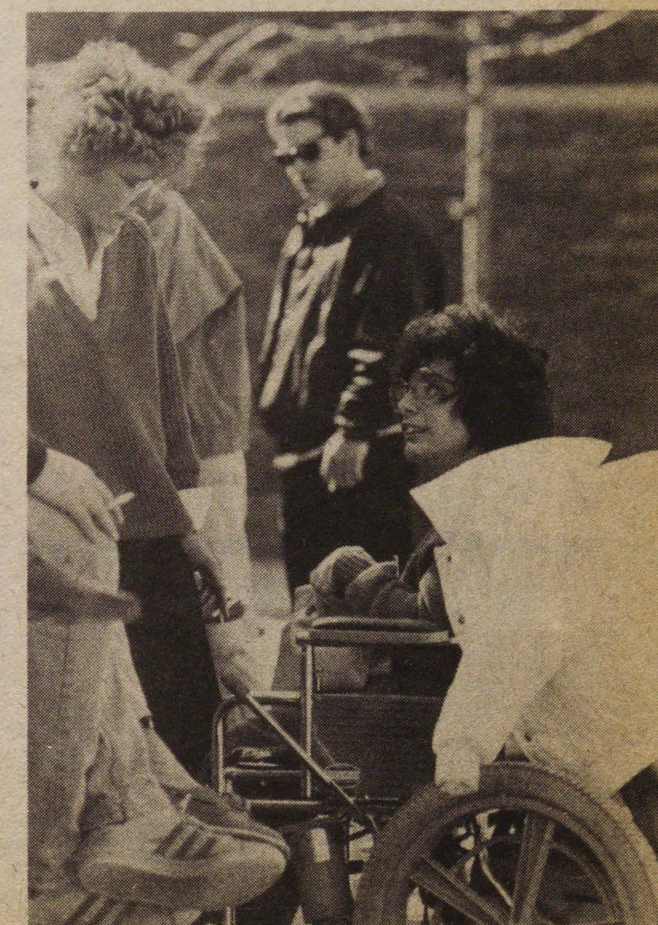
This publication was funded by an appropriation made available to the State University College at Buffalo. Thirty-one thousand were printed December, 1988. The three vice presidents' offices supplied copy for their respective areas of responsibility. The production and graphics were the responsibility of the Public Affairs Office, GC 515, (716) 878-4201.

State University College at Buffalo is an affirmative action/equal opportunity institution which subscribes to all federal, state, and SUNY legal requirements and does not discriminate against applicants, students, or employees on the basis of race, sex, ethnicity, national origin, sexual orientation, religion, age, handicap, marital or veteran status, and arrest and/or conviction record.

Any violation of this policy should be reported to the campus Affirmative Action Office, GC 409, (716) 878-6210.

Table of Contents

Section	Page
Academic Calendar 1989-90	4
1 Buffalo State College	6
2 Admissions	10
3 Finances and Financial Aid	14
4 Academic Programs	24
5 Course Listings	96
6 Academic Policies	178
7 Special Academic Programs and Facilities	190
8 Student Services	196
State University of New York	202
Buffalo State College:	
Important Facts	204
College Administration	206
Faculty and Professional Staff	208
Index	220



Academic Calendar 1989-90

First Semester Fall 1989

Orientation Tuesday, Wednesday, Thursday
August 29, 30, 31
Registration Wednesday, Thursday, Friday
August 30, 31, September 1
Labor Day (no classes) Monday, September 4
Classes Begin Tuesday, September 5
Columbus Day (no classes) Monday, October 9
Veterans Day (no classes) Saturday, November 11
Thanksgiving Recess Wednesday-Saturday
November 22-25
Critique/Evaluation Week Monday-Friday
(If extended beyond two-year trial period) December 18-22
Last Day of Classes Friday, December 22

Second Semester Spring 1990

Registration Wednesday, Thursday, Friday
January 10, 11, 12
Martin Luther King Day (no classes) Monday, January 15
Classes Begin Tuesday, January 16
Presidents Day Recess (no classes) Monday, Tuesday
February 19, 20
Spring Recess Monday-Saturday
April 9-14
Critique/Evaluation Week Friday-Thursday
May 11-17
Last Day of Classes Thursday, May 17
Commencement (tentative) Friday, May 18

Student Deadlines

Course Withdrawals
Nov. 3, 1989 fall semester 1989
March 16, 1990 spring semester 1990

Cross Registration
Sept. 5, 1989 fall semester 1989
Jan. 16, 1990 spring semester 1990

Departmental Transfer
Oct. 10, 1989 fall semester 1989
March 23, 1990 spring semester 1990

Leave of Absence
Nov. 3, 1989 fall semester 1989
March 16, 1990 spring semester 1990

Incomplete Grades
Nov. 10, 1989 from spring semester 1989
Nov. 10, 1989 from summer semester 1989
March 23, 1990 from fall semester 1989

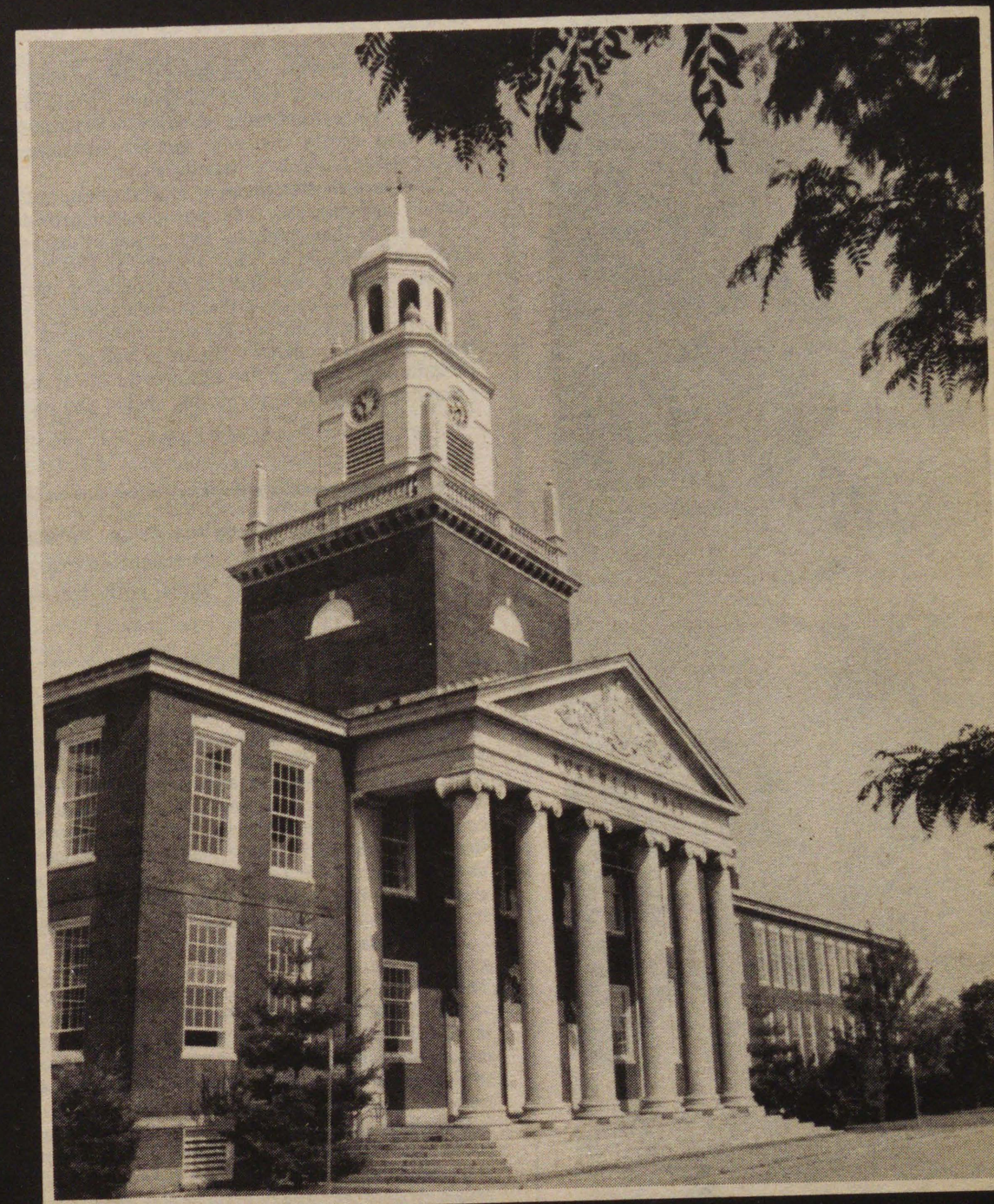
E-Grade Repeat Forms
Oct. 6, 1989 fall semester 1989
Feb. 16, 1990 spring semester 1990

Pass/Fail Application
Oct. 20, 1989 fall semester 1989
March 2, 1990 spring semester 1990

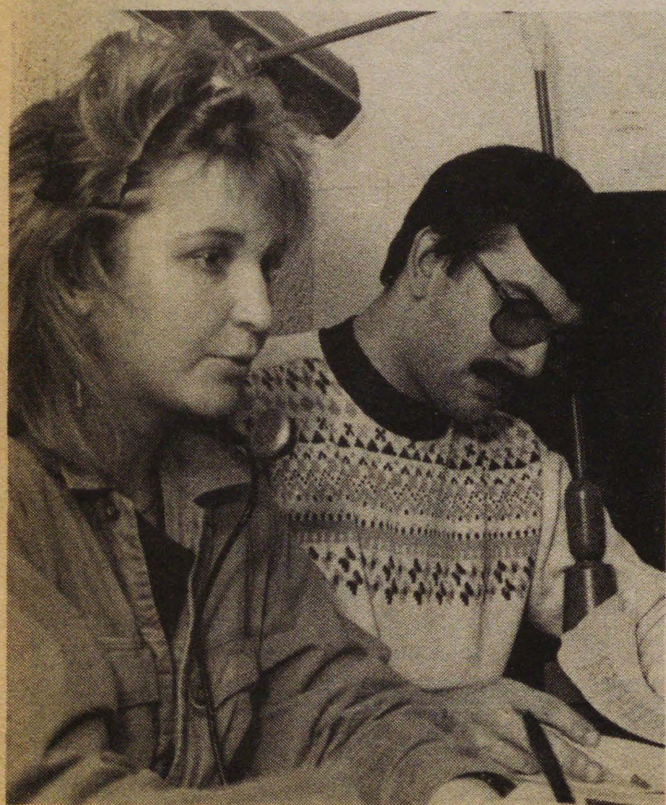
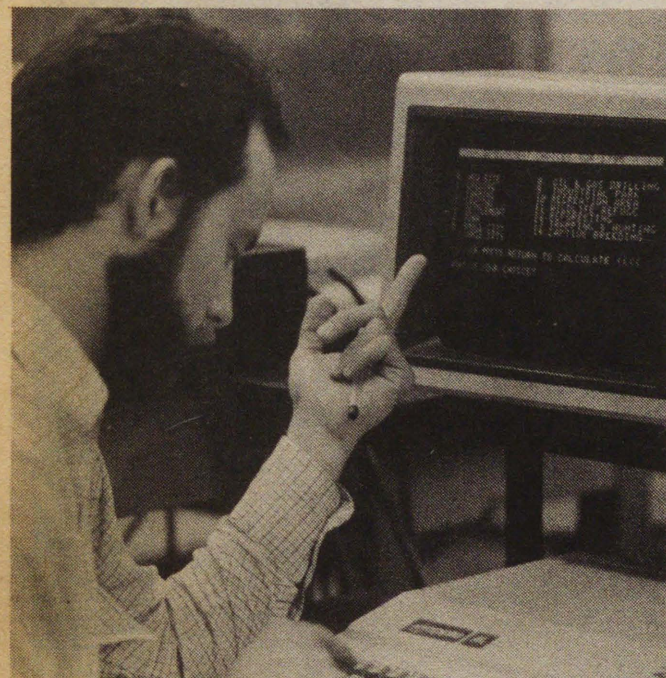
Undergraduate Degree Applications
Oct. 6, 1989 December 1989
Feb. 2, 1990 May 1990
TBA August 1990

1

BUFFALO
STATE
COLLEGE



Buffalo State College



In today's highly competitive job market, college graduates need specialized training in marketable skills to forge successful careers. While recognizing the importance of providing specialized training for its students, Buffalo State College believes strongly that those who receive baccalaureate degrees must also obtain the solid general knowledge base that distinguishes the truly educated person.

To ensure that students at Buffalo State are not educationally shortchanged, the degree program provides a breadth and balance that combines instruction in marketable career skills with learning in many disciplines. This combination of specialized knowledge and general education gives students a well-rounded background that is invaluable both professionally and personally. Buffalo State takes pride in its dedication to laying a strong foundation for life as well as for a career — in providing an education that nurtures the life of the mind while preparing students for varied and challenging jobs.

Buffalo State degree programs provide a breadth and balance that combines instruction in marketable career skills with learning in many disciplines.

Buffalo State is the largest of the 13 SUNY four-year colleges, but it is not so large that students' needs are ignored. The beautiful 115-acre campus — located in one of the finest areas of New York's second largest city — offers a small-college setting where service to students is the foremost goal of the faculty and staff. More than 11,000 students, of which about 2,000 reside on campus, make Buffalo State a busy and stimulating place to learn, play, and meet interesting people from next door, across the country, or around the world.

Buffalo State is primarily an undergraduate institution, granting five bachelor's degrees in nearly 70 major fields. There are, in addition, more than 30 programs leading to advanced degrees. The College's mission is to provide education in the liberal arts and science, sound career preparation, continuing education for non-traditional students, service to the local metropolitan region, and programs in teacher education.

Buffalo State is particularly proud of its imaginative and successful programs for evening students — many of whom work full time while pursuing one of 18 undergraduate degree programs entirely through evening and weekend study — and for its Educational Opportunity Program (EOP), which helps educationally and financially disadvantaged students attain their dream of a college degree through counseling, tutoring, developmental classes, and a six-week summer readiness program.

The college's 34 buildings are a pleasing blend of modern and traditional and include nine coeducational corridor- and suite-style residence halls.

Physical facilities at Buffalo State are up-to-date and extensive. The college's 34 buildings are a pleasing blend of modern and traditional and include nine coeducational corridor- and suite-style residence halls.

The Edward H. Butler Library boasts 500,000 volumes, substantial microform resources, and over 2,000 periodical titles.

The well-equipped Science Building contains modern biology, chemistry, and physics labs as well as a planetarium.

In the Great Lakes Laboratory, students engage in research relating to the ecology of the Great Lakes.

The College Learning Laboratory/Campus West is a public elementary magnet school located right on campus that provides education majors with an opportunity to observe and practice the latest teaching techniques.

Upton Hall houses state-of-the-art equipment for industrial arts and industrial and engineering technology, as well as fine arts and design labs, studios, and galleries.

The Performing Arts Department and the internationally recognized graduate program in art conservation are located in Rockwell Hall, the recently renovated centerpiece of the campus. Also in Rockwell are the Burchfield Art Center, a major regional gallery and museum, and a modern 850-seat auditorium for student and community theatrical, musical, and dance productions.

The centrally located Student Union provides dining, recreational, and social facilities, and houses the College Store.

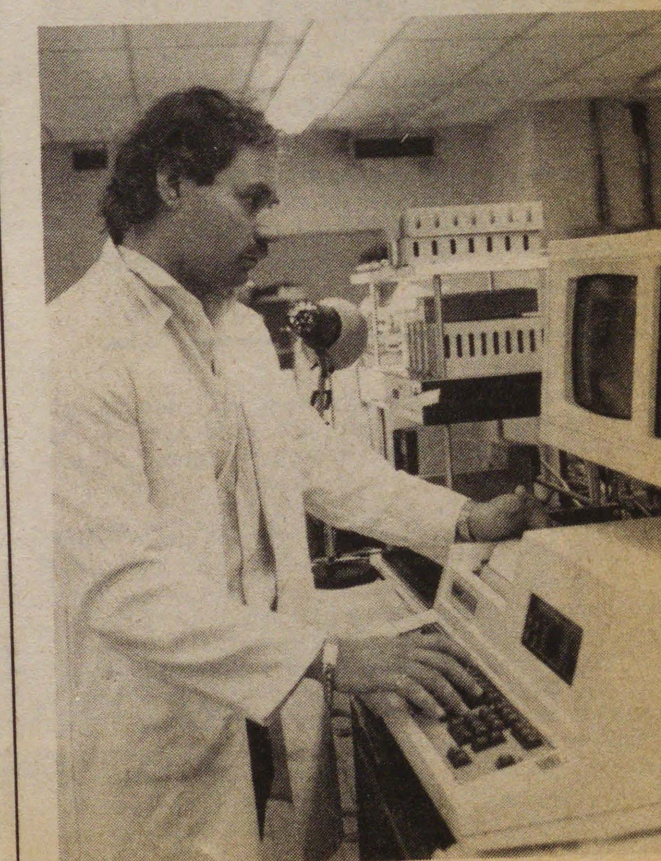
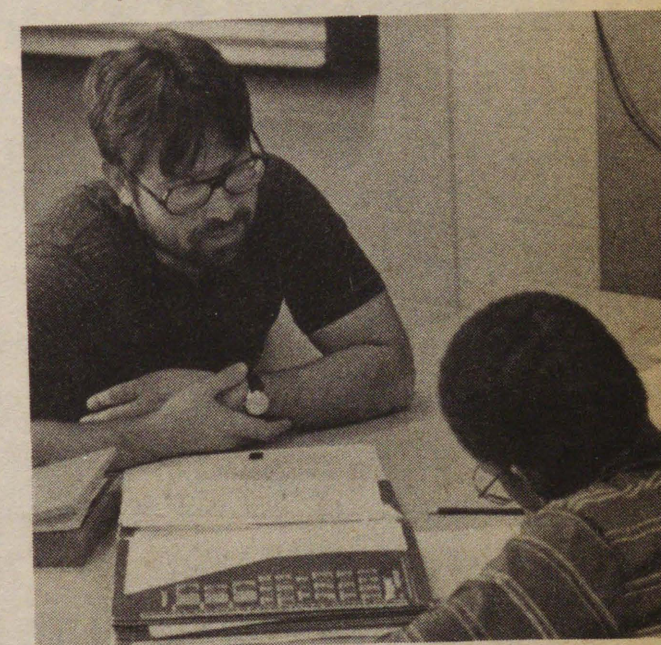
In the summer of 1988, construction began on a \$15 million sports arena, which will contain a 4,000-seat basketball arena and a 2,000-seat facility for ice hockey.

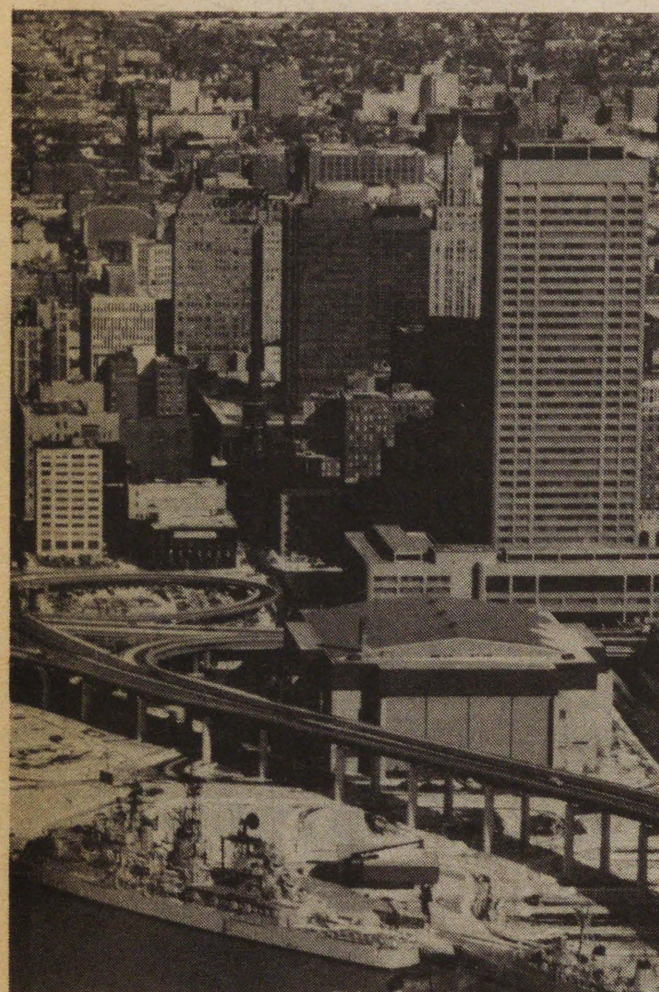
Since its founding in 1871 as an institution for training teachers, Buffalo State has grown to become a nationally respected comprehensive arts and science college where faculty, staff, and students alike, seek innovative solutions to today's educational challenges.

A wide array of choices and challenges awaits each Buffalo State student. In the academic area, advisers are available to assist students in making those important curricular choices. Outside the classroom, the range of cultural, recreational, and educational organizations and activities is almost unlimited.

In addition, the thriving Buffalo metropolitan area offers the diverse attractions of a major city, including nearby parks, art galleries, museums, restaurants, shops, nightclubs, professional and amateur sports, and recreational opportunities as diverse as wind-surfing in the summer and downhill or cross-country skiing in the winter.

Buffalo State's setting in a region that is emerging as a



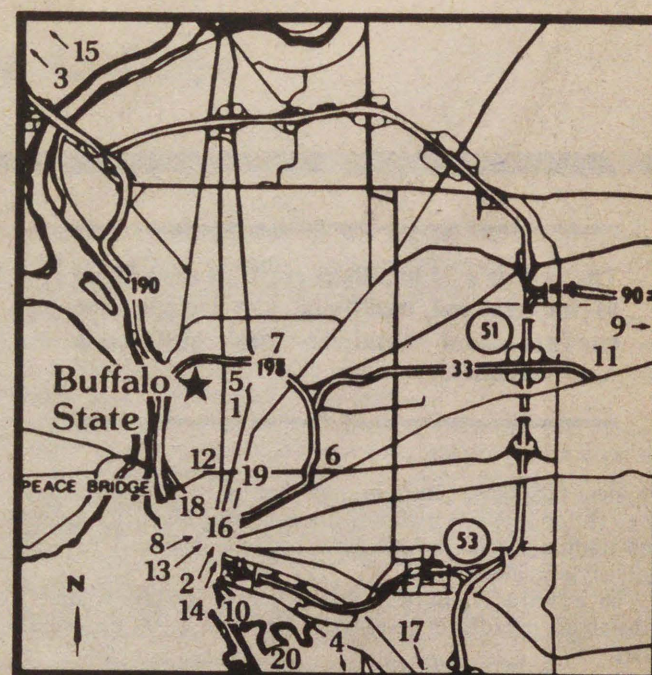


Buffalo State is in a region that is emerging as a leading center for high technology and service industries.

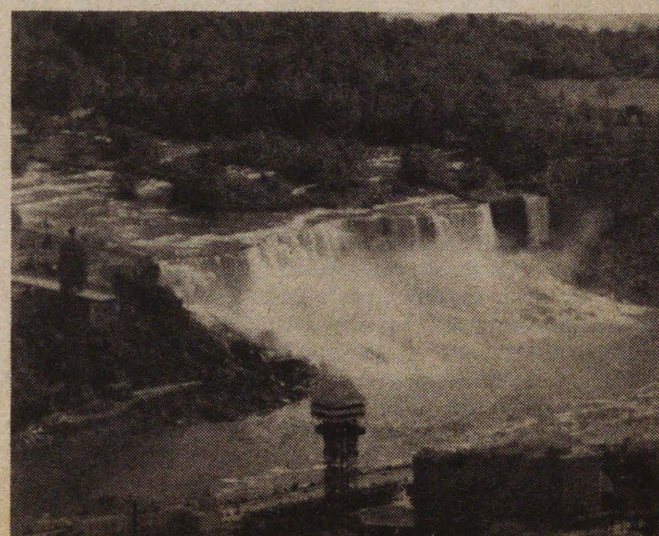
leading center for high technology and service industries such as banking, printing, medicine, and education provides numerous opportunities for students to gain firsthand knowledge and all important contacts through pre-professional internships.

Students who qualify may cross register in one of many Western New York colleges and universities, participate in the National Student Exchange Program, or study abroad for a semester as participants in the International Student Exchange Program. On campus, students experience small classes and a special relationship with instructors who like to teach.

For over 115 years the Buffalo State story has been one of growth, innovation, and service to students and community, combined with a firm belief in academic excellence based on traditional educational values. For the student who accepts the challenge to excel academically, a Buffalo State College education can open the door to a lifetime of personal and professional success.

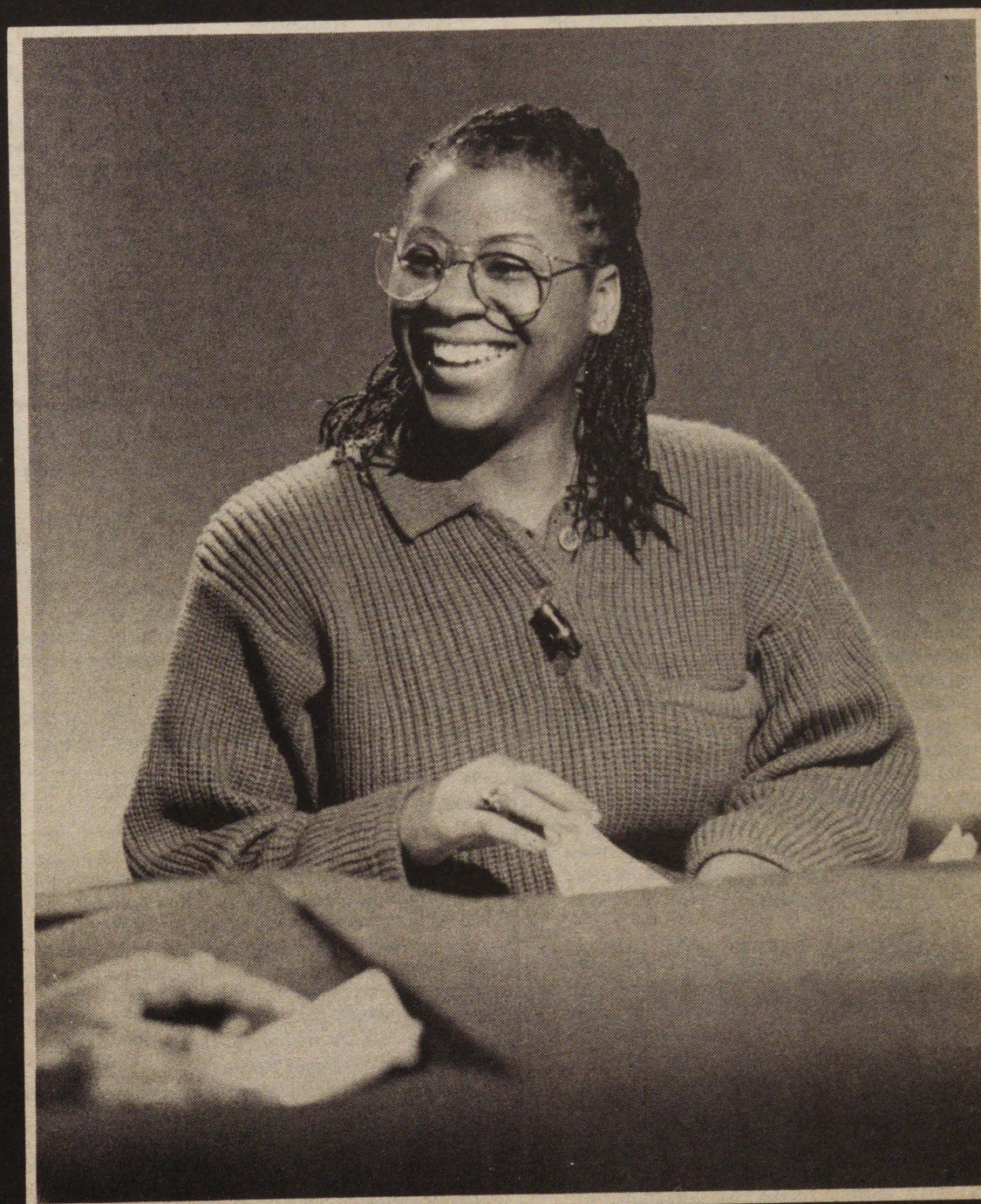


- | | |
|--|---|
| 1. Albright-Knox Art Gallery | 11. Greater Buffalo International Airport |
| 2. Amtrak Terminal | 12. Kleinhans Music Hall |
| 3. ArtPark | 13. Memorial Auditorium |
| 4. Buffalo and Erie County Botanical Gardens | 14. Naval and Servicemen's Park |
| 5. Buffalo and Erie County Historical Society Museum | 15. Niagara Falls |
| 6. Buffalo Museum of Science | 16. Pilot Field |
| 7. Buffalo Zoo | 17. Rich Stadium |
| 8. Convention Center | 18. Theater District |
| 9. Darien Lake | 19. Theodore Roosevelt Inaugural National Historic Site |
| 10. Erie Basin Marina | 20. Tifft Farm Nature Preserve |



2

ADMISSIONS



Admissions

Admission to State University College at Buffalo is based on the academic and personal qualifications of the applicant and is granted without regard to race, color, creed, religion, or national origin of individuals. Specific questions may be directed to the Admissions Office, Cleveland Hall 206, (716) 878-4017.

Freshman Admission

All applicants must possess or be a candidate for a high school diploma. A State High School Equivalency Diploma is also acceptable. High school preparation should be broad and balanced with study in the areas of social science, English, natural science, mathematics, and foreign language. Admission decisions are based on a combination of high school grades, rank in class, scores on standardized examinations such as the SAT or ACT, and high school recommendations.

Freshmen applicants may indicate a curriculum choice, if they so desire, but it is not necessary. Those who do not indicate a major must select one by the second semester of their sophomore year. Freshmen are accepted directly into their major, with the exception of the following programs: broadcasting, criminal justice, engineering technology, exceptional education, information systems management, journalism, public communication, and social work. Freshmen interested in the aforementioned majors are accepted to the college as uncommitted students. Once enrolled, they must meet additional departmental requirements for entrance into the program.

Freshmen applicants to the elementary education and early childhood majors are accepted into a pre-elementary education program. Freshmen applicants to the business studies, office administration, business education, and distributive education programs are accepted into a pre-business sequence. All pre-elementary education and pre-business students receive advisement from the respective department and must meet departmental requirements prior to formal entrance into the major.

Special Consideration

Each year Buffalo State accepts a limited number of students who would not normally be admissible if academic criteria were the sole basis for decision. Individuals who possess special talents (in the arts or athletics, for example), those with extensive involvement and leadership roles in school or community activities, those whose academic records were adversely affected by unusual circumstances (such as illness or family crisis), or applicants who are members of historically underrepresented groups (African American, Hispanic, or Native American) may receive special consideration. Individuals accepted under this program take a reduced course load their first year and receive a variety of support services. Those wishing consideration under this program should contact the Admissions Office for further details.

Transfer Students

Transfer students with more than 30 credits must apply for and be admitted to specific programs. Those with 30 credits or less may apply for uncommitted status. Admission is based on academic performance in college and space availability. A minimum grade point average of 2.00 out of 4.00 is necessary for acceptance, although some programs are very competitive and will require a higher grade point average. No student will be accepted who is on probation at another institution or who has been academically dismissed in the past year.

Credits earned previously will be evaluated for all accepted transfers upon receipt of official transcripts. No credit will be evaluated from any institution which is not listed on the application for admission. A maximum of 91 semester hours may be transferred from other accredited institutions. However, no more than 65 hours may be transferred from two-year colleges.

No credit earned at a two-year institution after a student has earned upper division status (57 credits or more) or earned an associate's degree will be transferred.

Transfer students should understand that only credit is transferable. Grades, quality points, and cumulative averages do not transfer.

Students dissatisfied with this evaluation, whether under the guaranteed transfer policy or as a regular transfer student, may formally request a review from the Admissions Office or may submit a petition to the Academic Appeals Committee.

Special Credit

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

Source	Maximum credit hours
1. Published examinations.....	30
No more than 18 may be in general examinations.	
2. Course challenge.....	30
3. Military service courses.....	15
4. Non-collegiate institutions.....	15
5. Proprietary institutions.....	15

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

Guaranteed Transfer Policy

New York state residents who are graduates of a State University of New York two-year college, including community colleges operated within the program of the University, and who possess an A.A. or A.S. degree, shall be guaranteed an opportunity to continue their education on a full-time basis at a senior campus of SUNY. Buffalo State College, a senior campus, subscribes to and participates in this agreement. Students who are admitted to the college from parallel programs can ordinarily expect to complete their degree requirements in four semesters of full-time study. Those entering programs involv-

ing special certification and licensing may need more time to complete these additional requirements.

This guarantee will be extended to every graduate who possesses an A.A.S. degree as rapidly as appropriate existing programs are expanded and new programs are developed. Students from such programs may need additional time to complete degree requirements. Specific information is available in the Admissions Office.

Joint Dual Admission Program (Erie Community College/Niagara Co. Community College)

First-time freshmen who expect to receive an associate's degree from Erie Community College or Niagara County Community College may file a single application for simultaneous admission to one of the two-year colleges and to Buffalo State College. 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 College upon completion of the associate's degree. They will matriculate at Buffalo State College as juniors, and can expect to earn the baccalaureate degree in four additional semesters of full-time study (or the equivalent for part-time students).

The admissions requirements and general education requirements for the bachelor's degree at Buffalo State College will be those in effect at the time of the student's admission to the two-year college. Major requirements for the bachelor's degree will be those in effect at the time the student enters Buffalo State College. Further details are available from the transfer admissions counselor at Buffalo State College or the admissions offices at the participating two-year colleges.

Educational Opportunity Program

This program is designed to provide special admissions and counseling to those individuals who are both traditionally underrepresented in higher education and in need of financial assistance. Applicants must be New York state residents with a high school diploma or its equivalent. They must not qualify for admission to the college under normal admission standards and must have a family income equal to or less than published state standards. For further information and application forms, write to the Admissions Office, Cleveland Hall 207, (716) 878-4415.

International Students

The college accepts a limited number of international students each year. Applicants should possess the equivalent of 12 years of elementary and secondary education, and must provide evidence of proficiency in the English language and the ability to meet the financial costs of attending college. A special booklet, "Information for New Students From Abroad," is available from the Admissions Office.

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

Once they have received official notification of acceptance, students who intend to live on campus are required to send a deposit of \$6,000 to the Bursar's Office, Cleveland Hall 305. Students who intend to live *off campus* are required to send a

deposit of \$3,300 to the Bursar's Office. The International Student Affairs Office will then send an I-20 Form or an IAP-66 Form enabling them to obtain, respectively, an F-1 (student) visa or a J-1 visa from the U.S. Embassy or Consulate in their home country.

All international students must enroll in a group health insurance plan available through the college. The premium is \$334 per year, which must be paid to the Student Health Insurance Office, Weigel Health Center 204. International students must take their receipts to the International Student Affairs Office in Cassety Hall 115 to prove they have paid for the College Student Health Insurance Plan. Failure to do so will automatically cancel registration.

About \$9,200 a year will be necessary to cover all expenses. By the time they arrive on campus, international students should have made arrangements for the funds to cover their college career.

International students may live on or off campus. On campus, they may live in the international dormitory, which remains open during the holidays, or in any other dormitory, provided they move out of the dormitory during holidays. New international students are allowed to stay in the international dormitory over the holidays at no charge during the first year only. (See Student Services section for additional information regarding international students.)

This college is authorized under federal law to enroll non-immigrant alien students.

Early Admission

Especially well-qualified high school juniors may apply to Buffalo State College for full- or part-time study during their senior year in high school under the Early Admission Program. The college offers several options:

1. Students may enroll on a part-time basis while attending high school.
2. Students may enroll as full-time freshmen for only the last semester of their senior year.
3. Students may enroll as freshmen for the entire academic year instead of completing their senior year of high school.

The college arranges with the high school to have remaining high school diploma requirements fulfilled by taking appropriate freshmen courses. Therefore, the completion of the high school diploma requirements is concurrent with the accomplishment of earned college credits.

For further details, contact the Admissions Office, Cleveland Hall 206, (716) 878-4017.

Special Departmental Requirements

Certain programs have special entrance requirements. Some examples are:

Fine Arts—freshman and transfer fine arts applicants must present an art portfolio to the department. Interviews will be arranged by the college.

Information Systems Management—transfer students must complete a programming course with a C or better in one of the following languages: FORTRAN, COBOL, Assembly, or Pascal.

A number of programs have other entrance requirements, such as a minimum grade point average or successful completion of specific courses. Students should consult the Admissions Office for further information.

Admission Procedures

The college uses the state's common application form, which may be obtained from high school guidance offices, community college transfer offices, or the Buffalo State College Admissions Office. It should be completed and submitted to the Application Processing Center in Albany, New York.

Admission is on a first-come, first-served basis. All applications and supporting materials should be submitted no later than Dec. 15 for spring admissions, May 1 for summer admissions, and Aug. 1 for fall admissions.

Prior to class registration, all accepted applicants must submit a complete immunization record and either a completed Health History Questionnaire or the results of a recent physical examination. These materials must be on file at the Student Health Center for the protection of the student in the event of illness or injury.

With the exception of applicants to EOP, all accepted students are required to submit a \$50 advance tuition deposit. This deposit is applied to the fall or spring (whichever is appropriate) semester tuition bill.

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

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

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

Non-Degree Status

This status enables individuals to take college courses for credit without working toward a degree. Students may enroll in up to 11 hours of course work each semester on a space availability basis. Credits earned may be applicable to a degree at the college should the student apply and be accepted as a formally matriculated student. The only entrance requirement is a high school diploma or its equivalent. To register, complete a one-page application, which may be obtained from the Admissions Office. Non-degree students are not eligible for financial aid. Also see "Special Study Options."

Readmission

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

A student who has been academically dismissed must wait one full year from the time of dismissal before being considered for readmission. If readmitted, all course work taken previously will be considered in computing the cumulative average.

Readmission forms are available in the Admissions Office, Cleveland Hall 206.

Summer Session

The college offers one of the largest and most comprehensive summer programs in the State University system, with more than 350 graduate and undergraduate courses available in more than 40 fields of study. Departments often choose to offer special creative or unique courses in the summer.

Summer session consists of two six-week sessions and three three-week modules beginning in early June. The last session begins in mid-July. A summer session bulletin is available each March in the Records and Registration Office, Cleveland Hall 204.

Evening Study

Buffalo State College offers 18 undergraduate evening degree programs for its more than 1,100 evening students. The college recognizes that evening students tend to hold daytime jobs, and may be somewhat older than the traditional college age. Every effort is made to provide the programs and services necessary for students contemplating career changes. Adult students will find that Buffalo State College maintains no separate evening division. Instead, all students—whether part time or full time, day or evening—are admitted through the college's 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. This also means that the general programs, policies, procedures, and course descriptions throughout this catalog apply to day and evening students alike.

Of the college's nearly 70 undergraduate academic majors, the 18 available to evening-only students are: the arts, broadcasting, business studies, criminal justice, engineering technology (electronics, mechanical, or power and machines), food systems management, general studies, history, humanities, industrial technology, information systems management, office administration, philosophy, social work, urban-regional analysis and planning, and vocational technical education.

The courses for each of these programs are sequenced over several semesters so that evening students are able to fit them into their schedules. Occasionally courses are offered on weekends or via videotapes and local cable television as part of the college's continuing effort to make evening study as convenient as possible for working adults.

Evening Student Assistance

Evening students may visit the Evening Student Assistance Center for information about evening study at the college, available evening degree programs, alternative means of earning college credit, and other information relevant to evening study at Buffalo State College. The Evening Student Assistance Center is the evening branch of the college's Paul G. Bulger Lifelong Learning Center. It is open from 4:30 to 9 p.m. Monday through Thursday when classes are in session during the fall and spring semesters. For further information, call or visit the Evening Student Assistance Center, Twin Rise 100, (716) 878-5906.

Student Retention

In fall 1981, the college enrolled 1,645 new, full-time freshmen. To date, 38 percent have received bachelor's degrees and 3 percent are still enrolled.

3 FINANCES AND FINANCIAL AID



Finances

New students are required to pay tuition and fees upon receipt of invoice either in cash or through use of a deferred payment plan open to all students. Deductions will be made under various financial aid programs if students attach a copy of the award notice with payment.

Room and board charges must be paid prior to arrival on campus. These charges are usually included in the bill covering tuition and fees.

Further information concerning payment is available in the Bursar's Office, Cleveland Hall 304, (716) 878-4121.

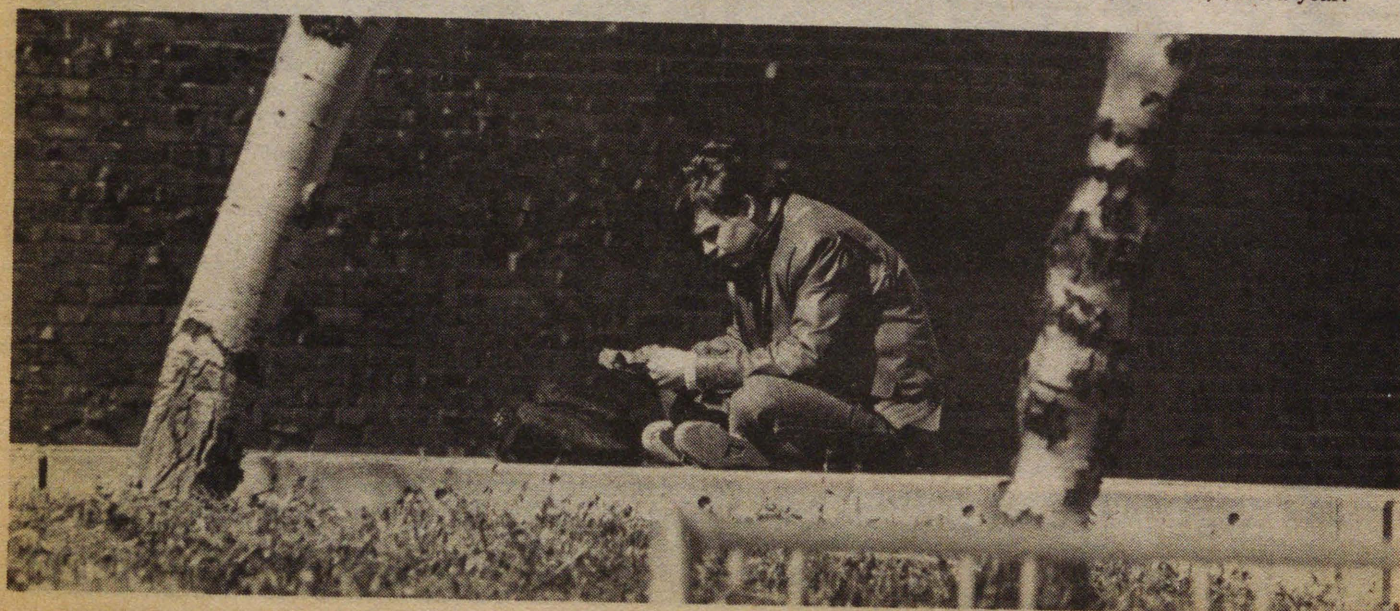
Costs—Student Expenses

Tuition

Tuition for full-time undergraduate Buffalo State students is \$675 per semester for New York state residents and \$1,975 per semester for out-of-state students. Tuition for part-time undergraduates is \$45 per credit hour for New York residents and \$132 per credit hour for out-of-state students.

Room and Board

Dormitory room rates are \$915 per semester for a double-occupancy room. Room rental does not include telephone service; students arrange for this service with the telephone company. Some single rooms are available, but the college cannot guarantee these accommodations.



Meal plan rates vary from \$450 to \$700 a semester.

College Fee

A 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 various SUNY construction projects.

Activity Fee

All full-time students are required to pay a \$45 per semester activity fee; part-time students pay \$3.75 per semester. These funds support the activities of more than 80 student groups on campus.

Late Payment Fee

A \$20 late payment fee will be assessed to all payments received after the due date on the invoice and to every delinquent file mailed to a student.

Late Registration Fee

There is a \$20 late registration fee and a late add fee of \$10 per course. These fees will not be waived or deferred.

Bad Check Fee

A "bad check" charge of \$10 will be assessed to each bad check passed. In addition, the \$20 late payment fee will be imposed.

Miscellaneous Expenses

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

The college estimates books and supplies will cost approximately \$450 a year, depending upon declared major; personal expenses, \$550 a year; and transportation, \$350 a year.

Health Insurance

An optional health insurance plan is available for \$141 a year. This is for the period of September 1, 1988, through September 1, 1989, and the rate is subject to change each year.

Foreign Student/Study Health Insurance

All international students are mandated to carry a special health insurance plan. The premium is \$334 per year. This includes the period of September 1, 1988, through September 1, 1989. There are rates for coverage during any of the semesters of the college year. The premium is subject to change each year. All American students studying abroad also must carry this insurance.

Summer Session

Tuition and the college fee are charged at the credit-hour rate for all courses taken during summer sessions. The summer rate for a double dormitory room is \$60 a week, and \$120 a week for a single room. The summer activity fee is \$5.

Explanation of Terms

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

Part-time — A student taking one to 11 credit hours a semester is a part-time student.

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

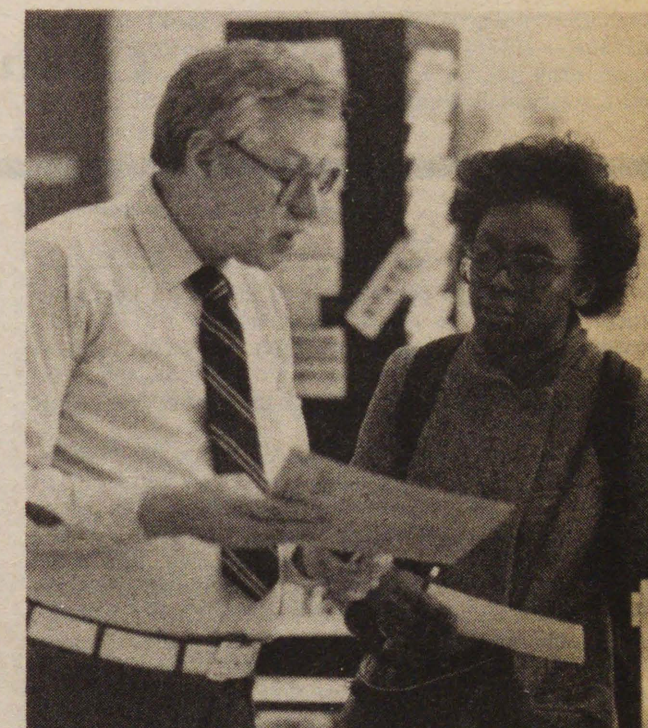
Non-Resident Tuition — Students who are not permanent residents of New York state are charged a higher tuition rate. Other fees are the same.

An Estimated Budget

Estimated college costs can be found in the following table for the 1988-89 academic year. The costs may vary according to a student's class status, place of residence, major, 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 1988-89 Fall and Spring Semesters

	Commuter	Resident
Fixed Costs		
Tuition	\$1,350	\$1,350
Fees	115	115
Total Fixed Costs	\$1,465	\$1,465
Variable Costs		
Books and Supplies	\$ 450	\$ 450
Maintenance at home	1,500	---
Room	---	1,830
Board	---	1,400
Miscellaneous expenses	550	550
Transportation	350	350
Total Variable Costs	\$2,850	\$4,580
Estimated Annual Costs (two semesters)	\$4,315	\$6,045



Refund Policy

Tuition

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

Date of Course Withdrawal	Tuition Liability
1st week of class	0
2nd week	30%
3rd week	50%
4th week	70%
after 4th week	100%

The first week of class ends on Saturday of the week in which classes are scheduled to begin.

Room Rentals

During the fall and spring semesters, a refund can be made only if students withdraw due to circumstances beyond their control. Any questions covering refunds are addressed in the Residence Hall License.

Board Charges

Meal rates are set by the Faculty-Student Association Board of Directors. The Food Service Office will determine the amount of refund due in cases of meal plan withdrawal.

Activity Fee

This fee is refunded only when registration is canceled within the first two weeks of class.

College Fee

Not refundable under most circumstances.

All refunds are mailed to the student's permanent address.

Financial Aid

Student Financial Aid

The cost of a college education need not be an impossible burden. Although the primary responsibility for financing education rests on the student and his or her family, there are numerous financial aid programs — grants, loans, and work-study positions — that can help bridge the gap between college costs and family resources.

Buffalo State College's Financial Aid Office has been extremely successful in helping students find ways and means of financing their college educations. Currently, the office oversees the distribution of more than \$17 million in federal and state grants, loans, and jobs annually, and determines student eligibility for the College Work-Study Program (CWSP), Educational Opportunity Program (EOP), Stafford Student Loan (formerly GSL), Perkins Loan, and Supplemental Educational Opportunity Grant (SEOG).

About 75-80 percent of Buffalo State students are eligible for some type of aid. At least 3,400 students are currently receiving federal Pell Grants each year. About 3,700 receive federal loans in excess of \$6 million total. Work-study opportunities provide each of some 600 students with an additional \$700 per semester.

The Financial Aid Office, with one of the most experienced staffs in the state, works year round to keep students and their families up-to-date on financial aid possibilities. Service is personalized; communication is frequent. The office is open from 9 a.m. to 4:15 p.m. weekdays, and students are invited to make appointments to meet with the staff. In addition, upon filing applications, all incoming students are notified by mail about financial aid programs for which they may be eligible and the requirements which must be met.

The office provides information and forms for a variety of programs and also awards available funds on the basis of federal and state guideline to students who have completed the appropriate financial aid applications. Three types of aid are available: grants (financial aid that does not have to be repaid); loans (money that must be repaid at low interest); and employment (opportunities for students to work to earn part of the needed funds).

The office is the clearing house for many college scholarships, which are offered by special groups on and off campus. Notices of these scholarships are usually announced in the Buffalo State *Record*. In addition, the office administers several short-term loan programs for students needing small amounts of money.

Financial Aid Is Based on Need

Financial need is defined as the difference between the amount of money a family may be expected to contribute and the total cost of education. (Total college costs include tuition, fees, room, and board paid directly to the college in addition to related expenses, such as books and supplies, transportation, and personal expenses.)

The Financial Aid Office uses the Financial Aid Form (FAF) to assess a family's ability to pay for college. Information on this form includes the family's annual income, debts, and assets, number of dependents, other family members in college, and unusual circumstances. The office analyzes this information, and, with the help of an annually revised formula prescribed by the federal government, makes a determination of how much a family can reasonably be expected to contribute. The student is also expected to contribute something from savings, summer earnings, or special benefits he or she may receive.

All of the information provided on the Financial Aid Form and on any attachments is confidential and is used only by the Financial Aid Office to determine eligibility. It is not shared with the Admissions Office, academic departments, or administrators.

If family circumstances change at any time, the office should be notified at once. A death in the family, loss of employment, and change from commuter to resident status are examples of changes which could affect the amount of aid offered.

Who is Eligible?

It is important to remember that only **matriculated** students — students who have been accepted at the college and are pursuing specific degree programs — are eligible to receive most financial aid. Non-matriculated students are those who are not recognized as degree candidates, and therefore are not eligible for financial aid. This includes continuing education, some visiting, and special status students who have been allowed to take courses but have not been formally accepted by the college.

To continue receiving campus-based aid, all recipients must file the Financial Aid Form (FAF) **every year** with the College Scholarship Service in Princeton, New Jersey, listing the Buffalo State College code (2533) and enclosing the appropriate processing fee. Applications must be filed by March 1 for the following academic year to receive full consideration. Applications received after March 1 are subject to funds available. Other programs may require the filing of separate applications each year as well.

Some financial aid programs are based on full-time enrollment (12 credits hours a semester or more). If a student's enrollment is for less than that, the award may be subject to reduction or cancellation.

Students also must be citizens, nationals, or permanent residents of the United States or a citizen of the Federated States of Micronesia, the Marshall Islands, or a permanent resident of the Trust Territory of the Pacific Islands (Palau) to apply for aid. Students who are non-citizens may be eligible if they provide documentation from the Immigration and Naturalization Service (INS) that designates them as lawfully present in the U.S. for other than a temporary purpose with the intention of becoming a citizen or permanent resident.

To continue to receive aid, students must make satisfactory progress toward completion of a degree in accordance with the Academic Policies chapter of this catalog and any addendums. Also, they must not be in default of any loan or owe a refund for any Title IV grant to any institution.

All inquiries concerning financial aid or related matters should be addressed to:

Financial Aid Office
Cleveland Hall 309
State University College at Buffalo
1300 Elmwood Avenue
Buffalo, N.Y. 14222-1095

A detailed brochure on financial aid information is also available from this office. (716) 878-4901

How to Apply for Financial Aid

Students are encouraged to apply early for financial aid. Application forms may be obtained in the Financial Aid Office, Cleveland Hall 309, (716) 878-4901. The requirements below pertain to 1988-89. As this catalog spans more than one academic year, all procedures and eligibility requirements may change, subject to government action.

All students applying for aid at the college must file the Financial Aid Form (FAF) each year. This form is also the application for the federal Pell Grant and the Guaranteed Student Loan Program as well as the state's Tuition Assistance Program (TAP) and all campus-based aid programs. It should be completed and mailed to the College Scholarship Service, CN 6344, Princeton, New Jersey 08541. Buffalo State's college code is 2533. An annual processing fee must be enclosed in order for Buffalo State to receive the application for campus-based aid and student loan consideration. (The college also accepts the American College Testing Family Financial Statement, code number 2920.) Filing deadline for summer, fall, and spring semesters is the previous March 1 for continuing students. Applications will be accepted after the deadline on a first-come, first-served basis, with awards subject to availability of funds.

The following forms must be submitted annually for specific aid programs.

1. Pell Grant — Apply using the Financial Aid Form (FAF). The Application for Federal Student Aid (AFSA) is available **ONLY** if the FAF will not be filed for other program eligibility. The completed AFSA form should be mailed to the address indicated on the form. The deadline date is May 1 of the academic year (i.e., May 1, 1989, for 1988-89). Submit the Student Aid Report (SAR) results to the Financial Aid Office.

2. Tuition Assistance Program (TAP) — For New York states residents **ONLY**. Apply with the Financial Aid Form (FAF). Award notices will be sent to the student for the first New York state school listed. The TAP deadline is May 1 of the academic year (i.e., May 1, 1989, for 1988-89).

3. Stafford Student Loan (formerly GSL) — The Financial Aid Form (FAF) along with a Guaranteed Student Loan application should be completed and sent to the Financial Aid Office at least three (3) months prior to the first day of classes for the semester for which you wish to attend in order to meet appropriate payment or deferment deadlines. The Financial Aid Office will complete the college section and forward it to the appropriate lender.

4. Other Loans (Parent Loan for Undergraduate Students (PLUS); Supplemental Loans for Students (SLS)) — Application forms available from participating lending institutions. Completed forms are to be submitted to the Financial Aid Office for processing.

Who is Self-Supporting?

The following regulations must be met and documented for students to be considered self-supporting or independent for federal financial aid consideration. For 1989-90:

- Was the student born *before* January 1, 1966? Yes _____ No _____
- Is the student a veteran of the U.S. Armed Forces? Yes _____ No _____
- Is the student a ward of the court or are both parents dead? Yes _____ No _____
- Does the student have legal dependents other than a spouse? Yes _____ No _____

A YES response to any one of these questions would allow a student to be considered independent.

If a student cannot meet any of the above criteria for independent student status, the following secondary requirements may be considered:

Unmarried (Single, Divorced, Widowed, or Separated) Undergraduate Students:

Was the student claimed by parents as an income tax exemption

- ... in 1987? Yes _____ No _____
... in 1988? Yes _____ No _____

If the student is able to answer "no" to both years, then he/she should proceed to the following questions:

For the student, who **first** received financial aid during the **1987-88 school year**, were the student's total resources \$4,000 or more, not including parents' support,

- ... in 1985? Yes _____ No _____
... in 1986? Yes _____ No _____

For the student, who **first** received financial aid during the **1988-89 school year**, were the student's total resources \$4,000 or more, not including parents' support,

- ... in 1986? Yes _____ No _____
... in 1987? Yes _____ No _____

For the student, who **never** received financial aid or first received financial aid **before the 1987-88 school year**, were the student's total resources \$4,000 or more, not including parents' support,

- ... in 1987? Yes _____ No _____
... in 1988? Yes _____ No _____

Married Students or Graduate/Professional Students:

Will the student be claimed by parents as an income tax exemption in 1989? Yes _____ No _____

If the answer is "Yes" to the appropriate questions above, and the student is able to answer "No" to the question of being claimed by parents, the student may be considered independent.

Award Notification

Freshmen and transfer students who have filed financial aid applications will receive notification after they have completed the acceptance process to the college for the following federal and state programs: Supplemental Educational Opportunity Grant, Perkins Loan (formerly National Direct Student Loan [NDSL]), College Work-Study Program, and Educational Opportunity Program. Continuing students will start to receive notification beginning in June. The Financial Aid Office determines the eligibility for these programs.

Overawards

Students are urged to contact the Financial Aid Office promptly when they receive funds from any source not listed on their award letters or amounts that are different from what was estimated.

Overawards occur on occasion because of the length of time it takes to match funds from various sources against student records. Students are responsible for repaying any money that is overawarded.

FINANCIAL AID PROGRAMS

FEDERAL AID

Before any Title IV funds (CWSP, Perkins, SEOG, Pell, and GSL) may be disbursed, the following statements and procedures must be followed.

1. Statement of Educational Purpose — Recipients of funds through federal programs must sign a Statement of Educational Purpose indicating that funds received will be used for such purposes, and file an acceptance form by the required date.
2. Information (Application) Verification — All students receiving Title IV funds are subject to Department of Education verification procedures. Selected students and their parents may be asked to provide supporting documentation (i.e., tax returns) and other information that verify the accuracy of the data reported on the student aid application(s).
3. Financial Aid Transcript — All incoming transfer students are required to submit financial aid transcripts from all prior institutions. Forms are available at the Financial Aid Office.
4. Selective Service Registration Statement — All students must sign a statement that they have registered with the Selective Service or that they are not required to do so prior to the disbursement of Title IV funds.
5. Default/Refund Statement — All students must sign a statement that they are neither in default on any student loan (GSL, Perkins) nor do they owe a refund on any Title IV grant (Pell, SEOG) program at any institution.

Pell Grant

Pell Grant is an entitlement program for undergraduates enrolled at least on a half-time basis in a degree program. Eligibility and the amount of the award are based on need. For 1988-89, awards are expected to go as high as \$2,200 or sixty percent of the total cost of attendance, whichever is less. Pell Grant payments may be made for the period of time required to complete the first bachelor's degree.

To apply for 1988-89, either the Financial Aid Form or an AFSA application must be filed by May 1, 1989. For 1989-90, the deadline is May 1, 1990. Applications are available in the Financial Aid Office. About six to eight weeks after filing, a calculated Student Aid Report will be sent to the applicant, who must submit all copies to the Financial Aid Office for determination of the amount of the grant, and for processing of payment.

For selected applicants, the Department of Education requires additional documents to be submitted for verification to the Financial Aid Office. This procedure must be completed before final eligibility can be determined and appropriate payment made.

If a student's family experiences a dramatic change in income from one year to the next, the student may be eligible to apply for a Pell Grant based on estimated income. Further details are available in the Financial Aid Office.

Supplemental Educational Opportunity Grant (SEOG)

For undergraduates, who can demonstrate financial need, this grant program provides awards ranging up to \$750 per year. SEOG awards may be received for the period of time required to complete the first bachelor's degree. Preference is given to full-time students.

Application is made with the FAF through the college's Financial Aid Office, which is responsible for determining who receives these grants and the amount. This application also covers the College Work-Study Program and Perkins Loan.

College Work-Study Program (CWSP)

This work program for students demonstrating financial need offers positions both on campus and at approved off-campus locations. Where possible, placements are made according to the student's educational/vocational goals. Salaries are paid biweekly for actual hours worked up to an average of 12 hours a week. Students earn about \$675 a semester. Preference given to full-time students.

Application is made through the college's Financial Aid Office using the FAF.

Perkins Loan (formerly National Direct Student Loan [NDSL])

Undergraduate students may borrow up to \$4,500 for the first two years of study depending on need. A total of \$9,000 may be borrowed for a bachelor's degree program.

The cumulative amount for a master's degree is \$18,000. Preference is given to full-time students. Loans may be limited due to fund availability.

If you are a new borrower, and you are attending at least half-time, you have a grace period of nine months. (If you are not a new borrower your grace period may be six months.) You may be allowed up to 10 years to repay the loan. The schedule of repayment will depend on the size of the loan but the minimum amount is \$30 per month, which includes five percent interest on the unpaid balance.

Repayment of the entire loan may be canceled for full-time teaching in a school designated by the Department of Education as being low income, or for teaching handicapped children. Application is made through the Financial Aid Office, using the Financial Aid Form (FAF). Federal regulations also require a loan exit interview prior to a student's leaving

the college. This interview, also conducted by the Financial Aid Office, includes repayment obligations, deferment options, and cancellation possibilities.

Veterans Administration

Eligible veterans and children or spouses of eligible deceased or service-connected disabled veterans may be able to receive aid for approved post-secondary study. Information and application forms are available at all Veterans Administration Offices.

Aid to Native Americans — Federal

The United States Bureau of Indian Affairs offers grants for college study to needy applicants who are at least one-fourth American Indian, Eskimo, or Aleut; enrolled members of a tribe, band, or group recognized by the bureau, and enrolled in or accepted at an approved four-year institution. Awards vary depending on need and available funds.

An application is necessary for each year of study and must be accompanied by an official needs analysis from the Financial Aid Office. First-time applicants must also submit tribal enrollment certification from the bureau agency or tribe which records enrollment for the tribe.

Applications are available from:
U.S. Department of Interior
Bureau of Indian Affairs, New York Liaison Office
Federal Building, Room 253
100 South Clinton Street
Syracuse, New York 13260-0043

NEW YORK STATE AID PROGRAMS

Tuition Assistance Program (TAP)

Full-time students enrolled in a degree program at an approved New York state post-secondary institution are eligible to participate in this grant program. Awards are based on taxable income and tuition and fees charged. Undergraduates may receive from \$350 up to maximum tuition each year for four years unless enrollment is in an approved five-year program.

A recipient must be a U.S. citizen or permanent resident alien and a New York state resident. If the student is dependent, the family net taxable income from the preceding tax year must be below \$34,251; if independent and single with no tax dependents, net taxable income must be below \$10,000. To be considered independent, a student must meet specific TAP requirements regarding age, residency, and financial status.

To continue to be eligible to receive payment, students must maintain good academic standing and be making reasonable progress toward a degree as required by State Education Department regulations.

These requirements plus application forms can be obtained from the Financial Aid Office or from the New York State Higher Education Services Corporation, 99 Washington Ave., Albany, N.Y. 12255. The Higher Education Services Corporation determines eligibility and mails an award certificate directly to the applicant indicating the amount of the grant. Application deadline for 1988-89 is May 1, 1989, and for 1989-90, May 1, 1990.

Educational Opportunity Program (EOP)

A grant program for undergraduates only who are both traditionally underrepresented in higher education and in need of financial assistance, this program requires New York state residency. Students must be accepted or enrolled generally as full time in the Buffalo State EOP program. Awards are based on financial need and available funds and can be received for up to 10 semesters. New students should apply through the EOP Admissions Office, Cleveland Hall 207. Returning students may pick up financial aid applications in the Financial Aid Office, Cleveland Hall 309.

Regents College Scholarship (RC)

This tuition scholarship for full-time students residing in New York state is based on results of the Scholastic Aptitude Test (SAT) or American College Testing Program Assessment (ACT) taken by high school students in their senior year. Awards are for \$250 a year for tuition for up to four years unless enrolled in an approved five-year program.

To receive payment, a Financial Aid Form (FAF) or a Student Payment Application from the New York State Higher Education Services Corporation must be filed each year. Students may receive both a Regents College Scholarship and a TAP award (see section on TAP) if eligible for both. Payment applications are available from the Financial Aid Office or by writing the New York State Higher Education Services Corporation, 99 Washington Ave., Albany, N.Y. 12255.

Children of Veterans Award

The Child of Veteran Award is a financial aid program for children of veterans who are deceased, disabled, or missing in action as a result of service during World War I, World War II, the Korean conflict, or the Vietnam era, or who are classified as prisoners of war during such service.

Awards of \$450 a year for up to five years (depending on the normal length of the undergraduate degree program) in a college or hospital nursing school in the state without consideration of income or tuition costs. The combined Child of Veteran Award and TAP award cannot exceed the amount of tuition charges.

A special application supplement is available from the New York State Higher Education Services Corporation.

New York State Aid for Part-time Study (APTS)

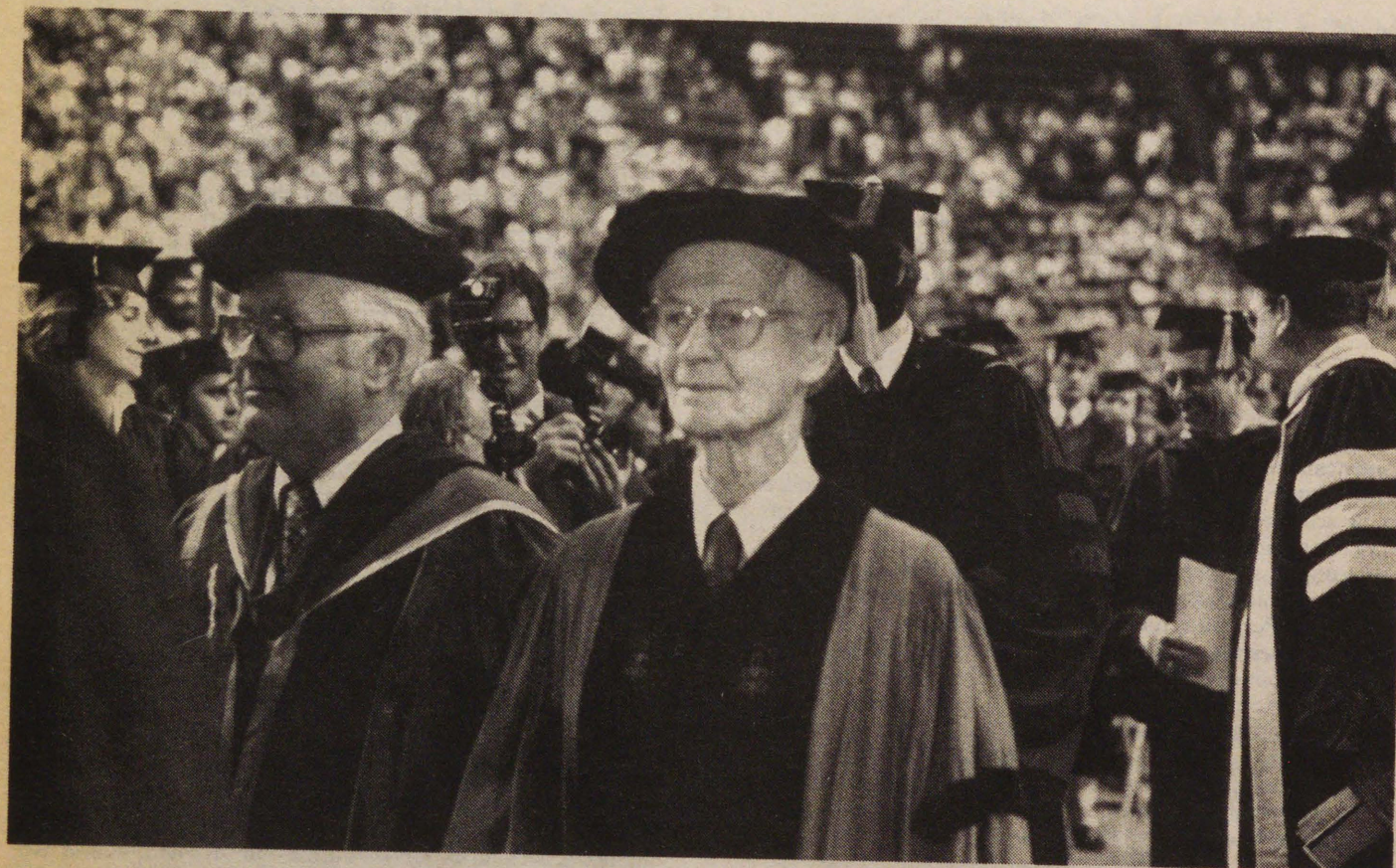
This New York state aid program provides tuition assistance for part-time undergraduate students enrolled in degree programs.

Students who intend to enroll as at least half-time students and who meet all other eligibility requirements may apply for this campus-based program.

To be considered for an award a student must:

- Be working toward an undergraduate degree as a part-time student enrolled for six-11 semester hours per semester.
- Have already earned at least six semester hours of credit or the equivalent.
- Retain good academic standing.
- Be a resident of New York state.
- Be either a U.S. citizen, permanent resident alien, or refugee.

—Meet the income limits. "Income" means the net taxable income as taken from the previous year's New York state income tax return. The income limit varies with the student's eligibility to be claimed as a tax dependent. If the student was not eligible



to be claimed as a tax dependent of the parents, the student's (and, if married, the spouse's) New York state net taxable income cannot exceed \$15,000. If the student was claimed as a tax dependent, the family's (student, spouse, and parents) New York state net taxable income cannot exceed \$22,000.

- Not have used up Tuition Assistance Program (TAP) or other New York state student financial aid eligibility for full-time study.
- Apply for a federal Pell Grant.

Awards are based upon a student's financial need and funds available at our institution. (Awards cannot exceed the educational costs minus the total of other grants awarded.)

Contact the Financial Aid Office for information and applications.

Vietnam Veterans Tuition Award

New York state has instituted a Vietnam Veterans Tuition Award program for Vietnam veterans enrolled as matriculated students.

These tuition awards range from \$1,000 per semester for full-time attendance to \$500 per semester for part-time attendance.

Full-time students may receive this award for up to eight semesters for a four-year program (four years) or 10 semesters for undergraduate study if a program is specifically approved as requiring five years. Part-time students taking from three to 11 hours per semester may receive this award for up to 16 semesters, or 20 semesters if a program is specifically approved as requiring five years of full-time study. Total awards may not exceed \$5,000. If a TAP award is also received, the combined academic year award cannot exceed tuition.

In order to receive the Vietnam Veterans Tuition Award, students must meet the following eligibility requirements. They must:

- Have served in the armed forces of the United States in Indochina between Jan. 1, 1963, and May 7, 1975.
- Have been discharged from the service under other than dishonorable conditions.
- Have been a resident of New York state on April 20, 1984, or have been a resident at time of entry into the service and must have resumed residency by September 1, 1987.
- Apply for a Tuition Assistance Program (TAP) award and a Pell grant if applying as a part-time student.

For those interested, applications are available at the Financial Aid Office or by writing to:

NYSHESC
VVTA
Albany, N.Y. 12255

Supplemental Tuition Assistance Program (STAP)

Undergraduate students who are educationally disadvantaged and require remedial courses may be eligible for up to one additional semester of tuition aid beyond their TAP eligibility. For further information concerning the Supplemental Tuition Assistance Program, contact the Financial Aid Office.

New York State Higher Education Service Corporation
(NYSHESC/Student Bank Loan/Stafford Student Loan)
The New York State Higher Education Services Corporation

(NYSHESC) sponsors a loan program for students who are enrolled at least half-time at an approved college and who are U.S. citizens or permanent residents in addition to residing in the state. The program enables both undergraduate and graduate students to borrow directly from a bank, credit union, savings and loan association, or other participating lender. Depending on total college costs, other aid, full/part-time status, and the application of the family contribution for all applicants, the amount a student in his/her first two years may borrow is \$2,625. A student, who has achieved third year status of undergraduate study, may borrow \$4,000 per year. A total of \$17,250 may be borrowed for undergraduate study. Graduate students may borrow \$7,500 per year. A total of \$54,750 for both undergraduate and graduate study is the maximum a student may borrow under this program.

Repayment begins six months after at least half-time enrollment has ended, and students generally have from five to ten years to repay. The minimum payment, barring unusual circumstances, is \$600 per year, which includes 8 percent interest on the unpaid balance. For a new borrower, who is borrowing for a period of enrollment which begins on or after July 1, 1988, the applicable interest rate will be 8 percent until the end of the fourth year of repayment and will be 10 percent beginning the fifth year of repayment status. The federal government will pay the interest on the loan until the repayment period begins, and also during any other authorized periods of deferment. An annual insurance premium of ½ percent of the loan is payable to the lender at the time the check is issued. Also, a 5 percent origination fee is charged against the loan by the program and will usually be deducted from the amount of the check.

Loan applications are available at the lending institution. The completed application and a current Financial Aid Form (FAF) are submitted to the Financial Aid Office for its recommendation and then sent to the lending institution. The lender will forward it to the New York State Higher Education Services Corporation for final decision. NYSHECS notifies the student and the lender of the loan decision.

Student loan checks, which are payable to both the student and the college, are mailed directly to the school. The college Bursar Office will notify the student when the check arrives on campus. Loan checks over \$1,000 will be disbursed in two installments if the enrollment period spans more than six months.

Due to the volume of applications and federal verification requirements, it is suggested that Stafford Loan applications be filed with the Financial Aid Office three months before the semester for which the loan is needed. This will also help eliminate cash flow problems regarding books, supplies and transportation which often occur early in the semester.

Other Loans

There are two types of other educational loans available to provide additional funds for educational expenses. The annual interest rate for these loans will not exceed 12 percent and may be less based on the U.S. Treasury bill rate. Like the GSLs, they are made by a participating lender.

Loan applications are available at the lending institution and the completed application is submitted to the Financial Aid Office. Unlike the Stafford Loan, there are no restrictions or limits to eligibility based on family income; however, no loan may exceed the difference between the student's budget and other aid.

Parents Loan for Undergraduate Students (PLUS)

This loan is available to parents of dependent undergraduate students. They may borrow up to \$4,000 per year per child, and up to \$20,000 in total for each child.

An insurance premium of ½ percent of the total loan is collected at the time of check issue by the lender. There is no origination fee charged. Parents must begin repayment of principal and interest (variable) within 60 days after the loan is received. The minimum monthly payment is \$60 with repayment to be completed within five-10 years, depending on how much the parent borrowed.

Many of the rights and responsibilities of Stafford Loans apply to this program; however some of them are different. Contact the lending institution for complete information, forms, and procedures.

Supplemental Loans for Students (SLS)

This loan is available to independent undergraduates and to graduate and professional students. Undergraduates may borrow up to \$4,000 per year with a \$20,000 total (including any Stafford Loan borrowed).

Students must begin repayment of interest (variable) within 60 days of receipt of the loan. (This includes the time in school attendance.) Some lenders let the student delay interest payments until repayment of the loan begins. Contact the lending institution for the details for capitalizing the interest on this loan. An insurance premium of ½ percent of the total loan is collected at the time of check issue by the lender. There is no origination fee charged.

Repayment of the principal plus interest begins within 60 days after leaving school or dropping below full-time attendance. The minimum monthly payment is \$60, with repayment to be completed within five-10 years depending on how much the student borrowed.

State Aid to Native Americans

This is an entitlement program with neither a qualifying examination nor a limit in the number of recipients. Students receive up to \$1,350 a year for a maximum of four years of full-time study. A minimum of 12 credit hours must be taken each semester. Students registered for less will receive about \$46 per credit hour.

To qualify, applicants must: be a member of one of the Native American tribes located on reservations within New York state, have graduated from an approved high school, or have earned a general-equivalency diploma, or be enrolled in a program in an approved post-secondary institution leading to degree credit status and the general-equivalency diploma, or be enrolled in a program in an approved post-secondary institution in New York state.

Applications and program details may be obtained from the Native American Education Unit, New York State Education Department, Albany, N.Y. 12234.

Recipients must notify the Native American Education Unit in writing of any change in student status, program, or institutional enrollment.

Office of Vocational Rehabilitation (OVR)

Disabled students pursuing higher education may be eligible for assistance through the State Office of Vocational Rehabilitation. Criteria and funding vary. Applications and eligibility requirements may be obtained at local Vocational Rehabilitation offices.

COLLEGE AID PROGRAMS

Job Location and Development Program

The Job Location and Development Program was established to provide Buffalo State college students with part-time employment opportunities in the Buffalo area. The program provides alternatives for students to learn work-related skills while defraying educational costs. All students currently registered may make use of the service, regardless of eligibility for other student assistance programs (Title IV funding).

To register for the program, make an appointment for an initial screening interview at the Financial Aid Office.

Scholarships

A limited number of scholarships are available to students showing outstanding leadership qualities, academic abilities, and financial need. Some of these awards are provided by outside organizations, others by specific departments at Buffalo State.

The scholarships listed below are administered by the Financial Aid Office. Students fill out a single form for all of them. Unless otherwise stated, all students may apply. In most cases selection is made by the organization. Notices of deadlines are published in the student newspaper and are on file in the Financial Aid Office.

Buffalo Council of Parents and Teachers — for students residing in Buffalo who are graduates of Buffalo public high schools and whose parents have been P.T.A. members.

College Club of Buffalo; Daniel Upton Tri Sigma — for junior females majoring in education.

Mothers Club of United Methodist Church

State University College at Buffalo Association of Women

Women Teachers Association of Buffalo — for upper-class females majoring in education.

The following scholarships/awards require separate application forms and, for the most part, have more specialized requirements:

Alumni Scholarship — for all students. Applications are available in the Alumni Office in Moot Hall.

Additional Alumni Scholarships — awards for undergraduates who are from specially designated areas or are members of particular organizations. Applications are available in the Alumni Office in Moot Hall.

Chemistry — for outstanding junior female majoring in chemistry. Selection is made by the Chemistry Department.

Exceptional Education — grants from various fraternal organizations available to majors in all areas of exceptional education. Contact chairperson of Exceptional Education Department, Ketchum Hall 201.

Foreign Language — two scholarships are available through Foreign Language Department, Bishop Hall 121. Application deadline is April 1.

Home Economics, Nutrition and Food Science — eight special scholarships/awards available to students majoring in these areas. A single application form can be obtained in Caudell Hall 207. It must be filed by April 7 of each academic year.

Frances Siu Lan Tyau International Student Scholarship — one annual scholarship awarded to an international student.

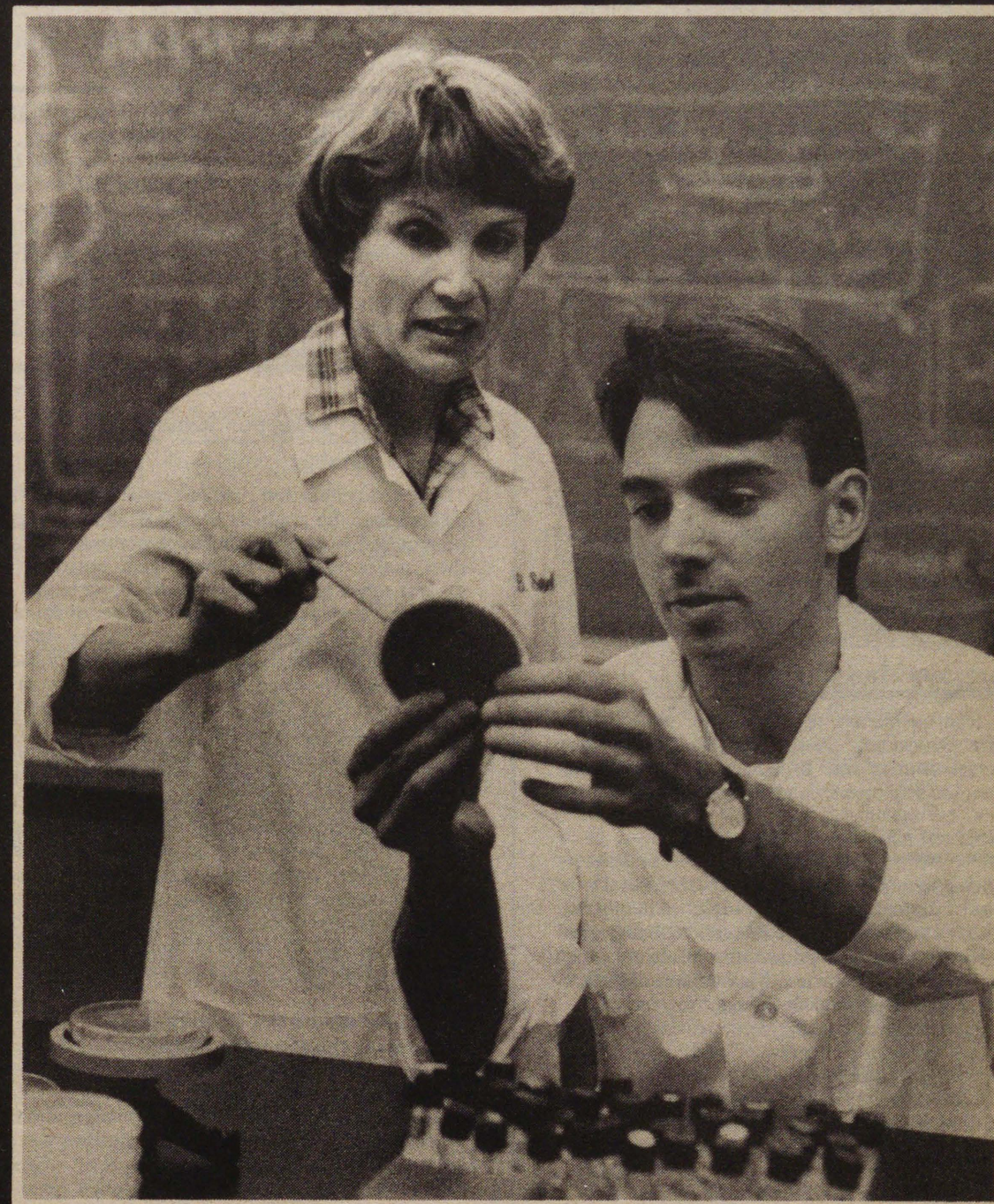
Candidates are screened by a selection committee in March of each year. Further information is available from the director of International Student Affairs, Cassety Hall 115.

In Memory of Anthony Sokolowski from Donald, Suzanne, and Jonathan Sokolowski Scholarship — one or more annual scholarships of \$100 to \$200 awarded in accordance with the following criteria:

1. Polish descent
2. Completion of a minimum of two semesters at Buffalo State.
3. Minimum cumulative average of 3.0 at time of selection.
4. Preference to education or history majors (other majors acceptable if education or history major does not qualify).
5. Demonstrated financial need as determined by financial aid need analysis system.



4 ACADEMIC PROGRAMS



Academic Programs

Academic Organization

The college is organized into three faculties: Arts and Humanities, Applied Science and Education, and Natural and Social Sciences. Each faculty contains specific departments which are responsible for the degree programs offered there.

All of the major areas of study or interdisciplinary programs described below fall under the responsibility of one or more of the departments.

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

Faculty of Applied Science and Education

The following departments are in the Faculty of Applied Science and Education: Business, Consumer Studies and Home Economics, Criminal Justice, Educational Foundations, Elementary Education and Reading, Exceptional Education, Information Systems Management, Nutrition and Food Science, Social Work, Speech Language Pathology and Audiology, and Technology.

Faculty of Arts and Humanities

The following departments are in the Faculty of Arts and Humanities: Art Education, Design, English, Fine Arts, Foreign Language, Journalism, Broadcasting and Speech, Performing Arts, and Philosophy and Religious Studies.

Faculty of Natural and Social Sciences

The following departments are in the Faculty of Natural and Social Sciences: Anthropology, Biology, Chemistry, Economics, Earth Sciences and Science Education, Geography and Planning, Health, Physical Education and Recreation, History and Social Studies Education, Mathematics, Physics, Political Science, Psychology, and Sociology.

General Requirements for Bachelor of Arts and Bachelor of Science Degrees

Special Note For Students Who Entered Buffalo State Prior to the Fall 1984 Semester

The general education requirement described below is in effect for all students who entered Buffalo State in the fall 1984 semester or thereafter. Students who began their studies at the college prior to this time will have the option of graduating under the new requirements or under those described in the appropriate catalog. Students who have returned to Buffalo State after an absence of two or more years must complete the degree requirements described below.

The General Education Requirement

Goals

The general education requirement is based on the belief that all students who graduate with B.A. or B.S. degrees ought to be required to take a significant number of courses outside their major areas in order to gain breadth. Through the general education requirement and, in particular, through the careful arrangement of a limited number of courses in selected categories, the college hopes to provide for students a general framework for understanding the complexity and diversity of human experience and an intellectual context from which to evaluate critically their own values as well as the values of society. This framework will help students gain the experience, knowledge, and sensitivity necessary to function in contemporary society as educated individuals and to adjust to the pressures and demands of careers and of life.

The requirements are structured in ways that will enable students to: acquire a knowledge of basic scientific methodologies; understand the impact of technology on society; gain insights into the basic workings of institutions and societies; become aware of other cultures and other times; appreciate the role of arts and humanities; gain a deeper sensitivity to the major ideas and events that shape society.

The Structure of the Requirement

The general education requirement comprises 60 credits of the 123 credits necessary for graduation. This 60-credit requirement is divided into two parts: the **core** of 42 credits, which is divided among specific areas of knowledge, and the remaining 18 credits (the **general education electives**), which may be chosen (with advisement) from any or all of these areas. In each category (core and general education electives), students may select from lists of specially approved courses. A description of each course listed may be found in the course listing section of this catalog. The courses described in this catalog which meet the general education requirement are listed below, as are the specific categories and credit distribution.

Categories and Credit Distribution

Core Requirement.....42 credits
(Each core area must contain courses from at least two distinct academic fields.)

Applied Science and Education.....6
(appropriate courses from business, consumer studies and home economics, criminal justice, educational foundations, elementary education and reading, exceptional education, information systems management, nutrition and food science, social work, speech language pathology and audiology, and technology)

Arts.....9
(appropriate courses from art education, design, fine arts, and performing arts)

Humanities.....9
(appropriate courses from English, foreign language, journalism, broadcasting and speech, and philosophy and religious studies)

Math/Science.....9
(appropriate courses from biology, chemistry, geosciences, mathematics, and physics and interdisciplinary sciences)

Social Science.....9
(appropriate courses from anthropology, economics, geography and planning, history and social studies, health, physical education and recreation, political science, psychology, and sociology)

General Education Electives.....18 credits
(must include courses from at least three of the core categories)

TOTAL.....60 credits

Additional Guidelines, Notes, and Requirements

Basic Skills Courses

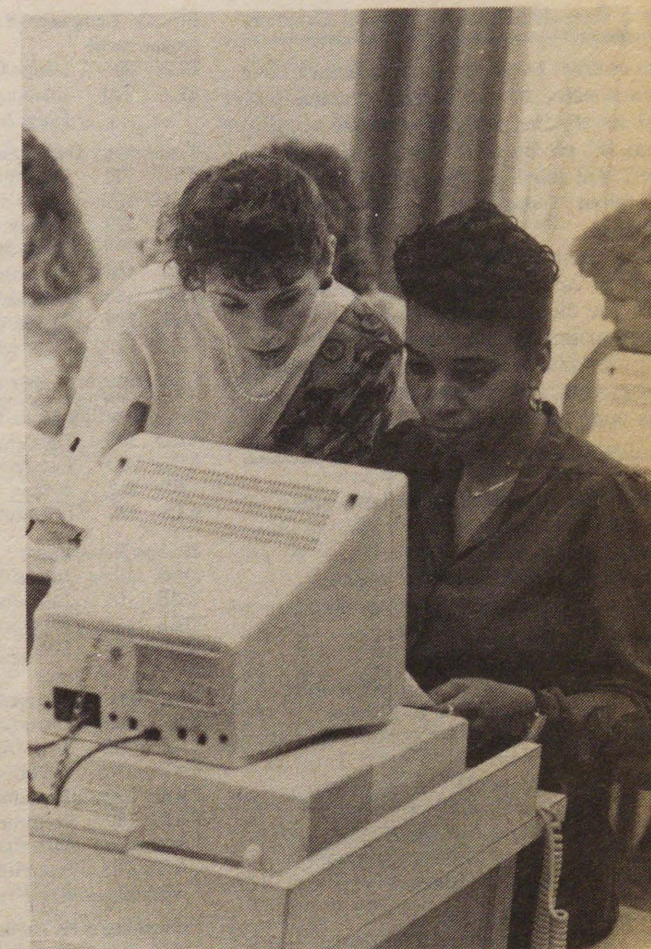
Students **may not** apply courses in mathematics and English taken for the purpose of satisfying the basic skills requirement to fulfill any part of the general education requirement. These courses (ENG 101, 102, MAT 100) must be used only as all-college or free electives. A complete description of the basic skills requirement may be found in the following pages of this catalog.

Physical Education Requirement—All students must complete the two-credit physical education requirement, as outlined elsewhere in this catalog. Courses taken to satisfy the physical education requirement **may not** be applied toward the general education requirement.

Major Courses—Students **may not** use courses required by their major or courses from their major discipline to satisfy any part of the general education core requirement.

Dual Major 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.

Upper-Level Requirement—All students must complete a minimum of 45 credits of their total program (including the major) with upper-level courses (300-400 level; an exception is made for foreign language courses as noted below).



Special Notes to Students and Advisers Regarding Selection of Courses

Because of their importance, it is recommended that consideration be given to the following areas by advisers and students:

1. In order to encourage the integration of knowledge derived from the general education requirement, it is recommended that nine of the 60 hours selected by each student focus on a specific, common issue or period that has had a major impact on civilization and that courses selected represent at least two distinct academic fields. These courses and the particular area of special focus would be determined jointly by the student and adviser.

2. In recognition of the increasing need for quantitative and analytic skills in contemporary society, it is recommended that at least one course be selected from either the core or the electives that incorporates an approach that is primarily analytic. This may include courses in logic, statistics, mathematics, or computer technology. Such an approach would assist students in the development of a more critical and analytic method of inquiry.

3. In recognition of the increased importance of a global perspective in the contemporary world, it is recommended that at least one course in the student's program, to be selected under advisement, focus on a foreign culture. This may be accomplished through a humanistic, social scientific, or artistic approach.

Core Requirement - Selected Courses

The courses listed for each category have been selected by the faculty because they best satisfy the goals of the core requirement (42 credits). Students and their advisers will select the particular courses to be taken from the list of approved courses.

The requirement for each category must be satisfied by courses from more than one distinct academic field as determined primarily by course prefix designation; for example, if a category includes nine credits, only two of the three courses may come from the same field.

Core Category: Applied Science and Education (6 credits)**Business Department**

- BUS 116 Introduction to Business
BUS 117 Introduction to Retailing

Consumer Studies and Home Economics Department

- CFS 101 Trends in Consumer Studies
CFS 206 Introduction to Textiles
CFS 301 Preparation for Marriage and Family
CFS 308 Human Dev/Family Rel: Adolescent Years Through Young Adulthood
CFS 340 Introduction to Fashion Merchandising

Criminal Justice Department

- CRJ 101 Introduction to Criminal Justice Systems and Administration
CRJ 201 Criminal Law & Procedure
CRJ 302 Community Issues in Criminal Justice

Educational Foundations

- EDF 206 Introduction to the Group Experience

Exceptional Education Department

- EXE 300 Nature & Needs of Exceptional Individual
EXE 314 Psychology of Exceptional Individual
EXE 370 Applying Behavior Analysis Procedures in Special Education

Information Systems Management Department

- ISM 101 Computer Fundamentals
ISM 111 Introduction to Computer Science

Nutrition and Food Science Department

- NFS 101 Introductory Food
NFS 334 Contemporary Nutrition

Social Work Department

- SWK 220 Introduction to Social Work
SWK 319 Social Dynamics of Poverty

Speech Language Pathology and Audiology Department

- SLA 206 Language Development
SLA 220 Introduction to Communication Disorders

Technology Department

- TEC 123 Principles of Manufacturing
TEC 301 Materials Processing II
TEC 327 Survey of Industrial Pollution Control Problems
TEC 150 The Shape of Things
TEC 260 Development of Technology
SAF 305 Fundamentals of Safety
TEC 319 Technology and Values

Core Category: Arts (9 Credits)**Art Education Department**

- AED 100 Essentials of Visual Arts
AED 200 Fundamentals of Art Inquiry
AED 315 Arts in Living
ATS 320 Introduction to Art Therapy

Design Department

- DES 101 Introductory Design 2D
DES 103 Introductory Design 3D
DES 114 Workshop in Crafts
DES 190 Design Symposium

Fine Arts Department

- FAR 100 Introduction to Fine Arts
FAR 101 Drawing I
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

Performing Arts Department

- DAN 200 Beginning Modern Technique
DAN 220 Beginning Ballet
DAN 224 Dance Appreciation
DAN 302 Modern Technique I
MUS 210 Rudiments of Traditional Music Notation

- MUS 217 Experience in Music for Beginners OR
MUS 218 Essentials of Music Reading

One of the following Music courses:

- MUS 201 Symphonic Literature
MUS 202 Vocal Literature
MUS 203 Chamber Music Literature
MUS 204 Dramatic Music
MUS 205 American Popular Music
MUS 206 Jazz Rock Foundations
MUS 208 Oriental Art Music - China, Japan, Korea

- MUS 301 Introduction to Music Literature

- THA 106 Introduction to Theatre

- THA 200 Voice and Diction
THA 207 Play Production
THA 317 History of Theatre - Ancient to Renaissance OR

- THA 318 History of Theatre - Renaissance to Modern

Core Category: Humanities (9 Credits)**English Department**

- ENG 110 English Literature I OR
ENG 111 English Literature II
ENG 130 Biblical & Classical Literature OR
ENG 131 Medieval and Renaissance Literature
ENG 132 Modern European Literature
ENG 140 American Literature I OR
ENG 141 American Literature II
ENG 151 Introduction to Poetry
ENG 205 History of Cinema I OR
ENG 206 History of Cinema II
ENG 230 Comparative Literature
ENG 252 Contemporary Literature I OR
ENG 253 Contemporary Literature II

Foreign Language Department

- FRE 101 Elementary French
FRE 102 Elementary French
GER 101 Elementary German
GER 102 Elementary German
GRK 101 Elementary New Testament Greek
GRK 102 Elementary New Testament Greek

- HEB 101 Elementary Hebrew
HEB 102 Elementary Hebrew

- ITA 101 Elementary Italian
ITA 102 Elementary Italian

- LAT 101 Elementary Latin
LAT 102 Elementary Latin

- POL 101 Elementary Polish
POL 102 Elementary Polish

- RUS 101 Elementary Russian
RUS 102 Elementary Russian

- SPA 101 Elementary Spanish
SPA 102 Elementary Spanish

- SWA 101 Elementary Swahili
SWA 102 Elementary Swahili

Journalism, Broadcasting and Speech Department

- JBS 100 Introduction to Mass Communication
JBS 103 Introduction to Human Communication
JBS 205 Experiences in Speech

Philosophy and Religious Studies Department

- PHI 101 Introduction to Philosophy OR
PHI 102 Introduction to Social and Moral Philosophy
PHI 103 Introduction to Logic OR
PHI 307 Beginning Symbolic Logic
PHI 104 Introduction to Religious Studies OR

- PHI 204 Philosophy of Religion
PHI 201 Capitalism, Socialism and Democracy OR

- PHI 323 Moral Issues (Ethics)
PHI 317 History of Philosophy I OR
PHI 318 History of Philosophy II
PHI 207 Philosophy in Literature

- PHI 302 Philosophy of Art and Beauty
PHI 321 World Religions

Core Category: Math/Science (9 Credits)**Biology Department**

- BIO 100 Principles of Biology
BIO 104 Environmental Biology
BIO 115 General Botany
BIO 116 General Zoology
BIO 311 Human Anatomy & Physiology I
BIO 312 Human Anatomy & Physiology II
BIO 322 Heredity & Human Inheritance

Chemistry Department

- CHE 100 Chemistry and Society
CHE 101 General Chemistry I OR
CHE 111 Fundamentals of Chemistry I
CHE 102 General Chemistry II OR
CHE 112 Fundamentals of Chemistry II

Earth Sciences and Science Education Department

- GES 101 Introductory Geology OR
GES 122 Principles of Earth Science
GES 102 Historical Geology
GES 111 Oceanography
GES 131 Introductory Astronomy
GES 223 Environmental Earth Science
GES 241 Meteorology
SCI 100 Contemporary Science
SCI 105 Physical Science for Non-Science Students
SCI 231 Pollution, Environment and Society
SCI 232 Energy, Environment and Society
SCI 327 Development and Impact of Atomic Science

Mathematics Department

- MAT 103 Introduction to Contemporary Mathematics
MAT 107 Casino Gambling
MAT 110 Intermediate College Algebra and Trigonometry
MAT 111 Elementary Probability and Statistics
MAT 119 Finite Mathematics
MAT 126 Calculus OR
MAT 161 Calculus I
MAT 127 Calculus of Several Variables OR
MAT 162 Calculus II
MAT 304 Games and Linear Programming
MAT 306 Problem Solving in Basic

Physics Department

- PHY 100 Current Physics
PHY 101 General Physics I OR
PHY 111 University Physics I
PHY 102 General Physics II OR
PHY 112 University Physics II
PHY 103 Understanding Sound

Core Category: Social Science (9 Credits)**Anthropology Department**

- AAS 331 Relevance of Social Theories to Black Experience
ANT 100 Human Origins
ANT 101 Introduction to Anthropology
ANT 144 Folklore and Folklife
ANT 340 Women in Anthropological Perspective
ANT 381 Religion, Myth, Magic

One of the following Anthropology courses:

- ANT 300 Indians of Western North America
ANT 301 Indians of Eastern North America
ANT 302 Peoples of Latin America
ANT 305 Peoples of Africa
ANT 330 Anthropology of Oceania

Economics Department

- ECO 101 The Economic System
ECO 103 Economic History of U.S.
ECO 201 Principles of Macroeconomics
ECO 202 Principles of Microeconomics
ECO 301 Labor Relations

Geography and Planning Department

- GEG 101 Man's Natural Environment
GEG 102 Man's Cultural Environment
GEG 107 Resources and Man
GEG 200 Introduction to Regional Geography
GEG 203 Geography of Middle America
GEG 206 Geography of New York State
GEG 307 Conservation and Management
GEG 309 Introduction to Urban Geography

One of the following Geography courses:

- GEG 205 Geography of China and Far East
GEG 351 Geography of Africa
GEG 352 Geography of Europe
GEG 353 Geography of the Soviet Union

Health, Physical Education and Recreation Department

- HPR 250 Movement and Meaning
HPR 300 Athletics in Education
HSC 204 Personal and Community Health

History and Social Studies Education Department

- HIS 101 Twentieth Century U.S.
HIS 106 American Life I
HIS 107 American Life II
HIS 115 Western Civilization (Europe to 1500)

- HIS 116 Europe Since 1500
HIS 117 Twentieth Century Europe
SST 102 Problem Solving in the Social Studies

One of the following History courses:

- HIS 210 History of Modern Asia
HIS 211 History of Modern Africa
HIS 314 History of Modern Latin America

- HIS 322 Afro-American History
HIS 313/ PSC345 Politics and History in Middle East

Political Science Department

- PSC 101 Introduction to Government and Politics
PSC 102 American Political Institutions and Problems
PSC 103 Great Political Issues
PSC 215 Urban Government
PSC 230 International Relations
PSC 368 Comparative Public Administration

One of the following Political Science courses:

- PSC 225 Women and American Politics
PSC 240 European Political Systems
PSC 340 Politics of Developing Countries
PSC 345/ HIS 313 Politics and History of the Middle East
PSC 348 Government and Politics of the Far East

Psychology Department

- PSY 101 Introduction to Psychology
PSY 304 Psychology of Learning
PSY 308 Basic Concepts of Perception
PSY 311 Theories of Personality
PSY 325 Social Behavior
PSY 355 Lifespan Developmental Psychology
PSY 367 Behavior in Organizations

Sociology Department

- SOC 100 Introduction to Sociology
SOC 210 Introduction to Women's Studies
SOC 240 Analyzing Social Problems
SOC 310 Sociology of Sex Roles
SOC 320 Sociology of the Family
SOC 330 Social Psychology
SOC 360 The Sociology of Work
SOC 380 The Sociology of Crime

The General Education Electives: Selected Courses

The general education elective category offers students greater flexibility in choosing courses than available in the core. These electives will allow students to build on areas of interest developed while completing the core, to broaden or enhance career opportunities, and to explore additional interests and concerns.

All courses that have been approved to satisfy the core requirement may also be used as general education electives (18 credits). In addition to those core courses listed, the courses that appear below may be used as general education electives, although they are not available to satisfy the core requirement. Please note that no course already used to satisfy the core requirement may also be used as a general education elective. Courses selected in this section of the requirement must include courses from distinct academic fields reflecting at least three of the core categories listed, i.e., arts, humanities, social science, math/science, applied science and technology.

General Education Electives (18 credits)

Applied Science and Education Electives

Business Department

- BUS 323 Salesmanship
BUS 325 Personnel Management

Consumer Studies and Home Economics Department

- CFS 212 The Family in Society and Culture
CFS 230 Family Health and Home Nursing
CFS 310 Economics for Consumers
CFS 315 Consumer Problems in Personal Finance
CFS 331 Housing the Family
CFS 335 The Consumer and the Law
CFS/EDU 345 Parenting
CFS/EDU 346 Teenage Sexuality
CFS 440 Family Law
CFS 447 Clothing in Relation to Human Behavior

Criminal Justice Department

- CRJ 317 Constitution/Civil Liberties

Educational Foundations

- EDF 303 Educational Psychology
EDF/CFS 345 Parenting
EDF/CFS 346 Teenage Sexuality

Elementary Education and Reading

- ECS 405 The Parent-Infant Experience

Exceptional Education Department

- EXE 345 Community Service with Exceptional Individuals

Information Systems Management Department

- ISM 201 Introduction to Microcomputer Applications

Nutrition and Food Science Department

- NFS 305 Advanced Foods
NFS 335 Nutritional Needs & Concerns During the Lifespan

Social Work Department

- SWK 105 Interpersonal Relations
SWK 310 Sexuality in Human Development
SWK 320 Organization of Community Services

Technology Department

- ENT 308 Applications of Electronics in Science & Art
TEC 400 Marketing
TEC 401 Management Science
SAF 320 Product Safety
SAF 340 Community Safety

Arts Electives

Art Education Department

- AED 319 Art for Elementary and Exceptional Education Classroom Teachers
ATS 325 Arts & Special Needs
ATS 329 Art and the Older Adult

Design Department

- DES 215 Introduction to Design History
DES 220 Ceramics I
DES 230 Introduction to Jewelry
DES 235 Design in Metals I
DES 240 Fiber—Weaving I
DES 245 Fiber—Surface Design I
DES 250 Wood Design I
DES 260 Introduction to Interior Design

Fine Arts Department

- FAR 102 Drawing II
FAR 335 Papermaking
FAR 454 Greek Art
FAR 455 Etruscan and Roman Art
FAR 456 Early Medieval Art
FAR 457 Gothic Art
FAR 458 Early Renaissance Art in Italy
FAR 459 High Renaissance & Mannerism
FAR 460 Northern Renaissance Art
FAR 461 Italian Baroque Art
FAR 462 Nineteenth-Century Art
FAR 463 Twentieth-Century Art
FAR 465 American Art I
FAR 466 American Art II
FAR 467 Baroque of Northern Europe
FAR 468 Romanesque Art

Performing Arts Department

- DAN 303 Dance Composition
DAN 312 Modern Dance Technique
DAN 330 Ballet II
MUS 112 Applied Music
MUS 150 Directed Study Seminar
MUS 161-164 Applied Music II
MUS 165 Keyboard Harmony I
MUS 171-172 Applied Music
MUS 173-174 Applied Music
MUS 271-272 Applied Music
MUS 273-274 Applied Music
MUS 371-372 Applied Music
MUS 373-374 Applied Music
MUS 302 Music History, Antiquity Through Baroque
MUS 303 Music History, Classical & Romantic
MUS 304 Music History, 20th Century
MUS 305 Modern Jazz
MUS 306 Urban Blues and Rock
MUS 309 Art Music of Asia: Japan, Indonesia, India
MUS 311 Music Theory I, Melody & Two-Part Texture
MUS 312 Music Theory II, Harmony & Sonority
MUS 313 Ensemble I
MUS 314 Concert Band
MUS 318 Sight-Singing & Ear-Training
MUS 319 American Folk Music
MUS 320 Country Music USA
MUS 326 Jazz Ensemble I
MUS/PHI 327 Aesthetics & the Arts

- MUS/ENG 328 Words & Music

- PAR 325 The Business of the Performing Arts
THA 100-101-102 Play Reading

- THA 208 Technical Theater
THA 226 Acting: Theory & Practice
THA 260 Basic Movement for Actors
THA 300 Advanced Voice
THA 311 Costume for the Theater
THA 312 Lighting Techniques
THA 315 Period Styles for the Theater
THA 319 Playwriting

Humanities Electives

English Department

- ENG 180 Introduction to Folklore
ENG 202 Creative Writing Narrative
ENG 203 Creative Writing Poetry
ENG 231 Women in Literature: Selected Topics
ENG 240 Afro-American Literature to 1940
ENG 241 Afro-American Literature Since 1940
ENG 260 Children's Literature
ENG 280 American Folklore
ENG 300 Writing for the Professions
ENG 301 Advanced Composition

- ENG 303 Literature in the Film
ENG 304 Forms of the Film
ENG 315 Shakespeare I
ENG 316 Shakespeare II
ENG/MUS 328 Words and Music
ENG 330 Literature of the Bible
ENG/FRE 331 French Literature in Translation
ENG/RUS 332 Russian Literature in Translation
ENG/FLA 333 Yiddish Literature in Translation
ENG/POL 334 Polish Literature in Translation
ENG/ITA 336 Modern Italian Literature in Translation
ENG/RUS 338 Russian Literature Since the Revolution
ENG/POL 339 Modern Polish Literature in English Translation
ENG 341 Modern Hebrew Literature in Translation
ENG 345 World Literature after 1945
ENG 350 Contemporary Drama I
ENG 351 Contemporary Drama II
ENG 354 Ethnic-American Minority Literature
ENG 355 The Short Story
ENG 356 Futuristic Fiction
ENG 357 Comedy
ENG 359 Television Drama
ENG 377 Introduction to Semantics

Foreign Language Department

- FLA/ENG 333 Yiddish Literature in Translation
FLA 337 Greek & Roman Mythology
FLA 338 Introduction to Classic Greek Drama
FRE 201 Intermediate French
FRE 202 Intermediate French
FRE 301 French Conversation & Composition
FRE 302 French Conversation and Composition
FRE 306 Civilization of France
FRE/ENG 331 Contemporary Literature of France in Translation
GER 201 Intermediate German I
GER 202 Intermediate German II
GER 301 German Conversation and Composition I
GER 302 German Conversation and Composition II
GER 306 German Civilization
GER 337 Modern German Literature in Translation
GRE 201 Intermediate New Test. (Koine) Greek
GRE 202 Intermediate New Test. (Koine) Greek
HEB 201 Intermediate Hebrew
HEB 202 Intermediate Hebrew
HLI 101 Introduction to Biblical Literature
HLI 102 Introduction to Hebrew Literature

- ITA 201 Intermediate Italian
ITA 202 Intermediate Italian
ITA 301 Italian Conversation & Composition
ITA 302 Italian Conversation & Composition
ITA 306 Italian Civilization
ITA/ENG 336 Contemporary Italian Literature in Translation
LAT 201 Intermediate Latin
LAT 202 Intermediate Latin
POL 201 Intermediate Polish
POL 202 Intermediate Polish
POL/ENG 334 Polish Literature in Translation
POL/ENG 339 Modern Polish Literature in Translation
RUS 201 Intermediate Russian
RUS 202 Intermediate Russian
RUS/ENG 332 Russian Literature in Translation
SPA 201 Intermediate Spanish
SPA 202 Intermediate Spanish
SPA 301 Spanish Conversation & Composition
SPA 302 Spanish Conversation & Composition
SPA 306 The Civilization of Spain
SPA 309 The Civilization of Latin America
SWA 201 Intermediate Swahili
SWA 202 Intermediate Swahili

Journalism, Broadcasting and Speech Department

- JBS 306 Public Speaking
JBS 307 Communication & Group Process
JBS 309 Persuasive Speaking
JBS 402 Oral & Visual Communication

Philosophy and Religious Studies Department

- PHI 105 Introduction to Christian Philosophy
PHI 121 Introduction to Jewish Thought
PHI 206 Introduction to the New Testament
PHI 210 Existentialism
PHI 220 Development of Jewish Religious Thought
PHI 300 Problems of Philosophy
PHI 301 Social and Political Philosophy
PHI 304 Philosophy of Law
PHI 305 Philosophy of Language
PHI 306 Writings of John
PHI 308 Philosophy of Love & Sex
PHI 309 Philosophy of Science
PHI 313 Epistemology
PHI 314 Thought of Karl Marx
PHI 315 Early Modern Philosophy
PHI 319 Figures in Early Christian Philosophy
PHI 324 Chinese & Japanese Philosophy
PHI 325 Philosophy of Future Man

- PHI/MUS 327 Aesthetics & the Arts
PHI 328 Business & Ethics
PHI 329 Contemporary Christian Thought
PHI 330 20th Century Jewish Philosophy
PHI 331 Religion and Media
PHI 332 Mysticism
PHI 340 Bible and Jewish Thought
PHI 350 Holocaust

Math/Science Electives

Biology Department

- BIO 210 Bacteriology
BIO 214 Cell Biology
BIO 303 Genetics
BIO 304 Local Flora
BIO 305 Molecular Biology
BIO 306 Entomology
BIO 315 Ecology
BIO 316 Microbiology
BIO 320 Biology of Cold Blooded Vertebrates
BIO 324 Human Reproduction

Chemistry Department

- CHE 201 Organic Chemistry I
CHE 201L Organic Chemistry Lab I
CHE 202 Organic Chemistry II
CHE 202L Organic Chemistry Lab II
CHE 301 Analytical Chemistry
CHE 305 Physical Chemistry I
CHE 305L Physical Chemistry Lab I
CHE 306 Physical Chemistry II
CHE 306L Physical Chemistry Lab II
CHE 310 Literature of Chemistry
CHE 312 Chemistry and Criminalistics
CHE 315 Environmental Chemistry
CHE 321 Principles of Organic Chemistry
CHE 322 Biological Chemistry

Earth Sciences and Science Education Department

- GES 302 Paleontology
GES 304 Common Rocks/Minerals
GES 307 Geomorphology
GES 331 Solar System Astronomy
GES 332 Stellar and Galactic Astronomy
GES 335 Observational Astronomy
GES/SCI 338 Astronomy and the Astronomers, 1650-Present
GES 339 Astronomy and Cosmology
SCI 101 Physical Science for Elementary School Teachers
SCI 103 Earth Science for Elementary School Teachers
SCI 302 Development of Life in Geologic Time
SCI 323 Science as Inquiry
SCI 335 Outdoor Science Ed.
SCI 340 Scientific Studies in Environmental Pollution

Mathematics Department

- MAT 105 Math of Finance
MAT 121 Math for Elementary Teachers I

MAT 122	Math for Elementary Teachers II	GEG 320	Historical Geography of U.S.
MAT 124	Pre-Calculus Mathematics	GEG 322	Geography of World Hunger
MAT 125	Analytical Geometry	GEG 350	Comparative US-Canadian Metro Systems
MAT 183	Problem Solving in Math		
MAT 202	Introduction to Linear Algebra	GEG 357	Geography of Buffalo and the Niagara Frontier
MAT 263	Calculus III		
MAT 301	Introduction to Modern Algebra I	PLN 315	Introduction to Community Planning
MAT 315	Differential Equations		
MAT 316	Intermediate Differential Equations		
MAT 322	Modern Geometry		
MAT 351	Elementary Theory of Numbers		
MAT 381	Probability		

Physics Department

PHY 107	Applied Physics
PHY 200	Creators of the Atomic Age

Social Science Electives**Anthropology Department**

AAS 203	Human Variation
ANT 202	World Prehistory
ANT 203	Human Evolution and Variation
ANT 307	Urban Anthropology
ANT 308	Archaeological Method
ANT 312	Archaeology of the North American Indian
ANT 320	Human Growth in Anthropological Perspective
ANT 321	Primate Behavior
ANT 326	The Human Fossil Record
ANT 360	Folklore of Women
ANT 362	Urban Folklore
ANT 370	Anthropology of Contemporary Issues
ANT 377	Ancient Civilizations
ANT 380	Language and Culture
ANT 382	Culture and Personality

Economics Department

ECO 301	Economics of Labor Relations
ECO 304	Money and Banking
ECO 305	Statistics for Economics
ECO 307	Intermediate Microeconomics
ECO 308	Intermediate Macroeconomics
ECO 314	Corporation Finance
ECO 317	Economic Policy
ECO 320	Managerial Economics
ECO 350	Public Finance
ECO 355	The Economics of Energy and Environment

Geography and Planning Department

GEG 104	Man's Economic Environment
GEG 202	Geography of U.S. and Canada
GEG 304	Map Interpretation
GEG 305	Principles of Economic Geography

GEG 320	Historical Geography of U.S.
GEG 322	Geography of World Hunger
GEG 350	Comparative US-Canadian Metro Systems
GEG 357	Geography of Buffalo and the Niagara Frontier
PLN 315	Introduction to Community Planning

Health, Physical Education and Recreation Department

HPR 316	Developmental Motor Activities
HPR 319/SOC324	Sociology of Sport
HPR 345	Physical Fitness & Aging
HSC 320	Psychoactive Drugs & Health

History and Social Studies Education Department

HIS 110	History and Ideas
HIS 121	Introduction to Jewish History
HIS 155	World War II
HIS 201	Age of Discovery
HIS 206	History of Poland
HIS 208	History of England
HIS 212	History of Jews in Europe
HIS 215	History of Christian Thought
HIS 220	Classical Greece & Rome
HIS 222	American Revolution
HIS 260	The Turbulent Sixties
HIS 301	Counter Culture/Utopias
HIS 302	History of Women in America
HIS 303	City in American History
HIS 304	Europe and Napoleon to First World War
HIS 306	History of Africa to 1919
HIS 310	History of the Far East
HIS 317	History of Russia to 1917
HIS 318	History of the Soviet Union
HIS 319	Colonial History of American People
HIS 320	Modern History of Japan and Korea
HIS 321	History of Medieval Europe
HIS 325	U.S. Business History
HIS 330	U.S. Environmental History
HIS 332	Technology and U.S. History
HIS 341	Afro-Americans and Civil Rights
HIS 342	English Legal History
HIS 343	Introduction to American Legal History
HIS 344	History of American Capitalism
HIS 345	History of U.S. Since 1941
HIS 350	Left and Right in European History
HIS 351	Modern France
HIS 360	Germany and Hitler
HIS 365	American Labor History
HIS 370	American Diplomatic History to 1898
HIS 371	American Diplomatic History Since 1898
HIS 375	History of the Byzantine Empire

Political Science Department

PSC 210	The American Presidency
PSC 220	Development of American Constitutional Law
PSC 300	Political Analysis
PSC 306	Politics of Energy
PSC 307	Political Alienation
PSC 310	American Politics and Political Parties
PSC 311	Pressure Politics
PSC 312	Legislative Process
PSC 315	State and Local Government Politics
PSC 316	Urban Ethnic Politics
PSC 320	U.S. Constitution and Civil Liberties
PSC 325	Politics of Welfare
PSC 326	Politics and Media
PSC 330	American Foreign Policy
PSC 335	International Relations of Middle East
PSC 350	Introduction to Legal Thought
PSC 351	History of Political Theory I
PSC 352	History of Political Theory II
PSC 355	American Political Thought
PSC 360	Public Administration
PSC 364	American Public Policy

Psychology Department

PSY 306	Statistics in Psychological Research
PSY 310	Behavior Modification I
PSY 321	Comparative Animal Psychology
PSY 327	Adult Development and Aging I
PSY 340	Cognitive Psychology
PSY 365	Industrial Psychology
PSY 370	Environmental Psychology
PSY 382	Psychology of the Consumer
PSY 383	Psychology of Human Sexual Behavior
PSY 385	Psychology of Personal Adjustment
PSY 386	Psychology of Stress, Coping, Health
PSY 387	Psychology of Women
PSY 388	Psychology of Death and Dying

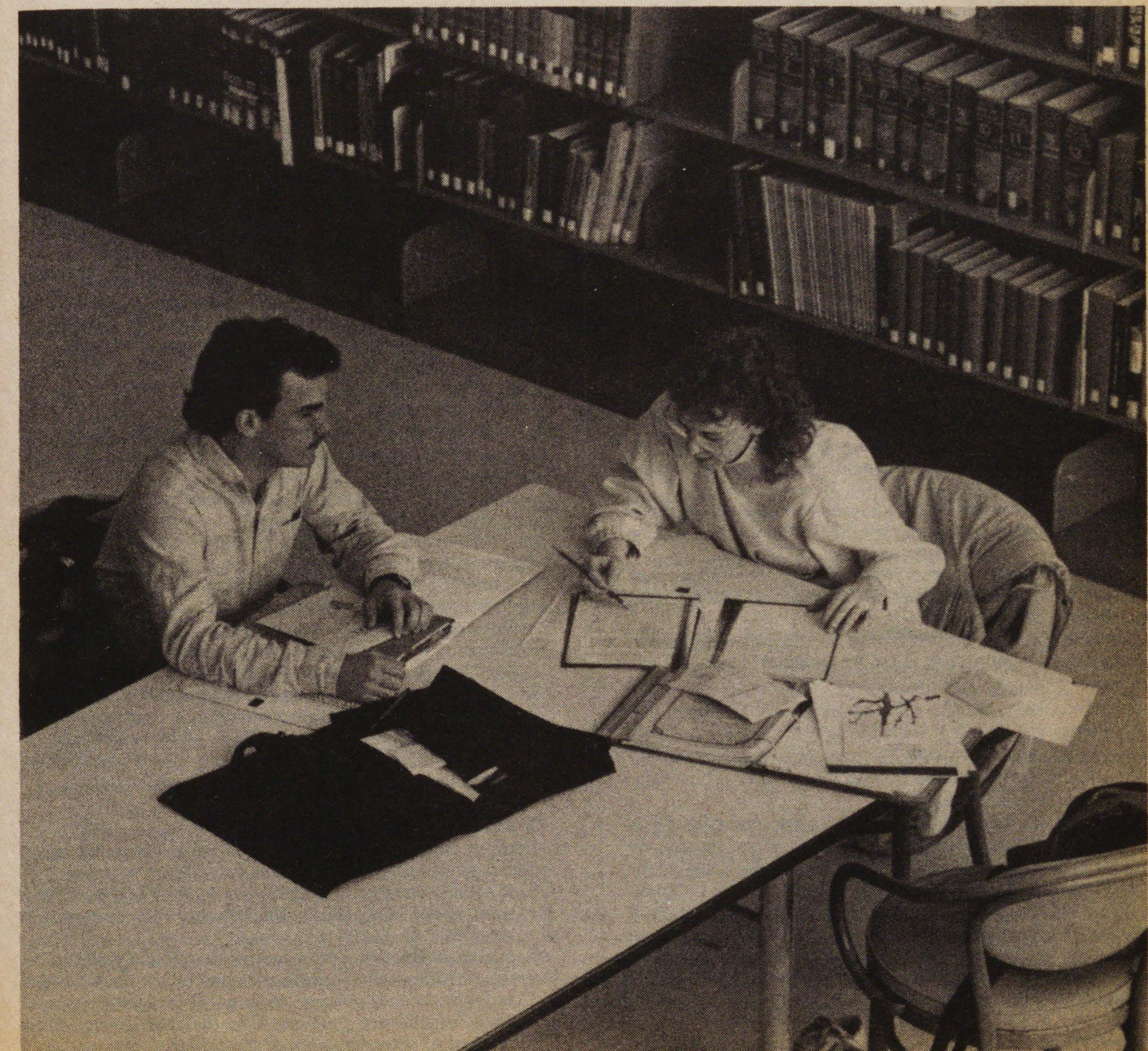
Sociology Department

SOC 321	Black Family in America
SOC 322	Sociology of Childhood & Youth
SOC 323	Sociology of Education
SOC 324/HPR 319	Sociology of Sport
SOC 331	Group Structure and Process
SOC 333	Social Movements
SOC 340	Sociology of the City
SOC 341	Sociology of Human Ecology
SOC 350	Power, Class and Inequality
SOC 351	Sociology of Race and Ethnicity

SOC 352	The Aged in Urban Society
SOC 361	Industrial Sociology
SOC 362	Sociology of Organizations
SOC 381	Sociology of Violence
SOC 382	Sociology of Law
SOC 383	Sociology of Punishment and Corrections
SOC 390	Juvenile Delinquency
SOC 391	Sociology of Addiction
SOC 392	Sociology of Sexual Behavior
SOC 393	Sociology of Mental Illness

Other Electives**Creative Studies**

CRS 205	Introduction to Creative Studies
CRS 302	Creative Approaches to Problem Solving
CRS 303	Creative Leadership Through Effective Facilitation
CRS 304	Advanced Creative Studies



English Composition Requirement

The college requires all matriculated students to demonstrate college-level skills in English composition. The requirement may be satisfied as follows:

Freshmen

Entering freshmen must take the English composition competence examination. The examination will be given during the orientation periods and during the semester. Students earning an Advanced Placement score of three or higher in expository writing are excused from the requirement.

On the basis of the competence examination, students will be placed at one of four levels:

1. ENG 099 required;
2. ENG 101 required;
3. ENG 102 required;
4. English Composition Requirement Satisfied. The department will notify the registrar that the student has met this all-college requirement.

Each student will take the competence examination again after completing each course. If the examination shows that the student has an improved performance level, the department will advance the student in the sequence. When the student has achieved a satisfactory level of competence, the department will notify the registrar.

Every entering freshman who does not pass the competence examination by the end of the first semester must register for (an) appropriate course(s) until the requirement has been satisfied. The Basic Composition Requirement must be completed by the end of the sophomore year.

Transfer Students

Transfer students will complete the English Composition Requirement in one of the following ways:

1. If two composition courses equivalent to ENG 101 and ENG 102 are transferred, the English Composition Requirement is satisfied;
2. If one composition course equivalent to ENG 101 is transferred, the student must complete ENG 102, College Writing II;
3. If no composition courses are transferred, the student must take the competence examination and follow the requirement stated for freshmen.

Transfer students must complete the English Composition Requirement within their first 45 semester hours at this college.

Credit for Courses

Registration for courses in this sequence may only occur following placement by the English Department on the basis of the competence examination.

Students will successfully complete a composition course by completing all the requirements of the course and passing the competence examination at the appropriate level. Retaking the competence examination at the end of each course is required.

ENG 101 and ENG 102 or equivalents may be used as credit to meet the degree requirements, but neither may be used to satisfy the 60-hour breadth requirement. ENG 098 and ENG 099 are non-credit courses and may not be used to meet any degree requirements. ENG 098, 099, 101, and 102 will be graded on an "S" or "U" basis. Course challenges will not be permitted.

Writing Across the Curriculum

In order to reinforce the writing skills acquired in basic composition courses and to encourage students to employ writing skills in a wide variety of areas, the college has instituted a requirement in writing across the curriculum. All students who enter this college in the fall 1987 semester or later are required to complete successfully two courses identified as "writing intensive." Such courses are indicated in the master schedule by the designation "W" following the course number, e.g., "SOC 101W" identifies the particular section as a writing intensive course. Writing intensive courses include a combination of writing assignments selected at the discretion of the instructor, including, but not limited to, essays, short papers, term papers, and essay exams. The minimum amount of writing in each writing intensive course is equivalent to 15 typed (double-spaced) pages. The quality of the writing will be taken into consideration in the determination of the grade. Successful completion of the English Composition Requirement is a prerequisite for all writing intensive courses.

Basic Mathematics Requirement

The college requires all matriculated students to demonstrate college-level skills in basic mathematics. The requirement may be satisfied as follows:

Freshmen

Entering freshmen must take the mathematics competence examination. The examination will be given during the orientation periods and at the end of each semester. On the basis of the competence examination, the Mathematics Department will place each student at one of three levels:

1. MAT 099 required;
2. MAT 100 required;
3. Basic Mathematics Requirement Satisfied. The department will notify the registrar that the student has met this all-college requirement.

Each student will take the competence examination again after completing one of the courses. If the examination shows that the student has an improved performance level, the department will advance the student in the sequence. When the student has achieved a satisfactory level of competence, the department will notify the registrar.

Every entering freshman who does not pass the competence examination by the end of the first semester must register for (an) appropriate course(s) until the requirement has been satisfied. Mathematics courses other than MAT 099 and MAT 100 will not fulfill the Basic Mathematics Requirement and cannot be taken prior to completing the Basic Mathematics Requirement. The Basic Mathematics Requirement must be completed no later than the end of the sophomore year.

Transfer Students

Transfer students will complete the Basic Mathematics Requirement in one of the following ways:

1. If a mathematics course equivalent to MAT 100 or above is transferred, the Basic Mathematics Requirement is satisfied;
2. If no mathematics courses are transferred, the student must take the competence examination and follow the placement procedures and policies outlined above for freshmen. Transfer students must complete the requirement within the first 45 semester hours at the college.

Credit for Courses

Registration for MAT 099 and MAT 100 may only occur following placement by the Mathematics Department on the basis of the competence examination.

Students will successfully complete each course by completing all of the requirements of the course and passing the competence examination at the appropriate level. Retaking the competence examination at the end of each course is required.

MAT 100 or equivalent may be used as credit to meet the degree requirements but may not be applied to the 60-hour breadth requirement. MAT 099 is a non-credit course and may not be applied to any degree requirements. The courses (MAT 099 and MAT 100) will be graded on an "S" or "U" basis. Course challenges of MAT 099 and MAT 100 will not be permitted.

Department (Major) Requirement

A major consists of no fewer than 24 semester hours and no more than 42 semester hours in a particular field of study. The number of hours needed for a major may vary according to the specific field. Each department sets its own requirements. To receive a degree in a particular major, students must complete at least six semester hours of work in their major at this college. Courses and sequences of a major are determined by individual departments with the approval of the College Senate, Academic Affairs Office, and the president.

Foreign Language Requirement

All students in B.A. degree programs must demonstrate proficiency in a single foreign language equivalent to the successful completion of the first two years of college-level study (101-202 level). Courses taken to satisfy the language requirement may be applied to the following sections of the B.A. degree audit sheet: Humanities (maximum of two courses), general education electives, all-college electives. Students who have successfully completed foreign language study on the high school level may register for the appropriate course or take a placement examination administered by the Foreign Language Department. Normally, one year of high school study is equivalent to one semester of college-level work. Successful completion of one language through the fourth year in high school satisfies the requirement. Transfer students may apply language courses successfully completed at other institutions in fulfillment of the requirement. Foreign language courses currently numbered 201-202 shall carry upper-level credit, i.e., they may be applied toward fulfillment of the 45-credit upper-division requirement. For further information regarding placement or any aspect of the requirement, contact the Foreign Language Department, Bishop Hall 126, 878-5414.

Language Policy for International Students

International students registering at Buffalo State are:

1. Required to take the English Department Placement Exam;
2. Required to register for the appropriate English course(s);
3. Required to take the Foreign Language Department English Oral Language Exam;
4. Advised to take the appropriate course in English as a second language after meeting with the chairperson of the Foreign Language Department to clarify their situation concerning the Foreign Language Requirement; and
5. Required to complete the English requirement prior to declaring a major.

Information on these requirements is available through the International Student Affairs Office.

Physical Education Requirement

Two one-hour physical education courses must be taken by all students. They must be selected from the HPR 100 series courses. The three-hour theory courses in physical education, health or recreation cannot be used to meet this requirement. A limit of six hours in physical education may be credited to the 123-hour total required for graduation.

Upper-Division Course Requirement

All students must complete 45 hours of upper-division course work to be eligible for graduation. Specific information can be obtained through the appropriate major department.

Electives

The number of unrestricted elective courses varies according to the individual program. These courses are needed to make up the 123 credit hours required for graduation. Check the individual program requirements to determine the number of electives allowed. These courses are taken in addition to the general education, departmental, and foreign language credits discussed previously.

General Requirements for Bachelor of Technology Degree

General Education Requirements

All students must take 24 hours of general education courses. These include: six hours in the arts/humanities, six hours in written/oral communications, and 12 hours in social sciences.

Mathematics and Physical Sciences Requirements

All students must take 24 hours in the area of mathematics and physical sciences. Courses must include nine hours in mathematics, six in physics, six in chemistry, and three in computer science.

Technical Sciences Requirement

All students must take 18 hours of required technical courses.

Physical Education Requirement

Two one-hour physical education courses must be taken by all students. They must be selected from the HPR 100 series courses. The three-hour theory courses in physical education, health, or recreation cannot be used to meet this requirement. A limit of six hours may be credited to the 123-hour total needed for graduation.

General Requirements for Bachelor of Fine Arts Degree

All B.F.A. candidates must complete 36 hours of general education courses with nine hours each from the arts, humanities, the social sciences, and math-science. In addition, students may choose 13 hours of free electives. The physical education requirement of two hours is the same for all degree candidates, as is the 123 credit hours required for graduation.

Academic Minors

An academic minor is an optional study program available to undergraduate students. 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. The minors available at Buffalo State are specially conceived sequences of courses designed to fulfill these general goals.

Each minor program consists of 18-21 semester hours of course work. A 2.00 cumulative average is required for admission to a minor program and at least three of the courses in each minor must be completed at the college. Students may not elect a minor from the same discipline as their major program. Students who complete the minor with a 2.00 cumulative average will have the minor recorded on their official transcript.

Students interested in selecting one of the minor programs included in the following list should contact the coordinating department as soon as possible and complete a Declaration of Minor Form. A complete listing of all minors and requirements is on file in each departmental and dean's office as well as in the Academic Advisement Office, Twin Rise South. Advisement on individual minors is provided only by the coordinating department.

Minor	Department or Unit Coordinating Advisement
African and African-American Studies	African and African-American Studies Unit
Aging	Psychology
Anthropology	Anthropology
Art History	Fine Arts
Art Therapy	Art Education
Astronomy	Earth Sciences and Science Education
Canadian Studies	History and Social Studies Education
Chemistry	Chemistry
Coaching	Health, Physical Education and Recreation
Computer Information Systems	Information Systems Management
Creative Studies	Interdisciplinary Center for Creative Studies
Criminal Justice	Criminal Justice
Dance	Performing Arts
Deviance	Sociology
Early Childhood Education	Elementary Education and Reading
English	English
Environmental Science	Earth Sciences and Science Education
Exceptional Education	Exceptional Education
Exceptionality	Exceptional Education
Family Life Education	Consumer Studies and Home Economics
French	Foreign Language
General/Regional Geography	Geography
Geology	Earth Sciences and Science Education
German	Foreign Language
History	History and Social Studies Education
Italian	Foreign Language
Management Economics	Economics
Medieval Studies	History and Social Studies Education
Physics	Physics
Polish, Russian & Eastern European Studies	History and Social Studies Education
Political Science	Political Science
Psychology	Psychology
Public Administration	Political Science
Religious Studies	Philosophy and Religious Studies
Safety Studies	Technology
Sociology	Sociology
Spanish	Foreign Language
Speech	Journalism, Broadcasting and Speech
Theater	Performing Arts
Urban Economic Geography	Geography
Urban Regional Analysis & Planning	Geography
Women's Studies	Women's Studies Unit

ANTHROPOLOGY (0733)

Offered by the Anthropology Department
Bachelor of Arts degree granted
(HEGIS 2202)

Dr. Jill Nash, Chairperson
Classroom Building B-107/878-6110

For as long as people have existed on earth, we have wondered about who we are, where we come from, and why we act as we do. Much of human history has resulted from efforts to answer these basic questions. Anthropology is the scientific approach to answering such questions about human life.

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

General Education Requirements60

Total required credit hours in Anthropology33

A. REQUIRED COURSES (15 cr.)

- ANT 100 Human Origins
- ANT 101 Introduction to Anthropology
- ANT 315 Research Methods
- ANT 405 History of Anthropological Theory
- ANT 499 Independent Study

B. ELECTIVES (12 cr.)

One course from each of the following areas (selected by advisement):

Archeology (3 cr.)

- ANT 202 World Prehistory
- ANT 308 Archeological Method
- ANT 312 Archeology of the North American Indian
- ANT 377 Ancient Civilization
- ANT 415 Seminar in Archeology

Physical Anthropology (3 cr.)

- ANT 203 Human Variation
- ANT 320 Human Growth in Anthropological Perspective
- ANT 321 Primate Behavior
- ANT 324 The Human Skeleton
- ANT 325 Skeletal Investigations
- ANT 326 The Human Fossil Record

Ethnography (3 cr.)

- ANT 144 Introduction to Folklore and Folklife
- ANT 300 Indians of Western North America
- ANT 301 Indians of Eastern North America
- ANT 302 Peoples of Latin America
- ANT 305 Peoples of Africa
- ANT 330 The Anthropology of Oceania
- ANT 360 Folklore of Women
- ANT 362 Urban Folklore

Method and Theory (3 cr.)

- ANT 307 Urban Anthropology
- ANT 327 Medical Anthropology
- ANT 340 Women in Anthropological Perspective
- ANT 380 Language and Culture
- ANT 381 Religion, Myth and Magic
- ANT 382 Culture and Personality
- ANT 402 Cultural Anthropology
- ANT 409 Social Structure
- ANT 412 Seminar in Anthropology

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

C. TWO OTHER COURSES, from any area, under advisement (6 cr.)

Total required credit hours outside of major12

The B.A. degree requirement includes a foreign language component of four three-credit courses. Students who have successfully completed foreign language courses at the high school level may be exempt. In general, one full year of foreign languages at the high school level is equivalent to a one-semester course at the college level.

Electives16

Physical Education2

TOTAL REQUIREMENTS123

ART (0105)

Offered by the Fine Arts Department
Bachelor of Arts degree granted
(HEGIS 1002)

Frank C. Eckmair, Chairperson
Upton Hall 502/878-6014

The art program provides students the opportunity to study a wide variety of visual arts media. Together with basic instruction in drawing, design, and art history, students, under advisement, choose 21 hours of electives in fine arts and/or design.

The Fine Arts Department reserves the right to retain student art work for official purposes such as exhibitions, catalogs, or teaching aids.

General Education Requirements.....60

Total required credit hours in Art.....39

A. REQUIRED COURSES (18 cr.)

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

B. ELECTIVES IN FINE ARTS AND/OR DESIGN (21 cr.)

Foreign Language Requirement.....0-12

Electives.....10-22

Physical Education.....2

TOTAL REQUIREMENTS.....123

ART EDUCATION (0100)

Offered by the Art Education Department
Bachelor of Science degree granted
(HEGIS 0831) NCATE Accredited
Provisional Teaching Certificate in Art K-12
or Certificate of Qualification granted by
New York State Education Department

Dr. Layman Jones Jr., Chairperson
Bishop Hall 129/878-4106

The department defines art educators as advocates for the visual arts to the general public. The primary means to achieve this is through teaching art to children in school, but art advocacy can take place in government, in business and industry, in social and clinical agencies, or wherever there is a vocational need for people skilled in art and professionally trained to deal with people.

Student Teaching

Eligibility for student teaching is determined by the Art Education Department; placement is arranged by the AED Coordinator of Student Teaching.

Student teaching experiences are provided in cooperating elementary and secondary schools. Students may be re-

(Continued)

General Education Requirements.....60

Total required credit hours in Art Education.....25

A. REQUIRED COURSES (12 cr.)

AED 300 Foundations in Art Education
AED 301 Theoretical Constructs in Art Education
AED 302 Functions and Practices in Art Education
AED 400 Student Teaching Seminar

B. ELECTIVES BY ADVISEMENT

AED 200 Fundamentals of Art Inquiry
AED 310 Art Materials Exploration for Group Activities
AED 315 Arts in Living
ATS 320 Introduction to Art Therapy
ATS 325 Art and Special Needs
ATS 329 Art and Older Adults
AED 330 Art Education Environments
AED 488 Internship
AED 495 Project

C. REQUIRED FIELD EXPERIENCE (12 cr.)

AED 303 Elementary Student Teaching in Art
AED 304 Secondary Student Teaching in Art

Total required credit hours in Fine Arts and Design.....36

(Continued)

Art Education (Continued)

quired to reside in some communities during student teaching assignments; transportation to/from the student teaching assignment is the student's responsibility. Students enrolled in the student teaching semester devote full time to their practicum assignment.

Prior written approval must be obtained from the chairperson 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 tine test within three months of the assignment. Results of the test must be filed at the Health Center.

Transfer Students

Students transferring to art education majors as juniors, and who wish to complete their programs in four semesters, should plan their schedules of course work in art education with great care and with an academic adviser. It is important to note that AED 300, AED 301 and AED 302 are intended as a sequence and may not be taken concurrently except for students in Certification Only programs or for students in an Articulation Agreement program.

All-College Requirements

Art education majors are responsible for fulfilling the requirements for the National Teachers Examination and drug education contained in the Teacher Education section of this catalog. Guidelines for fulfilling these requirements are available from the Art Education office.

Certification Only Program: This program is designed to meet the needs of students who have already earned a B.A./B.F.A. degree in a studio area and who are interested in earning Art Teacher certification. Information about this program is available in the Art Education Department office.

Articulation Agreement Program: The Art Education Department participates in Articulation Agreement programs with other New York state higher education institutions. Additional information is available by contacting the Art Education Department.

A. REQUIRED COURSES IN FINE ARTS (12 cr.)

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

B. REQUIRED COURSES IN DESIGN (12 cr.)

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

C. STUDIO ELECTIVES SELECTED BY ADVISEMENT (12 cr.)

Physical Education2

TOTAL REQUIREMENTS123

ART HISTORY (0130)

Offered by the Fine Arts Department
Bachelor of Arts degree granted
(HEGIS 1003)

Frank C. Eckmair, Chairperson
Upton Hall 502/878-6014

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

At the time this catalog went to press, the art history program was undergoing revision. Please contact the department for current requirements.

General Education Requirements.....60

Total required credit hours in Art History.....30

A. REQUIRED COURSES (15 cr.)

- FAR 250 Art History I
- FAR 251 Art History II
- FAR 454 Greek Art
- FAR 457 Gothic Art
- FAR 459 High Renaissance and Mannerism

B. ELECTIVES IN ART HISTORY (15 cr.)

- FAR 455 Etruscan and Roman Art
- FAR 456 Early Medieval Art
- FAR 458 Early Renaissance Art in Italy
- FAR 460 Northern Renaissance Art
- FAR 461 Italian Baroque Art
- FAR 462 Nineteenth-Century Art
- FAR 463 Twentieth-Century Art
- FAR 465 American Art I
- FAR 466 American Art II
- FAR 467 Baroque of Northern Europe
- FAR 468 Romanesque Art
- FAR 471 Senior Seminar in Art History

Foreign Language Requirement.....0-12

Electives.....19-31

Physical Education.....2

TOTAL REQUIREMENTS.....123

THE ARTS (0110)

Offered by the Performing Arts Department
Bachelor of Arts degree granted
(HEGIS 1001)

Myron H. Nadel, Chairperson
Rockwell Hall 203/878-6401

The arts program is an individually designed series of major courses that emphasize the performing arts and prepare students for graduate study. Students with interests, career goals, and talents that embrace an inter-arts approach work closely with a faculty mentor. Fields such as dance, choreography, pop music and culture, arts criticism, arts management, arts therapy, technical theater, and music theater demand a multidiscipline approach. The presentation of musicals, such as "The Wiz," "Godspell," and (Continued)

General Education Requirements.....60

Total required credit hours in the Arts.....36

ELECTIVES SELECTED BY ADVISEMENT

A minimum of three hours in two fields and nine hours in three remaining fields chosen from dance, design, fine arts, music, and theater.

Foreign Language Requirement.....0-12

All College Electives Selected by Advisement.....13-25

Physical Education.....2

TOTAL REQUIREMENTS.....123

The Arts (Continued)

others, supports the music theater emphasis.

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

1. Nineteen- to 21-credit minor programs are available in dance and theater and a 21-credit minor in music is pending. Contact the Performing Arts Department for information.

2. The Performing Arts Department can offer an individualized 24-hour con-

centration for honors-level students from business studies, elementary education, and exceptional education who are already adept in one arts field.

3. Honors-level work is expected in the major. Five paid undergraduate assistantships in technical theater are offered by the Performing Arts Department.

BIOLOGY (0725)

Offered by the Biology Department
Bachelor of Arts degree granted
(HEGIS 0401)

Dr. Bonnie M. Sampson, Chairperson
Science Building 313/878-5203

The program in the biological sciences prepares students for one of several options, including various employment opportunities at the bachelor's degree level, entrance to graduate school, and entrance to professional schools that specialize in medicine, dentistry, podiatry, and other areas of the health sciences.

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

General Education Requirements.....60

Total required credit hours in Biology.....36

A. REQUIRED COURSES (27 cr.)

- BIO 115 General Botany
- BIO 116 General Zoology
- BIO 214 Introduction to Cell Biology
- BIO 303 Genetics
- BIO 314 Advanced Cell Biology or BIO 305 Molecular Biology
- BIO 315 Ecology
- BIO 405 Organic Evolution

B. ELECTIVES IN BIOLOGY (9 cr.)

(Any upper-division course in biology for which prerequisites are satisfied.)

C. STRONGLY ADVISED COURSES

- CHE 111-112 and CHE 201-202
- MAT 126-127 or MAT 161-162
- PHY 111-112

Electives.....25

Foreign Language Requirement (General Education).....0-12

Physical Education.....2

TOTAL REQUIREMENTS.....123

BIOLOGY: Secondary Education (0631)

Offered by the Biology Department
Bachelor of Science (Education) degree
granted
(HEGIS 0401) NCATE Accredited
Dr. Bonnie M. Sampsell, Chairperson
Science Building 313/878-5203

The secondary education program in biology is specifically designed to prepare students to teach biology and general science at the secondary level (grades 7-12). Graduates of the program receive a B.S. in secondary education degree and provisional certification to teach in New York state public schools.

General Education Requirements.....	60
Total required credit hours in Biology.....	30

A. REQUIRED COURSES (25-26 cr.)

- BIO 115 General Botany
- BIO 116 General Zoology
- BIO 214 Introduction to Cell Biology
- BIO 315 Ecology
- BIO 405 Organic Evolution

A course in genetics to be chosen from:
BIO 303 Genetics
BIO 322 Heredity and Human Affairs

A course in physiology to be chosen from:
BIO 311 Human Anatomy and Physiology I
BIO 312 Human Anatomy and Physiology II

B. MINIMUM ELECTIVES IN BIOLOGY (4-5 credit hours)

Any upper-division courses in biology for which prerequisites are satisfied.

Total required credit hours in Professional Education.....	27
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A. REQUIRED COURSES

- SST 200 Field Experience: Secondary Education and Related Careers
- EDF 303 Educational Psychology for Adolescents
- EDF 403 Forces Influencing Secondary Education
- EDU416 Teaching Reading in the Secondary Schools
- SED 308 Methods in Teaching Secondary Science
- SED 408 Practicum in Teaching Science in Secondary School

Electives.....	4
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Physical Education.....	2
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TOTAL REQUIREMENTS.....	*123
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*The student must complete (as part of the 123 hours) a minimum of one year of geoscience, one year of chemistry, one year of physics, and one year of mathematics for provisional certification in general science and biology.

BROADCASTING (0707)

Offered by the Journalism, Broadcasting, and
Speech Department
Bachelor of Arts degree granted
(HEGIS 0605)

Dr. W. Richard Whitaker, Chairperson
Bishop Hall 234/878-6008

The broadcasting program is a mix of practical experience and relevant theory. It is tied closely to the professional community and emphasizes realistic and in-the-field broadcasting experience. Preparation for careers in television and radio broadcasting and allied fields is provided.

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

General Education Requirements.....	60
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Total required credit hours in Broadcasting.....	30
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A. REQUIRED COURSES (27 cr.)

- JBS 100 Introduction to Mass Communication
or
- JBS 102 Introduction to Broadcasting
- JBS 201 Broadcast Copywriting
- JBS 205 Experiences in Speech
or
- JBS 206 Speech Training for the Communication Professions
- JBS 222 Principles of Broadcasting

To enter the broadcasting major, students must have satisfactorily completed ENG 101 and 102 or equivalent, and have earned a grade of "C" or better with a cumulative grade point average of 2.6 in the above four core courses.

JBS 302 Interviewing

or
JBS 317 Sales and Management
or

- JBS 412 Programming
- JBS 328 Radio Studio Operations
- JBS 329 Beginning TV Studio Operations
- JBS 332 Contemporary Issues in Broadcasting
- JBS 430 Broadcast Law and Regulation

B. ELECTIVES SELECTED BY ADVISEMENT (3 cr.)

One course selected from among the professional courses in the JBS Department.

Foreign Language Requirement.....	0-12
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Electives.....	19-31
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Physical Education.....	2
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TOTAL REQUIREMENTS.....	123
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BUSINESS and DISTRIBUTIVE EDUCATION (0406)

Offered by the
Business Department
Bachelor of Science degree granted
(HEGIS 0838) NCATE Accredited

Dr. Benjamin Sackmary, Chairperson
Chase Hall 306/878-4239

The program in occupational business and distributive education leads to provisional certification to teach business and distributive education subjects in New York state. Need for teachers across the country (including Western New York) continues to remain constant. Buffalo State graduates with this degree have found teaching jobs in high schools,

(Continued)

General Education Requirements.....	60
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Total required credit hours in Distributive Education.....	27
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- BUS 117 Introduction to Retailing
- BUS 312 Principles of Accounting I
- BUS 325 Personnel Management
- BUS 326 Introduction to Merchandising
- BUS 327 Advertising Concepts and Practices
- BUS 334 Business Law I
- BUS 336 Visual Merchandising
- BUS 360 Principles of Management
- BUS 403 Marketing II-Buyer Behavior

(Continued)

Business and Distributive Education (Continued)

private schools, BOCES (Board of Cooperative Education Services), and community colleges.

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

Admission Requirements: Transfer students holding the A.A.S. degree in business are accepted into the major on a competitive basis. No freshmen are accepted directly into the major. Students seeking admittance into the business and distributive education major must provide evidence of satisfactorily completing BUS

Total required credit hours in Professional Education.....	27
DED 300 Principles of Business & Distributive Education.....	3
DED 415 Student Teaching.....	12
EDF 303/SED 303 Educational Psychology.....	3
DED 411 Methods of Teaching B.E. & D.E.....	3
DED 401 Curriculum & Evaluation in B.E. & D.E.....	3
EDF 403/SED 403 Historical & Philosophical Forces S.E.....	3

Electives 7

Physical Education..... 2

TOTAL REQUIREMENTS.....123

117 - Introduction to Retailing, and BUS 312 - Principles of Accounting I. Satisfactory completion is defined as a "C" grade or better.

*The occupational business and distributive education curriculum adheres to the guidelines published by the Council for Distributive Teacher Education.

BUSINESS EDUCATION (0404)

Offered by the Business Department
Bachelor of Science degree granted
(HEGIS 0838) NCATE Accredited

Dr. Benjamin Sackmary, Chairperson
Chase Hall 306/878-4239

The program in business education leads to provisional certification to teach business courses, including typing and shorthand. Especially attractive to students from two-year colleges, the program provides for ease in transferring credits, including up to 19 hours of typing, shorthand, and office skills courses. This is an excellent program for students holding the A.A.S. degree in secretarial science who wish to obtain teaching certification in business education.*

Admission Requirements: Transfer students holding the A.A.S. degree in secretarial science are accepted into the major on a competitive basis. No freshmen are accepted directly into the major. Students seeking admittance into the business education major must provide evidence of satisfactorily completing BUS 116 - Introduction to Business, and BUS 312 - Principles of Accounting I. Satisfactory completion is defined as a "C" grade or better.

General Education Requirements.....60

Total required credit hours in Business Education.....18

BUS 116 Introduction to Business	
BUS 312 Principles of Accounting I	
BUS 324 Business Communication	
BUS 334 Business Law I	
BUS 350 Current Practices in Business Technology	
BUS 360 Principles of Management	

Total required credit hours in Professional Education.....27

DED 300 Principles of D.E. & B.E.....	3
DED 410 Methods of Teaching Business Skills Subjects.....	3
DED 415 Student Teaching.....	12
EDF 303/SED 303 Educational Psychology.....	3
DED 401 Curriculum & Evaluation in B.E. & D.E.....	3
EDF 403/SED 403 Historical & Philosophical Forces S.E.....	3

Electives 16

Physical Education..... 2

TOTAL REQUIREMENTS.....123

*The business education curriculum adheres to the guidelines published by the National Association for Business Teacher Education.

BUSINESS STUDIES (0430)

Offered by the Business Department
Bachelor of Science in Special Studies
degree granted
(HEGIS 4999)

Dr. Benjamin Sackmary, Chairperson
Chase Hall 306/878-4239

The program in special studies—business studies is designed to serve students interested in various types of courses in business and industry. The program provides students with a basic core of business courses and permits a concentration of business courses in a specialized area (e.g., management, marketing, etc.). The program was developed to accommodate the transfer needs of students from community colleges and to provide flexibility in all students' programs. Therefore, transfer students will encounter very little if any difficulty in transferring and all students can develop a program of business studies to meet their individual needs and desires.

Admission Requirements: Transfer students holding the A.A.S. degree in business are accepted into the major on a competitive basis. No freshmen are accepted directly into the major. Students seeking admittance into the business studies major must provide evidence of satisfactorily completing BUS 116 - Introduction to Business, and BUS 312 - Principles of Accounting I. Satisfactory completion is defined as a "C" grade or better.

At the time of publication of this catalog, the Business Department was in the process of curriculum review and revision. Interested individuals are urged to contact the department office, Chase 306, to receive the most current information about programs and offerings.

General Education Requirements.....60

Total required credit hours in Business Studies.....36

A. REQUIRED COURSES (36 cr.)

BUS 116	Introduction to Business
BUS 312	Principles of Accounting I
BUS 313	Principles of Accounting II
BUS 324	Business Communication
BUS 325	Personnel Management
BUS 334	Business Law I
BUS 360	Principles of Management
ECO 201	Principles of Macro Economics
ECO 202	Principles of Micro Economics
MAT 111	Elementary Probability and Statistics
	or
ECO 305	Statistics for Economics
ISM 101	Computer Fundamentals
	or
ISM 111	Introduction to Computer Science
BUS 320	Retail Marketing
	or
TEC 400	Marketing

B. PROFESSIONAL PRACTICE—GENERAL DEFINITION FOR BS/SS PROGRAM

The bachelor of science in special studies degree program includes a flexible professional practice component of up to 12 credit hours. This experience is planned from several perspectives, including those of programmatic requirements and individual student needs. In some cases, the professional practice serves as an introductory experience to the professional area, and in others it becomes a culminating experience at the end of the program. In all cases, it is developed in close cooperation by the student, the college adviser, and the professional site representative/supervisor.

Electives 25

Physical Education..... 2

TOTAL REQUIREMENTS.....123

CHEMISTRY (0726)

Offered by the Chemistry Department
Bachelor of Arts degree granted
(HEGIS 1905)

Dr. Joseph S. Zingaro, Chairperson
Science Building 313/878-5204

Chemistry is a program of professional study whose content has been approved by the American Chemical Society. Graduates of this program are fully prepared to assume entry-level positions as chemists with industrial or governmental laboratories or to begin more specialized programs of study at the graduate level.

Special Admission Requirements: None at the freshman level. Transfer students from two-year colleges should have earned credit for courses equivalent to CHE 111-112, 201-202, 201L-202L, 301, MAT 161, 162, 263, and PHY 111-112 in order to avoid possible delays in the completion of the degree program.

General Education Requirements.....60

Total required credit hours in Chemistry.....41

A. REQUIRED COURSES

CHE 111-112	Fundamentals of Chemistry I-II
CHE 201-202	Organic Chemistry I-II (lectures)
CHE 201L-202L	Organic Chemistry I-II (labs)
CHE 301	Analytical Chemistry
CHE 305-306	Physical Chemistry I-II (lectures)
CHE 305L-306L	Physical Chemistry I-II (labs)
CHE 310	Literature of Chemistry
CHE 400	Inorganic Chemistry
CHE 401	Biochemistry
CHE 403	Instrumental Analysis

In addition to the above courses, any student who wishes to meet American Chemical Society minimum certification requirements must complete at least three semester hours of credit in a **laboratory-based** CHE 495 (Project) **during the senior year or, alternatively, CHE 410 (Advanced Synthetic Methods).**

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.

B. REQUIRED CREDIT HOURS IN OTHER FIELDS*

MAT 161-162, 263
PHY 111-112 General Physics

*Note: These credits may be applied toward the 60-hour general education requirement listed above.

Electives 20

Foreign Language Requirement (General Education).....0-12

Physical Education 2

TOTAL REQUIREMENTS.....123

CHEMISTRY: Secondary Education (0632)

Offered by the Chemistry Department
Bachelor of Science (Education)
degree granted
(HEGIS 1905) NCATE Accredited

Dr. Joseph S. Zingaro, Chairperson
Science Building 313/878/5204

The secondary education major in chemistry is a program of professional study whose graduates are prepared to assume positions as teachers of chemistry and general science in grades 7-12. Successful completion of this program leads to provisional certification by the New York State Department of Education. Permanent certification is earned by completing a master's degree in a related area and two years of teaching experience at the secondary level.

Special Admission Requirements: None at the freshman level. Transfer students from two-year colleges should have earned credit for courses equivalent to CHE 111-112, 201-202, 201L-202L, 301, MAT 161, 162, 263, and PHY 111-112 in order to avoid possible delays in the completion of the degree program.

General Education Requirements.....60

Total required credit hours in Chemistry.....31

A. REQUIRED COURSES

CHE 111-112	Fundamentals of Chemistry I-II
CHE 201-202	Organic Chemistry I-II (lectures)
CHE 201L-202L	Organic Chemistry I-II (labs)
CHE 301	Analytical Chemistry
CHE 305-306	Physical Chemistry I-II (lectures)
CHE 305L-306L	Physical Chemistry I-II (labs)
Chemistry Elective (3)	

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.

Total required credit hours in Professional Education.....27

A. REQUIRED COURSES—PROFESSIONAL EDUCATION

SST 200	Field Experience: Secondary Education and Related Careers
EDF 303	Educational Psychology
EDF 403	Forces: Influencing Secondary Education
EDU 416	Reading and Study Skills in the Secondary Classroom
SED 308	Methods and Materials in Teaching Secondary School Science
SED 408	Practicum in Teaching Science in the Secondary School

B. REQUIRED CREDIT HOURS IN OTHER FIELDS¹

BIO 115-116 ²
MAT 161-162, 263 ^{2, 3}
PHY 111-112 ^{2, 3}

Two semesters of geoscience^{2, 3}

¹These credits may be applied toward the 60-hour general education requirement listed above.

²Required for provisional certification.

³Required for graduation

Electives 3

Physical Education 2

TOTAL REQUIREMENTS.....123

CONSUMER and FAMILY STUDIES (0401)

Offered by the Consumer Studies and Home Economics Department
Bachelor of Science degree granted (HEGIS 1304)

Dr. Betty J. Cappella, Chairperson
Caudell Hall 206/878-5704

The consumer and family studies program prepares students to serve youth, families, and adults as professionals in one of the following three areas: consumer affairs, fashion technology, or human development and family studies. The department also offers a minor in family life education. Classroom, laboratory, and field experience provide a base for careers related to these programs. The consumer and family studies program is undergoing some review and change. Interested students should contact the department for information concerning changes in this program. The following describes each area of study within the department:

Consumer Affairs and Policy

The fact that consumers have numerous needs and problems in today's complex marketplace is not a new phenomenon, but there is something different about the way these situations are being addressed by businesses, government, and community agencies. The consumer affairs and policy program addresses requirements of consumer affairs professionals. The field of study is multidisciplinary in nature, incorporating knowledge from business, communications, economics, political science, psychology, and sociology. The core coursework addresses the management of consumer resources in various family configurations, the legal and economic environments within which consumers use their resources, agencies and organizations which exist to aid consumers, and the analysis of existing and proposed consumer-oriented policies.

General Education Requirements60

Total required credit hours in Consumer/Family Studies42

A. REQUIRED COURSE FOR CONSUMER AND FAMILY STUDIES (3 cr.)

CFS 105 Dimensions of Consumer and Family Studies

B. REQUIRED COURSES FOR SPECIALIZATIONS (39 cr.)

Consumer Affairs and Policy

REQUIRED CORE (21 cr.)

CFS 101 Trends in Consumer Studies
CFS 310 Consumer Economics
CFS 315 Personal and Family Finance
CFS 325 Family Resource Management
CFS 335 Consumer and the Law
CFS 439 Public Policy in the Consumer Interest
ECO 101 The Economic System

ELECTIVES SELECTED BY ADVISEMENT (18 cr.)

Select six courses from the following:

CFS 302 Consumer Equipment Evaluation
CFS 304 Introduction to Research Methods
CFS 306 Textile Science
CFS 331 Consumer Housing Issues
CFS 358 Families and Energy Management
CFS 438 Community Resources for Consumers
CFS 440 Family Law
CFS 488 Internship
CFS 495 Project
CFS 499 Independent Study
EDF 210 Introduction to Human Development
NFS 334 Contemporary Nutrition
JBS 205 Fundamentals in Speech
JBS 207 Public Speaking
BUS 116 Introduction to Business
BUS 212 Accounting for Non-Business Studies Majors
BUS 325 Personnel Management
BUS 360 Principles of Management
BUS 403 Marketing II--Buyer Behavior

Fashion Technology

REQUIRED CORE (21 cr.)

CFS 108 Apparel Design
CFS 306 Textile Science
CFS 336 Textile Evaluation
CFS 357 Contemporary Fashion Analysis
CFS 447 Clothing in Relation to Human Behavior
CFS 448 Costume Through the Ages
or
CFS 449 Textile Through the Ages
CFS 450 Apparel/Textile/Fashion Industry

SELECT ONE CONCENTRATION: (18 cr.)

REQUIRED COURSES for Apparel Design and Construction

CFS 307 Clothing Design and Construction
CFS 327 Clothing Design/Flat Pattern Techniques
CFS 328 Clothing Design Through Draping
CFS 410 Fundamentals of Apparel Production
CFS 303/THA 303 Fashion Illustration
DES 105 Introduction to Design

REQUIRED COURSES for Fashion Merchandising

CFS 340 Introduction to Fashion Merchandising
CFS 410 Fundamentals of Apparel Production
(Continued)

Consumer and Family Studies (Continued)

Fashion Technology

The fashion technology program is designed to prepare graduates to work in various segments of the fashion industry such as textiles, design, apparel production, testing laboratories, fashion merchandising, and private governmental agencies that are involved in setting standards for textile/apparel safety and performance. Students in fashion technology may apply, through the departments visiting student program, to spend a semester or a year studying their speciality at the Fashion Institute of Technology in New York City's garment district. In addition, majors are afforded the opportunity to see the fashion industry in action during freshman/sophomore trips to Toronto, Ontario, and junior/senior trips to New York City. Local and area museums and businesses are also used for firsthand experiences throughout the four-year program.

Human Development and Family Studies

The human development and family studies program is multidisciplinary in nature and designed to prepare students to work in community agencies, organizations, hospitals, residential institutions, family service agencies, family planning clinics, child-care agencies, government, and industry which provide services to support families in changing societies. It consists of a broad general education base and specialized coursework in human development, family dynamics, family life education, family violence, family law, or research in family studies. Community involvement, which centers around the internship program, places a number of students in public or private community agencies and organizations which provide services to support families, such as Parents Anonymous, Child and Family Services, Salvation Army, Family Court and Planned Parenthood. Graduates may engage in service to children, couples, and families, or may choose to pursue graduate work in an academic or professional school.

Note: These curricula are currently under review. Contact the department for information.

CFS 434 Principles and Practices of Fashion Buying and Merchandising
BUS 117 Introduction to Retailing
BUS 325 Personnel Management
BUS 326 Introduction to Merchandising

Human Development and Family Studies

REQUIRED CORE

EDF 210 Introduction to Human Development
CFS 212 Family in Society and Culture
CFS 213 Families in Crisis
SWK 105 Interpersonal Relations
CFS 440 Family Law
Select one of the following groupings:
CFS 487 Methods in Family Studies
CFS 488 Internship

or
CFS 304 Introduction to Research Methods
CFS 485 Senior Seminar

ELECTIVES SELECTED BY ADVISEMENT (18 cr.)

Select six courses from the following:

CFS 230 Family Health and Nursing
CFS 301 Marriage and the Family
CFS 304 Introduction to Research Methods
CFS 308 Human Development and Family Relations-Adolescence
CFS 309 Human Development and Family Relations-Young Adulthood
CFS 311/SOC 311 Family Violence
CFS 335 Consumer and the Law
CFS 345/EDF 345 Parenting
CFS 346/EDF 346 Teenage Sexuality
CFS 409 Essentials of Sex Education Programs
ECS 405 Parent-Infant Experience
ECS 417 Parents and Education
EDF 206 Introduction to Group Experience
EDF 350 Human Development During Early Childhood
EXE 300 Nature and Needs of Exceptional Individuals
HSC 204 Personal and Community Health
HSC 425 Alcohol Problems
ISM 101 Computer Fundamentals
NFS 334 Contemporary Nutrition
PHI 304 Philosophy of Law
PSC 350 Introduction to Legal Thought
SWK 310 Sexuality in Human Development
SWK 320 Organization of Community Services
SWK 346 Abuse and Neglect
SOC 100 Introduction to Sociology
SOC 210 Introduction to Women's Studies
SOC 382 Sociology of Law
SOC 381 Sociology of Violence

Electives19

Physical Education2

TOTAL REQUIREMENTS123

CRIMINAL JUSTICE (0771)

Offered by the
Criminal Justice Department
Bachelor of Science degree granted
(HEGIS 2105)

Dr. Robert D. Pursley, Chairperson
Classroom Building HC 114/878-4517

Criminal justice is a multi-disciplinary academic program which 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 is specifically designed to explore social, cultural, political, and organizational influences on criminal justice policies and operations from both theoretical and real-world perspectives.

Admission Requirements: 2.5 GPA or above.

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

General Education Requirements.....60

Total required credit hours in Criminal Justice.....39

NOTES:

1. No transfer students may take lower division courses in the major without permission of the department chairperson.
2. Economics 305 (Statistics) or its equivalent is a prerequisite for CRJ 315.
3. No more than six credit hours may be taken in any one field for use in Section "C" of the major.
4. No more than one 499 and/or 495 may be used in the major and none may be used in the major if taken prior to satisfactory completion of CRJ 315 without special permission (written) of the department.

A. REQUIRED COURSES (21 cr.)

- CRJ 101 Introduction to Criminal Justice
- CRJ 201 Criminal Law and Procedure
- CRJ 302 Community Issues in Criminal Justice
- CRJ 315 Research Design in Criminal Justice
- CRJ 317 U.S. Constitution and Civil Liberties
- CRJ 401 Seminar in Criminal Justice
- CRJ 402 Advanced Administration in Criminal Justice

B. CRIMINAL JUSTICE ELECTIVES SELECTED BY ADVISEMENT (6 cr.)

- CRJ 316 Field Studies (CRJ 316 is a six-credit course; however, only three credits may be used as electives in the major. The remaining three or the total six may be used as free electives.)
- CRJ 325 Skeletal Investigations (also ANT 325)
- CRJ 406 Introduction to Corrections Management
- CRJ 408 Pro-Seminar
- CRJ 415 Decision Making in Police, Judicial, and Correctional Systems
- CRJ 418 Analysis of Homicide
- CRJ 495 Upper Class Project
- CRJ 499 Independent Study
- HIS 343 Introduction to American Legal History
- SOC 390 Juvenile Delinquency

C. BEHAVIORAL AND SOCIAL SCIENCE ELECTIVES SELECTED BY ADVISEMENT (12 cr.)

- ECO 305 Statistics for Economics
- ECO 301 Labor Relations
- EXE 314 Psychology of Exceptional Individuals
- SWK 319 Social Dynamics of Poverty
- SWK 320 Organized Community Services
- SWK 419 Social Welfare Policy
- HIS 342 English Legal History
- HIS 343 American Legal History
- PSY 311 Personality
- PSY 325 Social Behavior
- PSY 411 Abnormal Psychology
- PHI 102 Introduction to Moral and Social Philosophy
- PHI 301 Social and Political Philosophy
- PHI 304 Philosophy of Law
- PHI 323 Moral Issues
- SOC 330 Social Psychology
- SOC 350 Power, Class and Inequality
- SOC 380 Sociology of Crime
- SOC 351 Sociology of Race and Ethnicity
- SOC 390 Juvenile Delinquency
- SOC 382 Sociology of Law
- SOC 391 Sociology of Addiction
- SOC 383 Sociology of Punishment and Corrections

Electives.....22

Physical Education.....2

TOTAL REQUIREMENTS.....123

CRIMINALISTICS (0772)

Offered by the Chemistry Department
Bachelor of Science degree granted
(HEGIS 2209)

Dr. Joseph S. Zingaro, Chairperson
Science Building 313/878-5204

Criminalistics 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 levels.

Special Admission Requirements: None at the freshman level. Transfer students from two-year colleges should have earned credit for courses equivalent to CHE 111-112 and CRJ 101 and 201 in order to avoid possible delays in the completion of the degree program.

General Education Requirements.....60

Total required credit hours in Chemistry.....30

- CHE 111-112 Fundamentals of Chemistry I-II
- CHE 301 Analytical Chemistry
- CHE 321 Principles of Organic Chemistry
- CHE 322 Biological Chemistry
- CHE 403 Instrumental Analysis
- CHE 412 Internship
- Chemistry Elective (3)

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.

Total required credit hours in Criminal Justice.....12

- CRJ 101 Introduction to Criminal Justice
- CRJ 201 Criminal Law and Procedure
- CRJ 315 Research Design in Criminal Justice
- CRJ 317 U.S. Constitution and Civil Liberties

Electives.....19

Physical Education.....2

TOTAL REQUIREMENTS.....123

DESIGN (0175)

Offered by the Design Department
Bachelor of Science degree granted
(HEGIS 1009)

Richard A. Butz, Chairperson
Upton Hall 212/878-6032

The Design Department offers a bachelor of science degree in design in the following areas of concentration: ceramic design, jewelry design, metal design, textile design, wood design, interior design, and graphic design.

The program provides a strong foundation program with drawing, two-dimensional design, three-dimensional design, color, art history, and design history. Upper-level concentrations equip students with the skills, insights, and self-confidence associated with the professional designer or artist/craftsperson.

Special Portfolio Requirement:

After completion of the foundation program and the introductory course in the intended major, a student must submit a (Continued)

General Education Requirements.....60

Total required credit hours in Design.....42

A. FOUNDATION PROGRAM (21 cr.)

- DES 101 Introductory Design 2D I
- DES 102 Introductory Design 2D II
- DES 103 Introductory Design 3D I
- DES 104 Introductory Design 3D II
- DES 105 Mechanical/Perspective Drawing
- DES 215 Introduction to Design History
- DES 317 Design in the 20th Century

B. MAJOR CONCENTRATION (with advisement) (21 cr.)

Electives.....22-28

Physical Education.....2

TOTAL REQUIREMENTS.....123

Design (Continued)

portfolio for review by faculty in the intended major. *Only* students receiving a positive recommendation may enter the major and continue in upper-level major courses.

The Design Department reserves the right to retain students' work for official

purposes such as exhibitions, catalogs, teaching aids, or for permanent collections.

At the time of publication of this catalog, approval was anticipated for a new bachelor of fine arts degree in design. Interested students should contact the

department for specific requirements.

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

DIETETICS (0410)

Offered by the Nutrition and Food Science Department
Bachelor of Science degree granted (HEGIS 1306)

Dr. Dennis K. Ponton, Chairperson
Caudell Hall 106A/875-5913

The generalist dietetics option enables students to satisfy the Plan IV academic requirements established by the American Dietetic Association (ADA). Graduates apply to post-baccalaureate dietetic internships or approved pre-professional practice programs (AP4), offered at various locations across the country, to satisfy the ADA experience component. Successful completion of the education and experience requirements, and passing the registration examination earns the credentials of Registered Dietitian. 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: Transfer students or uncommitted students desiring a major in this program must have a minimum grade point average of 2.75 on previous college credit.

Note: The curriculum is for the general area of program emphasis. The American Dietetic Association approved the Nutrition and Food Science Department to offer two other areas of program emphasis. Please contact the department for details on required classes for each of these.

General Education Requirements.....60

Total required credit hours in Nutrition and Food Science.....33

A. REQUIRED COURSES (Program Emphasis: General)

NFS 101	Introductory Food
NFS 305	Advanced Food
NFS 337	Human Nutrition
NFS 338	Nutrition and the Life Cycle
NFS 361	Principles of Management in Food Service
NFS 363	Quantity Food Production
NFS 366	Purchasing and Cost Control in Food Systems
NFS 400	Food Science
NFS 440	Advanced Human Nutrition
NFS 441	Dietary Modifications in Disease
NFS 463	Management Systems for Dietetics

B. A MINIMUM OF 12 CREDITS IN THE MAJOR must be completed in the Department.

Required Courses in Other Departments

The American Dietetic Association 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 General Education Requirement.

BIO 114	Cell Biology
BIO 210	Bacteriology
BIO 311	Human Anatomy and Physiology
BIO 312	Human Anatomy and Physiology II
CHE 101	General Chemistry I or CHE 111 Fundamentals of Chemistry I
CHE 102	General Chemistry II or CHE 112 Fundamentals of Chemistry II
CHE 321	Principles of Organic Chemistry
CHE 322	Biological Chemistry
ECO 101	The Economic System or ECO 201 Principles of Macroeconomics
ENG 300	Writing for the Professions
MAT 111	Elementary Probability and Statistics or ISM 101 Computer Fundamentals
MAT 124	Fundamentals of College Mathematics or three years high school math
PSY 101	Introduction to Psychology
EDF 303	Educational Psychology
SOC 100	Introduction to Sociology or ANT 101 Introduction to Anthropology

Electives 28

Physical Education 2

TOTAL REQUIREMENTS.....123

DIETETICS (0410)

Offered by the Nutrition and Food Science Department
Bachelor of Science degree granted (HEGIS 1306)

Dr. Dennis K. Ponton, Chairperson
Caudell Hall 106A/878-5913

The coordinated undergraduate program in clinical dietetics, accredited by the American Dietetic Association, combines theoretical learning with clinical application during the junior and senior years. The curriculum can be completed in four years if students select the appropriate prerequisite courses in the first two years of college. Graduates are recommended for membership in the American Dietetic Association and are eligible to take the registration examination. Upon successful completion of the examination, graduates become Registered Dietitians.

Admission Requirements: Students, sophomores or later, apply directly to the department in January of each year. The application process includes a personal interview, biographical sketch, various other activities, obtaining a 2.75 grade point average by August 20, and the ability to have completed the following courses by the next fall term: BIO 311, CHE 101 or CHE 111, CHE 102 or CHE 112, CHE 321, CHE 322, NFS 101, NFS 337, PSY 101, SOC 101. Up to 16 students can be accepted in this program each year. Most likely, more students will apply than can be accepted.

Note: Individuals interested in applying to this program must contact the department for application details. These are available by December 1 of each year; completed forms must be returned by January 20. Late applications will not be considered.

General Education Requirements.....60

Total required credit hours in Nutrition and Food Science.....32

A. REQUIRED COURSES (32 cr.)

NFS 101	Introductory Food
NFS 337	Human Nutrition
NFS 338	Nutrition and the Life Cycle
NFS 361	Principles of Management in Food Service
NFS 400	Food Science
NFS 439	Nutritional Biochemical Analysis
NFS 440	Advanced Human Nutrition
NFS 442	Nutrition and Disease Part I
NFS 443	Nutrition and Disease Part II
NFS 444	Community Nutrition
NFS 468	Operational Systems in Management

B. To satisfy the clinical requirements of the American Dietetic Association, students in the coordinated undergraduate clinical dietetic program are required to take the following clinical courses. These NFS courses 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
NFS 450	Senior Practicum in Dietetics

C. A minimum of 12 credits in the major must be completed in the department.

Required Courses in Other Departments

The American Dietetic Association 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 General Education Requirements.

BIO 114	Cell Biology
BIO 210	Bacteriology
BIO 311	Human Anatomy and Physiology
CHE 101	General Chemistry I or CHE 111 Fundamentals of Chemistry I
CHE 102	General Chemistry II or CHE 112 Fundamentals of Chemistry II
CHE 321	Principles of Organic Chemistry
CHE 322	Biological Chemistry
ECO 101	The Economic System or ECO 201 Principles of Macroeconomics
ENG 300	Writing for the Professions
MAT 111	Elementary Probability and Statistics or equivalent
MAT 124	Fundamentals of College Mathematics or three years of high school math
PSY 101	Introduction to Psychology
PSY 310	Behavioral Modification
EDF 303	Educational Psychology
SOC 100	Introduction to Sociology or ANT 101 Introduction to Anthropology

Electives 29

Physical Education 2

TOTAL REQUIREMENTS.....123

EARTH SCIENCE: Secondary Education

Offered by the Earth Sciences and Science Education Department
Bachelor of Science in Geosciences or Bachelor of Arts in Geology degree granted (HEGIS 1917)

Dr. Robert E. Horvat, Chairperson
Science Building 271/878-6731

The secondary education earth science program leads to a New York state Certificate of Qualification for teaching both earth science and general science in grades 7-12. It is not a degree program in itself, but an optional sequence of study which must be combined with either the bachelor of science in geosciences or the bachelor of arts in geology. All degree requirements for these programs must be fulfilled, in addition to those listed here.

General Education Requirements (may be applied either to B.A. or B.S. program).....60

Total required credit hours in Geosciences (may be applied to B.A. geology or B.S. geoscience program).....37

A. REQUIRED COURSES (28 cr.)

- GES 101 Introductory Geology or
- GES 122 Principles of Earth Science and
- GES 102 Historical Geology
- GES 103 Introductory Geology Lab (1 cr.)
- GES 111 General Oceanography
- GES 131 Introduction to Astronomy
- Astronomy Elective
- GES 241 Meteorology
- GES 302 Invertebrate Paleontology
- GES 304 The Common Rocks and Minerals
- GES 307 Geomorphology

B. ELECTIVES SELECTED BY ADVISEMENT (9 cr.)

Credit will be allowed for any course in geology, astronomy, oceanography, or atmospheric science.

Total required credit hours in Professional Education27

- SST 200 Field Experience in Secondary Social Studies (required for all secondary education majors)
- EDF 303 Educational Psychology (count in General Education category)
- EDF 403 Historical and Philosophical Forces Influencing Secondary Education
- EDU 416 Teaching Reading in the Secondary Schools
- SED 308 Methods and Materials in Teaching Secondary Science
- SED 408 Practice Teaching Science in the Secondary School (12 cr.)

Credit hours in related sciences -

(count for Core or General Education credit, 18 cr. minimum)

- Two semesters of biology
- Two semesters of chemistry
- Two semesters of physics

Foreign Language Requirement (B.A. degree only)

(0-12 General Education credits, depending on previous language coursework)

Physical Education2

TOTAL REQUIREMENTS123

ECONOMICS (0702)

Offered by the Economics Department
Bachelor of Science degree granted (HEGIS 2204)

Dr. Alex J. Ratkowski, Chairperson
Classroom Building B207/878-4606

In economics, students learn to describe, analyze, explain, and predict the economic activity of business, consumers, resource owners, and government and nonprofit agencies as they interact in producing and consuming goods and services. The B.S. program (in contrast to the B.A.) provides a background in economic theory, statistics, mathematics, accounting, and computer science; requires the selection of a specialized area of preparation in either financial economics, policy analysis and administration, or applied research; and includes more required courses to complete the program. Therefore, the B.S. program requires an earlier commitment and limits flexibility in order to provide more specific career preparation for entry-level positions in business and government or for entering graduate programs.

Specialized Areas: Each specialized area prepares a student for a different career goal. Financial Economics provides a thorough background for any aspect of financial services (e.g., positions in investment companies, banks, financial planning, etc.). A student interested in managerial positions in business or government (one begins as a management trainee) should consider Policy Analysis and Administration. Finally, a student who wants a job that requires using research to provide relevant information for use by business or government decision-makers should consider Applied Research. An adviser will assist you in selecting an appropriate specialized area.

Admission Requirements: A 2.2 GPA and a pre-calculus course (MAT 124 or equivalent) are required for entry.

Transfer Students: Most economics courses will be accepted into the major as long as the majority of requirements are completed at Buffalo State College. In most cases, grades for transfer courses will be used in computing the minimum GPA in economics.

General Education Requirements60

Total required credit hours in Economics42

A. REQUIRED COURSES (30 cr.)

- ECO 201 Principles of Macroeconomics
- ECO 202 Principles of Microeconomics
- ECO 305 Statistics for Economics
- ECO 307 Intermediate Microeconomics
- ECO 308 Intermediate Macroeconomics
- ECO 424 Econometrics
- BUS 312 Principles of Accounting I
- BUS 313 Principles of Accounting II
- ISM 101 Introduction to Computer Science
- MAT 126 Calculus or
- MAT 161 Calculus I

B. SPECIALIZED AREA (12 cr.)

Courses must be selected from one of the following specialized areas. Only three credits of ECO 488, 495, or 499 may be included.

Financial Economics

- ECO 304 Money and Banking
- ECO 314 Corporation Finance
- ECO 414 Investment Management
- ECO 415 Cases Studies in Corporation Finance
- MAT 105 Mathematics of Finance or
- ECO 340 Federal Income Taxation*
- BUS 410 Managerial Accounting
- ECO 488 Internship or
- ECO 499 Independent Study

Policy Analysis and Administration

- ECO 317 Economic Policy: Government and Business
- ECO 360 Economic Analysis of the Law
- ECO 411 Regional Economic Analysis
- ECO 412 Urban Economics
- ECO 350 Public Finance
- ECO 302 Women in the Economy
- ECO 403 Comparative Economic Systems
- ECO 401 International Economics
- ECO 301 Economics of Labor Relations
- ECO 314 Corporation Finance*
- ECO 320 Managerial Economics*
- BUS 410 Managerial Accounting*
- ECO 488 Internship or
- ECO 499 Independent Study

Applied Research

- ECO 320 Managerial Economics
- ECO 402 Seminar in Current Economic Problems
- ECO 405 History of Economic Thought
- ECO 411 Regional Economic Analysis
- ECO 425 Business and Economic Forecasting
- BUS 404 Market Research
- MAT 127 Calculus of Several Variables or
- MAT 162 Calculus II
- SOC 415 Population Analysis
- ECO 488 Internship or
- ECO 495 Project

Electives19

Physical Education2

TOTAL REQUIREMENTS123

*Pending approval of this program change

ECONOMICS (0704)

Offered by the Economics Department
Bachelor of Arts degree granted
(HEGIS 2204)

Dr. Alex J. Ratkowski, Chairperson
Classroom Building B207/878-4606

In economics, students learn to describe, analyze, explain, and predict the economic activity of business, consumers, resource owners, and government and nonprofit agencies as they interact in producing and consuming goods and services. The B.A. program (in contrast to the B.S.), by providing a broader, more generalized approach and requiring fewer hours in the major, enables students to pursue a second major, a minor, or an honors option in economics. This is intended to offer more flexibility in meeting a variety of personal interests and career choices. Graduates will have an appropriate background for entry-level positions in business and government and an excellent preparation for a variety of graduate programs and professional schools (e.g., international business, law school, economics).

Admission Requirements: A 2.2 GPA and a pre-calculus course (MAT 124 or equivalent) are required for entry.

Transfer Students: Most economics courses will be accepted into the major as long as the majority of requirements are completed at Buffalo State College. In most cases, grades for transfer courses will be used in computing the minimum GPA in economics.

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

General Education Requirements60

Total required credit hours in Economics36

A. REQUIRED COURSES (27 cr.)

- ECO 201 Principles of Macroeconomics
- ECO 202 Principles of Microeconomics
- ECO 305 Statistics for Economics
- ECO 307 Intermediate Microeconomics
- ECO 308 Intermediate Macroeconomics
- ECO 401 International Economics

- or
- ECO 403 Comparative Economic Systems
- ECO 405 History of Economic Thought
- ECO 424 Econometrics

- PHI 103 Introduction to Logic
- or
- PHI 309 Philosophy of Science

B. ECONOMICS ELECTIVES SELECTED BY ADVISEMENT (9 cr.)

Only three credits of ECO 488, 495, or 499 may be included.

Electives7-13

Foreign Language Requirement0-12

Physical Education2

TOTAL REQUIREMENTS123

Note: 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.

ELEMENTARY EDUCATION (0200)

Offered by the Elementary Education
and Reading Department
(HEGIS 0802) NCATE Accredited

Dr. Lawrence L. Smith, Chairperson
Elementary Education and
Reading Department
Bacon Hall 302/878-5916 or 878-5604

Requirements

Students wishing to major in elementary education may be admitted to pre-elementary education (0201) providing they meet the general admission re-

quirements of the college. However, to be admitted fully into elementary education, a student must have successfully completed at least 45 semester hours, completed the English and math requirements for the college, and have a cumulative grade point average of at least 2.5. Elementary education students may not enroll in EDU 314, EDU 315, EDU 401, or EDU 402 unless they have a cumulative grade point average of at least 2.5. In order to enroll in EDU 401, students must also have passed the Communication Skills and General Knowledge sections of

the National Teachers Exam. The Professional Knowledge subtest may be taken during the student teaching semester.

Graduates in elementary education will be recommended for New York state provisional certification to teach nursery through grade 6. Students may extend their certification to teach grades 7-9 in the areas of English, general science,

(Continued)

Elementary Education (Continued)

foreign language, mathematics, and social studies. Students in the elementary education program are provided with a developmental program of supervised teaching experiences with children of various age levels in different types of schools.

Academic Concentrations

Students enrolled in the elementary education program are required to complete a concentration in addition to the professional program requirements. The concentration is designed to broaden a student's academic background. Details of the various concentrations are available in Bacon Hall 303. Students must register their concentration choices with the latter office by the end of the second semester of their enrollment in the elementary education program.

Student Teaching

Eligibility for elementary student teaching is determined by the dean of Applied Science and Education; placement is done by the Elementary Education and Reading Department.

Student teaching experiences are provided in cooperating public schools in the college community. Students may be required to reside in some communities during student teaching assignments. Students enrolled in student teaching devote full time to student teaching.

Prior written approval must be obtained from the chairperson of the Elementary Education and Reading Department for a student to enroll for any other college credit work during a student teaching assignment except for EDU 402. All students anticipating a student teaching assignment must show proof of having a fine test within six months of the assignment. Results of the test must be filed at the Health Center.

Extended Certification

Students wishing to extend certification to teach in the junior high grades (7-9) in the areas of English, general science, foreign language, mathematics, or social studies will take additional methods and subject matter courses pertaining to their specific area and must complete a situation of student teaching in the selected academic subject in the early secondary grades. Students' advisers will be from the

General Education Requirements60

Total required credit hours in Elementary Education36

- *EDF 201 School and Society3
- *EDF 210 Introduction to Human Development3
- *EDF 350 Human Development During Early Childhood3
- or
- *EDF 351 Human Development During Middle Childhood3
- EDU 314 Teaching Reading and Other Language Arts6
- EDU 315 Teaching Social Studies, Science, and Mathematics6
- EDU 401 Practicum in Teaching12
- EDU 402 Seminar in Education3

*Offered by the Educational Foundations Department.

Electives25

Physical Education2

TOTAL REQUIREMENTS123

elementary education program. However, students should consult with the coordinator of secondary education for his academic area of the extension.

Transfer Students

Students transferring to elementary education majors as juniors who wish to complete their programs in four semesters should plan their schedules of course work in education carefully. It is important to note that EDU 314 and EDU 315 may not be taken concurrently except in the early childhood option. Students who do not plan to participate in that program should complete EDF 201 and EDF 210 in the first semester, EDF 350 or 351 and EDU 314 in the second semester, EDU 315 in the third, and EDU 401 and 402 in the final semester.

Additional Option

The following is an option to the standard elementary education developmental sequence for eligible students:

Early Childhood

The early childhood option is a 12-hour block encompassing EDU 314 and EDU 315. It stresses an interdisciplinary approach to an integrated curriculum for the young child. It is designed primarily for students interested in teaching in grades N-3. Some observations and participation will be in the intermediate grades to meet New York state Certificate of Qualifica-

tion and provisional certificate requirements (N-6).

Experience with children is the focal point of the option. The program is individualized to provide opportunities for students to work with children from various ethnic and cultural backgrounds in a variety of educational settings.

EDUCATIONAL FOUNDATIONS DEPARTMENT

Dr. Thomas J. Quatroche, Chairperson
Educational Foundations Department
Bacon Hall 306/878-4303

The Educational Foundations Department has responsibility for delivering the social, historical, philosophical, and psychological foundations courses needed by all education majors.

ENGINEERING TECHNOLOGY: Electrical (Electronics Option) (0820)

Offered by the Technology Department
Bachelor of Technology degree granted
(HEGIS 0909) Accredited by TAC/ABET

Dr. Charles A. Beasley, Chairperson
Upton Hall 315/878-6017

Electrical engineering technologists (electronics option) are employed in the design, testing, fabrication, and application of solid-state circuits and systems (both digital and analog), microwave systems, and control systems. This includes consumer products such as pocket calculators, stereos, and microwave ovens as well as industrial electronics and computer equipment.

General Education Requirements	24
Arts and humanities.....	6
Written and oral communications.....	9
Social sciences.....	9
Total required credit hours in Mathematics and Physical Sciences	24
Mathematics.....	9
Physics.....	6
Chemistry.....	6
Computer sciences.....	3
Total required credit hours in Technical Sciences	18
ENT 300 Analytical Methods for Technologists	
ENT 301 Mechanics I	
ENT 302 Mechanics II	
ENT 331 Electrical Circuits & Devices I	
ENT 332 Electrical Circuits & Devices II	
ENT 313 Computer Methods in Technology	
Total required credit hours in Technical Specialty	30
ENT 341 Electronics	
ENT 342 Networks	
ENT 351 Electronic Circuit Analysis and Design I	
ENT 352 Electronic Circuit Analysis and Design II	
ENT 431 Digital Systems I	
ENT 432 Digital Systems II	
ENT 441 Electromagnetic Fields and Waves	
ENT 442 Microwave Techniques	
ENT 461 Control Technology I	
ENT 462 Control Technology II	
Technical Electives	12
Electives	14
Physical Education	2
TOTAL REQUIREMENTS	124

ENGINEERING TECHNOLOGY: Electrical (Power and Machines Option) (0820)

Offered by the Technology Department
Bachelor of Technology degree granted
(HEGIS 0999) Accredited by TAC/ABET

Dr. Charles A. Beasley, Chairperson
Upton Hall 315/878-6017

Electrical engineering technologists (power and machines option) are employed in the design, testing, manufacture, and application of electrical machinery, electrical power systems, and control systems. They are diversified individuals who can fill the many industrial positions which require a knowledge of both mechanical and electrical technology.

General Education Requirements	24
Arts and humanities.....	6
Written and oral communications.....	9
Social sciences.....	9
Total required credit hours in Mathematics and Physical Sciences	24
Mathematics.....	9
Physics.....	6
Chemistry.....	6
Computer sciences.....	3
Total required credit hours in Technical Sciences	18
ENT 300 Analytical Methods for Technologists	
ENT 301 Mechanics I	
ENT 302 Mechanics II	
ENT 331 Electrical Circuits & Devices I	
ENT 332 Electrical Circuits & Devices II	
ENT 313 Computer Methods in Technology	
Total required credit hours in Technical Specialty	36
TEC 101 Technical Drawing	
ENT 311 Thermodynamics	
ENT 312 Fluid Mechanics	
ENT 341 Electronics	
ENT 342 Networks	
ENT 371 Electro-Mechanical Machines	
ENT 431 Digital Systems I	
ENT 432 Digital Systems II	
ENT 461 Control Technology I	
ENT 462 Control Technology II	
ENT 471 Electrical Power Systems I	
ENT 472 Electrical Power Systems II	
Technical Electives	6
Electives	14
Physical Education	2
TOTAL REQUIREMENTS	124

ENGINEERING TECHNOLOGY: Mechanical (0820)

Offered by the Technology Department
Bachelor of Technology degree granted
(HEGIS 0910) Accredited by TAC/ABET

Dr. Charles A. Beasley, Chairperson
Upton Hall 315/878-6017

Mechanical engineering technologists are employed in the design, testing, manufacture, and application of machinery. This includes a broad spectrum of items ranging from consumer goods to industrial equipment.

General Education Requirements	24
Arts and humanities.....	6
Written and oral communications.....	9
Social sciences.....	9
Total required credit hours in Mathematics and Physical Sciences	24
Mathematics.....	9
Physics.....	6
Chemistry.....	6
Computer sciences.....	3
Total required credit hours in Technical Sciences	18
ENT 300 Analytical Methods for Technologists	
ENT 301 Mechanics I	
ENT 302 Mechanics II	
ENT 331 Electrical Circuits & Devices I	
ENT 332 Electrical Circuits & Devices II	
ENT 313 Computer Methods in Technology	
Total required credit hours in Technical Specialty	33
TEC 101 Technical Drawing	
TEC 201 Materials Processing	
TEC 311 Materials Science & Testing	
ENT 303 Kinematics	
ENT 311 Thermodynamics	
ENT 312 Fluid Mechanics	
ENT 401 Stress Analysis	
ENT 402 Shock & Vibration Analysis	
ENT 411 Heat Transfer	
ENT 421 Machine Design I	
ENT 422 Machine Design II	
Technical Electives	9
Electives	14
Physical Education	2
TOTAL REQUIREMENTS	124

ENGLISH (0705)

Offered by the English Department
Bachelor of Arts degree granted
(HEGIS 0501)

Dr. John F. Dwyer, Chairperson
Ketchum Hall 326/878-5416

The English program offers four areas of service: the enhancement of writing skills, electives to satisfy general education requirements, a liberal arts English major, and a secondary education major.

General Education Requirements	60
Total required credit hours in English (18 credits must be upper division).....	39
A. REQUIRED COURSES (15 cr.)	
ENG 250 Literary Criticism	
ENG 301 Advanced Expository Writing	
ENG 315 Shakespeare I	
or one of ENG 316, 411, 413	
ENG 470 Foundations of Language	
or one of ENG 472, 474	
ENG 490 Senior Seminar	
B. AREA COURSES IN ENGLISH (21 cr.)	
TWO courses in literature of English prior to 1900.....	6
(Choose from ENG 110, 111, 415, 416, 417, 418, 419, 420, 421)	
TWO courses in literature of the United States, one prior to 1900.....	6
(Choose from Eng 140, 141, 240, 241, 441)	
TWO courses in literature from other countries.....	6
(Choose from ENG 130, 131, 132, 230, 331, 332, 334, 335, 336, 338, 341, 345, 432)	
ONE course in contemporary literature.....	3
(Choose from ENG 252, 253, 350, 351, 422, 454, 455)	
C. ENGLISH ELECTIVE (3 cr.)	
Foreign Language Requirement	0-12
Electives	10-22
Physical Education	2
TOTAL REQUIREMENTS	123

ENGLISH: Secondary Education (0610)

Offered by the English Department
Bachelor of Science (Education) degree
granted
(HEGIS 0501) NCATE Accredited

Dr. John F. Dwyer, Chairperson
Ketchum Hall 326/878-5416

General Education Requirements.....60

Total required credit hours in English.....42

A. ENGLISH LITERATURE (9 cr.)

Select from THREE areas:

Major literary periods	Recurrent themes
Major fiction writers	Master works
Major poets	Literary-historical overview
Major dramatists	

B. AMERICAN LITERATURE (9 cr.)

Select from THREE areas:

Major literary periods	Recurrent themes
Major fiction writers	Master works
Major poets	Literary-historical overview
Major dramatists	

C. WORLD LITERATURE (3 cr.)

Select from:

European and world literature, including classical and Biblical literature, and literature in translation

D. ADOLESCENT LITERATURE (3 cr.)

E. MINORITY AND ETHNIC AMERICAN LITERATURE (3 cr.)

F. ENGLISH LANGUAGE (6 cr.)

Select from history, structure, and usage of the English language

G. ADVANCED WRITING (6 cr.)

Select from creative writing, advanced composition, and technical writing

H. SHAKESPEARE (3 cr.)

Total required credit hours in Professional Education.....24

SST 200/EDU 200	Field Experience: Secondary Education and Related Careers
EDF 303/SED 303	Educational Psychology for Teachers of Adolescents
EDF 403/SED 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 416/SED 416	Teaching Reading in Secondary Schools
ENG 462/SED 462	Methods and Materials in the Teaching of English
ENG 464/SED 464	Student Teaching in Secondary School English*

*SST/SED 200, EDF/SED 303, EDU/SED 416, EDF/SED 403, and ENG/SED 462 are prerequisites for ENG/SED 464.

Admission requirements to the Professional Education Block

2.0 grade point average in general education courses

2.5 grade point average with no grade below "C" in English courses

A pass grade on a contemporary test of written literacy. The test will be offered each semester. Test dates are available in the English Department office.

To student teaching: 2.5 grade point average in the Professional Education Block with no grade below "C".

Physical Education.....2

TOTAL REQUIREMENTS.....128

EXCEPTIONAL EDUCATION

Offered by the Exceptional Education
Department
Bachelor of Science in Education degree
granted
(HEGIS 0808) NCATE Accredited

Dr. Mark Posluszny, Acting Chairperson
Ketchum Hall 201/878-5611

Undergraduate majors in exceptional education study within a cross-categorical program focusing on the education of newborns to 21-year-olds who have a variety of regular and special instructional needs. Included are students in disability groups traditionally associated with mental retardation, physical/neurological impairments, and learning and behavioral problems.

Graduates of the program typically obtain positions as teachers in resource rooms, self-contained classrooms, special schools, and residential facilities. Because exceptional education majors are also recommended for certification in elementary education, graduates may be employed as teachers in regular classes. These professionals are particularly well qualified to integrate individuals with handicaps into regular elementary school settings.

Exceptional education majors earn a bachelor of science in education degree, and are recommended for provisional dual certification as Teacher of Special Education and Teacher of Elementary Education. Majors must complete prescribed coursework and score at or above the passing level on the three major subtests of the National Teacher Exam (Professional Knowledge, Communication, and General Knowledge).

The department offers two minors for non-exceptional education majors. One, exceptional education, focuses on teaching individuals who are disabled. The other, exceptionality, is an interdisciplinary minor devoted to studying types of impairments and theories of remediation.

In addition to fulfilling rigorous academic demands, both majors and

General Requirements.....60

Total required credit hours in Exceptional Education.....36

EXE 100	Nature and Needs of Individuals Who Are Exceptional	3
EXE 245	Community Service With Individuals Who Are Exceptional	3
EXE 306	Behavior Management	3
EXE 320	Evaluating Individuals Who Are Exceptional	3
EXE 330	Individuals With Mild Handicaps	3
EXE 331	Individuals With Moderate/Severe/Multiple Handicaps	3
EXE 340	Curriculum for Individuals With Mild Handicaps	3
EXE 341	Curriculum for Individuals With Moderate/Severe/Multiple Handicaps	3
EXE 385	Observation and Participation in Special Education	6
EXE 420	Practicum in Special Education	6

Total required credit hours in Professional Education.....27

EDF 201	School and Society	3
EDF 210	Introduction to Human Development	3
EDU 314	Teaching Reading and Language Arts	6
EDU 315	Teaching Science, Social Studies and Math	6
EDF 350	Human Development During Early Childhood	3
	or	
EDF 351	Human Development During Middle Childhood	3
EDU 404	Practicum in Elementary School Teaching	6

Physical Education.....2

TOTAL REQUIREMENTS.....125

minors in the department can expect to spend considerable time in intensive, field-based experiences both on campus and in the surrounding community. Classroom and field-based experiences may be referenced to a particular orientation to the discipline of exceptional education.

Entrance Requirements

Students must provide evidence of potential for success in order to be admitted to the Exceptional Education Department. Entering freshmen demonstrate this potential through a point system established by the department in cooperation with Admissions Office. The point system includes criteria of high school average, rank in class, SAT scores, and whether or not a student completed a

regents diploma program. Transfer students and matriculated students demonstrate potential for success through the grade point average (GPA) earned in college coursework. Students with 2.6 GPAs (based on a 4.0 system) and above will generally be granted admission to the department. Students with 2.4 - 2.59 GPAs will be requested to submit supporting documentation such as letters of reference and statements referring to experience and purpose to be considered for admission into the department. Students with GPAs between 2.0 and 2.4 will be considered for admission only following a special review.

FINE ARTS

Offered by the Fine Arts Department
Bachelor of Fine Arts degree granted
Frank C. Eckmair, Chairperson
Upton Hall 502/878-6014

The B.F.A. program has majors in painting, photography, printmaking, and sculpture. All freshmen and transfer students enter the program in the B.F.A. foundations status. Those students admitted as freshmen or as transfers with less than four semesters in college must be examined for the major prior to their last four semesters in the program. Students admitted as upper-level transfers must be examined for the major at the end of the first semester in the program.

The application for a major is the most critical evaluation in the program. Eligibility will be determined by a two-member faculty committee on the basis of an interview with the student and a review of his or her portfolio. Each B.F.A. student will be required to mount an individual exhibition of his or her work as part of the program requirements. It will be planned and installed with the advice and assistance of the student's faculty adviser, but no grade will be assigned.

The Fine Arts Department reserves the right to retain student art work for official purposes such as exhibitions, catalogs, or teaching aids.

Special 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 at a time stipulated by the department and should contain examples of work which the candidate feels best display his or her abilities.

General Education Requirements.....36

Total required credit hours in Fine Arts.....72

A. REQUIRED COURSES (39 cr.)

FAR 101	Drawing I
FAR 102	Drawing II
FAR 103	Modeling
FAR 210	Introductory Painting
FAR 220	Introductory Photography
FAR 230	Introductory Printmaking
FAR 240	Introductory Sculpture
FAR 250	Art History I
FAR 251	Art History II
FAR 463	Twentieth-Century Art
	Two Art History Electives
FAR 470	Senior Seminar in Fine Arts

B. MAJOR FIELD (21 cr.)

Intermediate I	Three Advanced
Intermediate II	Senior Studio

C. ART ELECTIVES (12 cr.)

Free Electives.....13

Physical Education.....2

TOTAL REQUIREMENTS.....123

FOOD SYSTEMS MANAGEMENT (0432)

Offered by the Nutrition and
Food Science Department
Bachelor of Science degree granted
(HEGIS 1307)

Dr. Dennis K. Ponton, Chairperson
Caudell Hall 106A/878-5913

The food systems management curriculum prepares graduates for management positions in various aspects of the food service industry. Career opportunities exist for managers in restaurants, hotels, clubs, cafeterias, catering operations, health care, school food service, sales, production, and other components of industry/business. The curriculum includes both theoretical exposure and practical experience in food systems with the following program goals:

—To provide a common body of knowledge in food management theory/practice so that personal and professional growth will be fostered in students.

—To combine the specialized study in food systems management with a general education requirement that exposes students to many disciplines and encourages self-directed learning.

—To encourage, by course activities and experience components, the development of professional competencies, critical thinking ability, and problem solving skills which predict success in food management and project the potential for career advancement.

—To service SUNY and New York state with the only SUNY baccalaureate program in food systems management.

Admission Requirements: Transfer students or uncommitted campus students desiring to major in this program must have a minimum grade point average of 2.0 on previous college credit.

General Education Requirements.....60

Total required credit hours in Food Systems Management.....37

A. REQUIRED COURSES (34 cr.)

NFS 101	Introductory Food
NFS 279	Food Management Experience
NFS 334	Contemporary Nutrition
NFS 361	Principles of Management in Food Service
NFS 363	Quantity Food Production
NFS 364	Dining Room Service
NFS 367	Purchasing and Food Cost Accounting
NFS 466	Food Manager and Personnel Perspective
NFS 469	Institutional Foodservice Systems
NFS 470	Legal Aspects of Food Systems Management
NFS 479	Food Management Practicum
NFS 486	Food Systems Management Seminar

B. ELECTIVE IN FOOD SYSTEMS MANAGEMENT (3 cr.)

Courses available include:

NFS 306	Food Demonstration Techniques
NFS 365	Menu Planning

C. A minimum of 12 credits in the major must be completed in the department.

Electives24

Physical Education2

TOTAL REQUIREMENTS123

FRENCH LANGUAGE and LITERATURE (0709)

Offered by the Foreign Language Department
Bachelor of Arts degree granted
(HEGIS 1102)

Dr. Michael Johnson, Chairperson
Bishop Hall 126/878-5414

The program is designed to develop the ability to communicate in French and to introduce students to the masterpieces of the literature of France and the most significant aspects of French culture. Students are encouraged, but not required, to study in France for a semester in an approved program.

General Education Requirements.....	60
Total required credit hours in French.....	36

A. REQUIRED COURSES (18 cr.)

FRE 301-302	French Conversation and Composition
FRE 307-308	Survey of French Literature
FRE 306	The Civilization of France

B. ELECTIVES SELECTED BY ADVISEMENT (18 cr.)*

FRE 305	Spoken French
FRE 331	French Literature in Translation
FRE 401	Classical French Theater
FRE 403	Nineteenth-Century French Novel
FRE 404	Contemporary French Novel
FRE 415	Advanced Grammar and Composition
FRE 416	Advanced Conversation and Composition
FRE 417	Business French

*Six hours may be selected by advisement in courses with direct relationship to French studies (comparative literature, history, history of art, philosophy).

Electives	25
Physical Education	2
TOTAL REQUIREMENTS	123

FRENCH: Secondary Education (0651)

Offered by the Foreign Language Department
Bachelor of Science (Education) degree granted
(HEGIS 1102) NCATE Accredited

Dr. Michael Johnson, Chairperson
Bishop Hall 126/878-5414

The French-secondary education program enables students to earn provisional certification to teach French in New York state secondary schools. Students develop French language skills and study the structure and sound system of French, the literature and culture of French-speaking peoples, and, in the professional education component, the growth and role of the public school, adolescent development and psychology, and the teaching/learning of foreign languages in school settings. The curriculum includes a series of field experiences.

General Education Requirements.....	60
Total required credit hours in French.....	30

A. REQUIRED COURSES (21 cr.)

FRE 301-302	French Conversation and Composition
FRE 307-308	Survey of French Literature
FRE 305	Spoken French
FRE 306	The Civilization of France

(Note: All of the above are to be taken before student teaching.)

B. ELECTIVES SELECTED BY ADVISEMENT (9 cr.)

FRE 401	Classical French Theater
FRE 403	Nineteenth-Century French Novel
FRE 404	Contemporary French Novel
FRE 408	Contemporary French Theater
FRE 415*	Advanced Grammar and Composition
FRE 416*	Advanced Conversation and Composition

*Highly recommended for teaching majors

Total required credit hours in Professional Education.....	27
(Continued)	

French: Secondary Education (Continued)

A. REQUIRED COURSES (12 cr.)

EDF 303/SED 303	Educational Psychology for Teachers of Adolescents
EDF 403/SED 403	Historical and Philosophical Forces Influencing Secondary Education
EDU 416/SED 416	Teaching Reading in Secondary Schools
FLE 410/SED 410	Methods and Materials for Teaching Foreign Languages in the Secondary Schools

B. FIELD EXPERIENCE (15 cr.)

SST 200/SED 200 Field Experience: Secondary Education and Related Careers
FLE 413/SED 413 Student Teaching and Professional Seminar*

*SST/SED 200, EDF/SED 303, EDF/SED 403, EDU/SED 416 and FLE/SED 410 are prerequisites for FLE/SED 413.

Electives	4
Physical Education	2
TOTAL REQUIREMENTS	123

GENERAL STUDIES (0556)

Offered by the General Studies
Interdisciplinary Unit
Bachelor of Science degree granted
Lifelong Learning Center
Twin Rise 100/878-5906

The general studies program is directed at working adults and others interested in securing a more generalized major. It is also designed to allow students working full time to obtain a college degree in a reasonable period of time. The program is interdisciplinary in nature and offers students significant flexibility in determining a course of study. Prior to admission, students are required to contact the head of the General Studies Unit for specific information about the program.

General Education Requirements	60
Concentration	39-45
Electives (to include any appropriate college requirements, such as math or English)	16-22
Physical Education	2
TOTAL REQUIREMENTS	123

GEOGRAPHY (0715)

Offered by the Geography and Planning Department
Bachelor of Arts degree granted (HEGIS 2206)

Elbridge A. Renning Jr., Chairperson
Classroom Building A213/878-6216

Geography is designed to provide students with a basic foundation of the discipline while allowing them to focus on one of three major geographic subject areas. The physical geography/conservation stream emphasizes the interaction of man and the natural environment. The historical/cultural geography stream emphasizes developing an understanding of man's social-cultural patterns. The urban/economic geography stream emphasizes developing an understanding of the logic underlying the spatial distribution of cities and economic activities.

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

General Education Requirements.....	60
Total required credit hours in Geography.....	30

A. REQUIRED COURSES (12 cr.)

- GEG 101 Man's Natural Environment
- GEG 102 Man's Cultural Environment
- GEG 401 Development of Geographic Thought
- GEG 413 Cartography

In addition, geography majors are required to select one of three areas (tracks) of specialization and to complete an additional 9 or 12 hours of geography.

Track 1 — Physical Geography/Conservation (12 cr.)

- GEG 303 World Climatology
- GEG 307 Conservation
- GEG 322 Geography of World Hunger
- GEG 415 Seminar, physical geography or conservation or GEG 495

Track 2 — Historical/Cultural Geography (9 cr.)

- GEG 309 Introduction to Urban Geography
- GEG 320 Historical Geography of the United States
- GEG 415 Seminar, historical/cultural geography or GEG 495

Track 3 — Urban/Economic Geography (9 cr.)

- GEG 305 Principles in Economic Geography
- GEG 309 Introduction to Urban Geography
- or
- GEG 357 Geography of Buffalo and the Niagara Frontier or
- GEG 409 Geography of Manufacturing

B. GEOGRAPHY ELECTIVES selected by advisement (3 or 6 cr.)

Track 1 — Physical Geography/Conservation (3)

Three hours of regional geography

Track 2 — Historical/Cultural Geography (6)

Three hours of regional geography
Three hours of remaining geography courses

Track 3 — Urban/Economic Geography (6)

Three hours of regional geography
Three hours of remaining geography courses

C. REQUIRED ELECTIVE outside of geography (3 cr.)

Track 1 — Physical Geography/Conservation

- ONE of the following:
- GES 307 Geomorphology
- PSY 370 Environmental Psychology I
- BIO 403 Economic Biology and Conservation

Track 2 — Historical/Cultural Geography

- ONE of the following:
- HIS 213 History of Cities in Western Civilization
- ANT 307 Urban Anthropology
- PSY 370 Environmental Psychology I

Track 3 — Urban/Economic Geography

- ONE of the following:
- ECO 411 Regional Economic Analysis
- ECO 412 Urban Economics
- MAT 306 Problem Solving in BASIC

(Continued)

Geography (Continued)

Foreign Language Requirement.....	0-12
Electives	19
Physical Education.....	2
TOTAL REQUIREMENTS.....	123

GEOLOGY (0727)

Offered by the Earth Sciences and Science Education Department
Bachelor of Arts degree granted (HEGIS 1914)

Dr. Robert E. Horvat, Chairperson
Science Building 271/878-6731

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.

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

General Education Requirements.....	60
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Total required credit hours in Geology.....	40-42
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A. REQUIRED COURSES (28-30 cr.)

- GES 101 Introductory Geology
- or
- GES 122 Principles of Earth Science
- and
- GES 102 Historical Geology
- GES 103 Introductory Geology Lab (1 cr.)
- GES 301 Stratigraphy
- GES 302 Invertebrate Paleontology
- GES 304 The Common Rocks and Minerals
- GES 308 Structural Geology
- GES 401 Igneous and Metamorphic Petrology
- Two semesters of physics (6-8 cr.)

B. ELECTIVES SELECTED BY ADVISEMENT (12 cr.)

Credit will be allowed for any course in geology, astronomy, oceanography, or atmospheric science.

Foreign Language Requirement (General Education).....	0-12
Electives	19-21
Physical Education	2
TOTAL REQUIREMENTS	123

GEOSCIENCES (0737)

Offered by the Earth Sciences and Science Education Department
Bachelor of Science degree granted (HEGIS 1917)

Dr. Robert E. Horvat, Chairperson
Science Building 271/878-6731

The geosciences program offers students the opportunity to develop a broad understanding of the earth as a dynamic system involving interactions between land, sea, atmosphere, and the celestial environment. Classroom, laboratory, and field work provide a base for careers related to the environment or for teaching earth science in the secondary schools. (See special requirements for teaching under earth science: secondary education.)

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

General Education Requirements.....60

Total required credit hours in Geosciences.....37

A. REQUIRED COURSES (28 cr.)

- GES 101 Introductory Geology
- or
- GES 122 Principles of Earth Science
- and
- GES 102 Historical Geology
- GES 103 Introductory Geology Lab (1 cr.)
- GES 131 Introduction to Astronomy
- Astronomy elective
- GES 111 General Oceanography
- GES 241 Meteorology
- GES 302 Invertebrate Paleontology
- GES 304 The Common Rocks and Minerals
- GES 307 Geomorphology

B. ELECTIVES SELECTED BY ADVISEMENT (9 cr.)

Credit will be allowed for any course in geology, astronomy, oceanography, or atmospheric science.

Electives.....24

Physical Education.....2

TOTAL REQUIREMENTS.....123

HISTORY (0716)

Offered by the History and Social Studies Education Department
Bachelor of Arts degree granted (HEGIS 2205)

Dr. Monroe Fordham, Chairperson
Classroom Building C205/878-5412

The program ensures both a knowledge and an understanding of the foundations of the development of humankind, stimulates thinking about interaction of ideas, develops facility with written and verbal expression, increases confidence in articulating ideas, and encourages the critical awareness of self so important to an educated individual.

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

General Education Requirements.....60

*Total required credit hours in History.....36

- Two basic American history courses.....6
- Two basic European history courses.....6
- Two Third World history courses.....6
- Five upper division history courses.....15
- Seminar in history.....3

Foreign Language Requirement (0-12 General-Liberal Credit)

Electives.....25

Physical Education.....2

TOTAL REQUIREMENTS.....123

*History majors entering Buffalo State in the fall of 1985 semester or thereafter may count only two of the HIS 300 or HIS 389 topics courses toward the fulfillment of their history major requirements. No restriction on HIS 300 or HIS 389 topics courses taken as electives.

HOME ECONOMICS EDUCATION (0400)

Offered by the Consumer Studies and Home Economics Department
Bachelor of Science degree granted (HEGIS 0899) NCATE Accredited

Dr. Betty J. Cappella, Chairperson
Caudell Hall 206/878-5704

The home economics education program prepares students to teach home economics in grades K-12 and in adult education programs in New York state. Students are especially prepared to teach seventh and eighth grade New York state mandated home and career skills as well as occupational home economics at the senior high level. At the completion of the program, graduates will be recommended for provisional certification. The bachelor of science (B.S.) degree in home economics education also provides an excellent background for various types of employment in addition to teaching. Graduates in home economics obtain employment in related areas such as New York State Cooperative Extension, county human services, and adult education programs.

Note: This curriculum is currently under review. Contact the department for information.

General Education Requirements.....60

Total required credit hours in Home Economics Education.....39

- CFS 108 Apparel Design I
- CFS 230 Family Health and Home Nursing
- CFS 301 Marriage and Family
- CFS 302 Consumer Equipment Evaluation
- CFS 306 Textile Science
- CFS 307 Apparel Design II: Design Room Technique
- CFS 308 Human Development and Family Relations - Adolescent Years through Young Adulthood
- CFS 325 Family Resource Management
- CFS 331 Consumer Housing Issues
- NFS 101 Introductory Food
- NFS 305 Advanced Food
- NFS 335 Fundamentals of Human Nutrition
- EDF 210 Introduction to Human Development

Total required credit hours in Professional Education.....24

- EDF 303 Educational Psychology
- HEE 317 Dimensions of Home Economics Education
- HEE 460 Methods & Materials for Home Economics Education
- HEE 461 Student Teaching
- HEE 462 Student Teaching

Physical Education.....2

TOTAL REQUIREMENTS.....125

HUMANITIES (0717)

Administered by the Dean, Faculty of Arts and Humanities
Bachelor of Arts degree granted (HEGIS 4903)

Dean's Office
Rockwell Hall 222/878-6326

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

General Education Requirements.....60

Total required credit hours in Humanities.....36

- Two courses in philosophy.....6
- Three courses in English.....9
- Two courses in foreign language.....6
- Five electives in humanities (philosophy, English and/or foreign language).....15

Foreign Language Requirement.....0-12

Electives.....13-25

Physical Education.....2

TOTAL REQUIREMENTS.....123

INDUSTRIAL TECHNOLOGY (0810)

Dr. Charles A. Beasley, Chairperson
Upton Hall 315/878-6017

Deborah C. Rindfuss, Coordinator
Upton Hall 314/878-6018

The industrial technology program prepares students for technically oriented management positions in business and industry. It draws upon the principles of management, physical sciences, technology of industry, and liberal arts for the solution of problems involving industrial processes, materials, products and services, and the supervision of the personnel involved. Position titles of graduates include industrial engineering, quality control, production and management engineering, and technical sales/marketing.

Special Admission Requirements:
Although this program is primarily a transfer program for students with an A.A.S. in the technologies, freshman and sophomores are also admitted. Students may wish to gain teaching certification in addition to industrial qualification by completing the 21-credit professional sequence as shown in the technology education program entry in this catalog.

General Education Requirements60

Total required credit hours in Industrial Technology42

A. TECHNOLOGY CORE COURSES (33 cr.)

TEC 101	Technical Drawing
TEC 201	Materials Processing
TEC 311	Materials Science and Testing
TEC 312	Production Planning and Control
TEC 314	Electro-Mechanical Systems
TEC 350	Graphic Communications
TEC 351	Energy Systems
TEC 400	Marketing
TEC 401	Management Science
TEC 402	Ergonomics
TEC 405	Manufacturing Technology

B. REMAINING CORE COURSES FOR INDUSTRIAL TECHNOLOGY (9 cr.)

TEC 313	Statistical Quality Control
TEC 403	Systems Analysis
TEC 465	Safety Management

Electives19

Physical Education2

TOTAL REQUIREMENTS123

INFORMATION SYSTEMS MANAGEMENT (0825)

Offered by the Information Systems
Management Department
Bachelor of Science degree granted
(HEGIS 0702)

Lawrence W. Scott, Chairperson
Chase Hall 202/878-5528

The information systems management program is designed to prepare students for entry-level positions (programmer, systems analyst) in the computer field, and to provide 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 data processing profes-

(Continued)

General Education Requirements60

Total required credit hours in Information Systems Management42

A. REQUIRED COURSES (33 cr.)

ISM 151	Computer Based Information Processing I
ISM 251	Computer Based Information Processing II
ISM 311	Operations Research with FORTRAN
ISM 315	Computer Organization
ISM 350	Assembly Language Programming
ISM 370	Systems Analysis & Design
ISM 405	Comprehensive COBOL Programming
ISM 410	Computer Operating Systems
ISM 411	Database Systems
ISM 442	Advanced Systems Applications
ISM 470	Data Communications

B. ELECTIVES (9 cr.)

ISM 111	Introduction to FORTRAN
ISM 214	Interactive Computing
ISM 260	Data Structures*
ISM 318	Simulation and Modeling
ISM 351	Structured Programming*

(Continued)

Information Systems Management (Continued)

sionals, and unlike a computer science program its emphasis is on commercial computer applications.

Admission Requirements: Transfer students holding the A.A.S. degree in a related area are accepted directly into the major on a competitive basis. No freshmen are accepted directly into the major. Students seeking admittance into the ISM major must provide evidence of satisfactorily completing ISM 151, Computer Based Information Processing I. Satisfactory completion is defined as a "C" grade or better.

ISM 380	Microcomputer Applications
ISM 390	Computer Graphics
ISM 420	Data Base Management Systems
ISM 422	Management Information Systems
ISM 425	Comparative Computer Languages*
ISM 430	Applied COBOL*
ISM 435	Computer Seminar
ISM 450	Advanced Assembly Language Programming*
ISM 460	Computer Security and Crime
ISM 480	Office Information Systems
ISM 488	Internship

*Restricted Elective - At least three of the nine hours of major electives must come from the restricted electives designated by the asterisk. Certain sections of ISM 435 may also fill this requirement.

C. ADDITIONAL REQUIREMENTS

-A minimum of 21 credits, including at least three credits of restricted elective, must be completed in the department.
-Proficiency (as demonstrated by a passing grade in a programming course) in three different programming languages.

Electives19

Physical Education2

TOTAL REQUIREMENTS123

ITALIAN LANGUAGE and LITERATURE (0711)

Offered by the Foreign Language Department
Bachelor of Arts degree granted
(HEGIS 1104)

Dr. Michael Johnson, Chairperson
Bishop Hall 126/878-5414

The program is designed to develop the ability to communicate in Italian and to introduce students to the masterpieces of the literature of Italy and the most significant aspects of its culture. Students are encouraged, but not required, to study in Italy for a semester in an approved program. Italian majors may prepare for secondary education certification by fulfilling the professional requirements listed under the French and Spanish bachelor of science (secondary education) programs.

General Education Requirements60

Total required credit hours in Italian36

A. REQUIRED COURSES (18 cr.)

ITA 201-202	Intermediate Italian
ITA 301-302	Italian Conversation and Composition
ITA 307-308	Survey of Italian Literature

B. ELECTIVES SELECTED BY ADVISEMENT (18 cr.)*

ITA 306	Contemporary Italian Civilization
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
ITA 499	Independent Study

*Six hours may be selected by advisement in courses with direct relationship to Italian studies.

Electives25

Physical Education2

TOTAL REQUIREMENTS123

JOURNALISM (0708)

Offered by the Journalism, Broadcasting,
and Speech Department
Bachelor of Arts degree granted
(HEGIS 0605)

Dr. W. Richard Whitaker, Chairperson
Bishop Hall 234/878-6008

The journalism program offers two emphases: news/editorial, and broadcast news writing. The program is a mix of practical experience and relevant theory. It is tied closely to the professional community and emphasizes realistic and in-the-field experience. Preparation for careers is provided.

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

General Education Requirements.....	60
Total required credit hours in Journalism.....	33

A. REQUIRED COURSES (24 or 27 cr.)

- JBS 100 Introduction to Mass Communication
- JBS 101 Writing for the Print Media
- JBS 203 Writing for Publication
(not required for broadcast news writing emphasis)

To enter the journalism major, students must have satisfactorily completed ENG 101 and 102 or equivalent, earned a grade of "C" or better in JBS 100, and compiled a cumulative grade point average of 2.6 in the above three core courses.

- JBS 302 Interviewing
- JBS 305 News Reporting
- JBS 319 News Editing
- JBS 400 Law of Mass Communication

Choose ONE of the following:

- JBS 401 Communication Theory
- JBS 402 Visual and Oral Communication
- JBS 410 History of Mass Communication

Choose ONE of the following:

- JBS 415 Advanced Reporting
- JBS 488 Internship

B. ELECTIVES SELECTED BY ADVISEMENT (6 or 9 cr.)

(Two or three courses selected from among the department's professional courses.)

Foreign Language Requirement.....	0-12
Electives	16-28
Physical Education	2
TOTAL REQUIREMENTS	123

MATHEMATICS (0718)

Offered by the Mathematics Department
Bachelor of Arts degree granted
(HEGIS 1701)

James E. Westrope, Chairperson
Bishop Hall 309/878-5621

This program is identical to the mathematics B.S. program (0719) except for the language requirement.

Special Admission Requirements: High school mathematics through trigonometry recommended.

General Education Requirements.....	60
Total required credit hours in Mathematics.....	39

A. REQUIRED COURSES (24 cr.)

- MAT 161 Calculus I
- MAT 162 Calculus II
- MAT 263 Calculus III
- MAT 141 Computer Mathematics I
- MAT 270 Discrete Math
- MAT 202 Linear Algebra
- MAT 301 Fundamentals of Abstract Algebra
- MAT 381 Probability

B. ELECTIVES (15 cr.)

Choose 15 credits from the following list:

- MAT 366 Computer Mathematics II
- MAT 302 Algebra II
- MAT 315 Differential Equations
- MAT 316 Intermediate Differential Equations
- MAT 370 Applied Networks
- MAT 382 Mathematical Statistics
- MAT 404 Applications of Linear Algebra
- MAT 411 Complex Variables
- MAT 417 Introduction to Real Analysis I
- MAT 461 Numerical Analysis
- MAT 490 Seminar

Foreign Language Requirement.....	12
Electives	10
Physical Education.....	2
TOTAL REQUIREMENTS.....	123

MATHEMATICS (0719)

Offered by the Mathematics Department
Bachelor of Science degree granted
(HEGIS 1701)

James E. Westrope, Chairperson
Bishop Hall 309/878-5621

The mathematics B.S. program in the mathematical sciences is directed toward a specific career goal for computer-related government, industrial or business employment. It may also provide a basis for entry into graduate school in mathematics or computer science.

Special Admission Requirements: High school mathematics through trigonometry is recommended.

General Education Requirements.....	60
Total required credit hours in Mathematics.....	39

A. REQUIRED COURSES (24 cr.)

MAT 161	Calculus I
MAT 162	Calculus II
MAT 263	Calculus III
MAT 141	Computer Mathematics I
MAT 270	Discrete Math
MAT 202	Linear Algebra
MAT 301	Fundamentals of Abstract Algebra
MAT 381	Probability

B. ELECTIVES (15 cr.)

Choose 15 credits from the following list:

MAT 366	Computer Mathematics II
MAT 302	Algebra II
MAT 315	Differential Equations
MAT 316	Intermediate Differential Equations
MAT 370	Applied Networks
MAT 382	Mathematical Statistics
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 417	Introduction to Real Analysis I
MAT 461	Numerical Analysis
MAT 490	Seminar

Electives	22
Physical Education	2
TOTAL REQUIREMENTS	123

MATHEMATICS: Secondary Education (0721)

Offered by the Mathematics Department
Bachelor of Science degree granted
(HEGIS 1701)

James E. Westrope, Chairperson
Bishop Hall 309/878-5621

The mathematics B.S. program in secondary education is directed toward the specific career goal of teaching. For certification in New York state, the certification program is also required.

Special Admission Requirements: High school mathematics through trigonometry is recommended.

Certification Program in Mathematics Education: Provisional certification to teach mathematics in grades 7-12 will be

(Continued)

General Education Requirements	60
Total required credit hours in Mathematics	39

A. REQUIRED COURSES (27 cr.)

MAT 161	Calculus I
MAT 162	Calculus II
MAT 141	Computer Mathematics I
MAT 270	Discrete Mathematics
MAT 183W	Problem Solving in Math
MAT 263	Calculus III
MAT 202	Linear Algebra or MAT 301
	Fundamentals of Abstract Algebra
MAT 322	Modern Geometry
MAT 381	Probability

B. ELECTIVES (12 cr.)

Choose 12 credits from the following list:

MAT 202	Linear Algebra
MAT 301	Fundamentals of Abstract Algebra

(Continued)

Mathematics: Secondary Education (Continued)

awarded upon successful completion of the following requirements:

1. B.S. or B.A. degree (not necessarily in mathematics).
2. Successful completion of the mathematics component secondary education (39 S.H.) of the bachelor of science in mathematics degree program.
3. Successful completion of the following professional requirements (25 cr.):

SST 200	Field Experience and Related Careers
EDF 303	Educational Psychology
EDF 403	Forces Influencing Secondary Education
MED 397	Methods in the Teaching of Secondary School Mathematics
MED 496	The Professional Semester, Middle/Junior High School
MED 497	The Professional Semester, Senior High School

MAT 302	Algebra II
MAT 315	Differential Equations
MAT 351	Number Theory
MAT 366	Computer Mathematics II
MAT 370	Applied Networks
MAT 382	Mathematical Statistics
MAT 404	Applications of Linear Algebra
MAT 411	Complex Variables
MAT 417	Introduction to Real Analysis I
MAT 490	Seminar

Electives	22
Physical Education	2
TOTAL REQUIREMENTS	123

The above qualifies a student for the B.S. in mathematics but not for teacher certification. To obtain provisional certification to teach mathematics in grades 7-12, see certification program requirements.

MUSIC (0125)

Offered by the Performing Arts Department
Bachelor of Arts degree granted
(HEGIS 1005)

Myron H. Nadel, Chairperson
Rockwell Hall 203/878-6401

The music major is a liberal arts program which provides students with the broad knowledge and skills to enjoy a lifetime of music, integrate music into a career, and, in some cases, perform as a vocalist or instrumentalist. The discipline of music is studied through classical and creative methods in a series of courses called Comprehensive Musicianship which provides the foundations for contemporary and commercial music. Guest residencies of the Amherst Saxophone Quartet and the Maelstrom Percussion Ensemble enhance the student's exposure to professional musicians.

(Continued)

General Education Requirements	60
Total required credit hours in Music	42

A. REQUIRED COURSES (31 cr.)

MUS 130	Comprehensive Musicianship I
MUS 131	Comprehensive Musicianship II
MUS 140	Ethnomusicology
MUS 230	Comprehensive Musicianship III
MUS 231	Comprehensive Musicianship IV
MUS 330	Comprehensive Musicianship V
MUS 331	Comprehensive Musicianship VI
Applied Music—171, 173, 271, 273, 371, 373 Individual lessons in instrumental or vocal music, membership in and successful completion of all rehearsals and performances of at least one assigned, faculty-directed ensemble, and graded performance before a faculty jury is required of all music majors each semester.	

B. ELECTIVES (selected by advisement) (11 cr.)

Foreign Language Requirement	0-12
Electives	7-19
Physical Education	2
TOTAL REQUIREMENTS	123

Music (Continued)

Admission to the major: Students should contact the Performing Arts chairperson for career counseling and audition.

Continuation in the major:

1. The current semester's and cumulative grade point average of at least 2.5 in all required courses and music electives.

2. Successful completion of rehearsal, performance, and jury obligations and MUS 373 by the end of semester six.

Note: A 21-credit music minor is pending approval. Contact the Performing Arts Department for information.

OFFICE ADMINISTRATION: Special Studies (0433)

Offered by the Business Department
Bachelor of Science in Special Studies
degree granted
(HEGIS 4999)

Dr. Benjamin Sackmary, Chairperson
Chase Hall 306/878-4239

The bachelor of science program in special studies—office administration is designed to prepare students for the ever-growing numbers of positions in office management and supervision. With the increasing technological advances in this area, office administrators will be needed in the near future to manage and operate complex technical office procedures. This program provides students with a basic core of business courses in a specialized area (e.g., supervision, office procedures). The program was developed to accommodate the needs of transfer students from community colleges and to provide flexibility so that students may develop programs designed to meet their individual needs.

Admission Requirements: Transfer students holding the A.A.S. degree in either business or secretarial science are accepted directly into the major on a competitive basis. No freshmen are accepted directly into the major. Students seeking admittance into the office administration major must provide evidence of satisfactorily completing BUS 116 Introduction to Business and BUS 324 Business Communication. Satisfactory completion is defined as a "C" grade or better.

General Education Requirements.....60

Total required credit hours in Office Administration.....30

A. REQUIRED COURSES (21 cr.)

- ECO 201 Principles of Macro-Economics
- BUS 116 Introduction to Business
- BUS 324 Business Communication
- BUS 325 Personnel Management
- BUS 334 Business Law
- BUS 360 Principles of Management
- BUS 423 Office Management

B. ELECTIVES SELECTED BY ADVISEMENT (9 cr.)

- ECO 301 Labor Relations
- BUS 312 Accounting I
- BUS 313 Accounting II
- BUS 403 Marketing II - Buyer Behavior

C. PROFESSIONAL PRACTICE (0-12 cr.)

General Definition for BS/SS Program:

The bachelor of science in special studies degree program includes a flexible professional practice component of up to 12 credit hours. This experience is planned from several perspectives, including those of programmatic requirements and individual student needs. In some cases, the professional practice serves as an introductory experience to the professional area, and in others it becomes a culminating experience at the end of the program. In all cases, it is developed in close cooperation by the student, the college adviser, and the professional site representative/supervisor.

Electives 31

Physical Education.....2

TOTAL REQUIREMENTS.....123

PHILOSOPHY (0720)

Offered by the Philosophy and
Religious Studies Department
Bachelor of Arts degree granted
(HEGIS 1509)

Dr. George T. Hole, Chairperson
Bishop Hall 217/878-5136

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

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

General Education Requirements.....60

Total required credit hours in Philosophy.....27

A. REQUIRED COURSES (9 cr.)

- PHI 103 Introduction to Logic
- or
- PHI 307 Beginning Symbolic Logic
- PHI 317 History of Philosophy I
- PHI 318 History of Philosophy II

B. ELECTIVES IN MAJOR FIELD (18 cr.)

- PHI 101 Introduction to Philosophy
- PHI 102 Introduction to Social and Moral Philosophy
- PHI 104 Introduction to Religious Studies
- PHI 105 Introduction to Christian Thought
- PHI 121 Introduction to Jewish Thought
- PHI 201 Capitalism, Socialism, and Democracy
- PHI 204 Philosophy of Religion
- PHI 206 Introduction to the New Testament
- PHI 207 Philosophy in Literature
- PHI 210 Existentialism
- PHI 300 Problems of Philosophy
- PHI 301 Social and Political Philosophy
- PHI 302 Philosophy of Art and Beauty
- PHI 304 Philosophy of Law
- PHI 305 Philosophy of Language
- PHI 306 Writings of John
- PHI 308 Philosophy of Love and Sex
- PHI 309 Philosophy of Science
- PHI 312 Metaphysics
- PHI 315 Early Modern Philosophy
- PHI 319 Figures in Early Christian Philosophy
- PHI 321 World Religions
- PHI 323 Moral Issues
- PHI 324 Chinese & Japanese Philosophy
- PHI 325 Philosophy of Future Man
- PHI 327 Aesthetics and the Arts
- PHI 328 Business and Ethics
- PHI 329 Contemporary Christian Thought
- PHI/ JBS 331 Religion and Media
- PHI 332 Mysticism
- PHI 350 Holocaust
- PHI 401 Problem Seminar
- PHI 402 Seminar
- PHI 488 Internship
- PHI 495 Project
- PHI 499 Independent Study

Electives 22-34

Foreign Language Requirement.....0-12

Physical Education.....2

TOTAL REQUIREMENTS.....123

PHYSICS (0728)

Offered by the Physics Department
Bachelor of Arts degree granted
(HEGIS 1902)

Dr. James Wells, Chairperson
Science Building 271/878-6731

The B.A. physics program provides a good concentration in physics courses and a broad distribution in the liberal arts. Designed for technical or technically related graduate school studies or employment.

General Education Requirements.....60

Total required credit hours in Physics.....35

A. REQUIRED COURSES (30 cr.)

- PHY 111-112 University Physics I-II (or equivalent)
- PHY 305 Modern Atomic Physics
- PHY 320 Introduction to Theoretical Physics
- PHY 406 Introduction to Quantum Mechanics
- PHY 410 Advanced Physics Laboratory (taken twice)
- PHY 425 Classical Mechanics
- PHY 430 Electricity and Magnetism

B. ELECTIVES SELECTED BY ADVISEMENT (5 cr.)

- PHY 213 University Physics III
- PHY 303 Heat and Thermodynamics
- PHY 308 Optics
- PHY 310 Intermediate Laboratory
- PHY 325 Electronics
- PHY 403 X-rays
- PHY 408 Nuclear Physics
- PHY 411 Introduction to Solid State Physics
- PHY 412 Physics Seminar
- PHY 495 Project
- PHY 499 Independent Study

Total required credit hours outside of major.....9

- MAT 161 Analytic Geometry and Calculus I
- MAT 162 Analytic Geometry and Calculus II
- MAT 263 Analytic Geometry and Calculus III

Foreign Language Requirement (0-12 general education credit).....0-12

Electives.....0-12

Physical Education.....2

TOTAL REQUIREMENTS.....123

PHYSICS (0778)

Offered by the Physics Department
Bachelor of Science degree granted
(HEGIS 1902)

Dr. James Wells, Chairperson
Science Building 271/878-6731

The B.S. physics program gives a broad background in the fundamental concepts and applications of physics. This background is appropriate for graduate school or scientific employment in physics or physics-related fields.

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

General Education Requirements.....60

Total required credit hours in Physics.....42

A. REQUIRED COURSES

- PHY 111-112-213 University Physics I-III (11 cr.)
- PHY 303 Heat and Thermodynamics
- PHY 305 Modern Atomic Physics
- PHY 308 Optics
- PHY 320 Introduction to Theoretical Physics
- PHY 325 Electronics
- PHY 406 Introduction to Quantum Mechanics
- PHY 410 Advanced Physics Laboratory (taken twice)
- PHY 425 Classical Mechanics
- PHY 430 Electricity and Magnetism

B. ELECTIVES IN PHYSICS OR MATHEMATICS (0 cr.)

None required. However, additional courses may be selected with advisement to reflect student career goals.

Total required credit hours outside of major.....12

- MAT 161 Analytic Geometry and Calculus I
- MAT 162 Analytic Geometry and Calculus II
- MAT 263 Analytic Geometry and Calculus III
- MAT 315 Differential Equations

Electives.....7

Physical Education.....2

TOTAL REQUIREMENTS.....123

PHYSICS: Secondary Education (0634)

Offered by the Physics Department
Bachelor of Science (Secondary Education)
degree granted
(HEGIS 1902) NCATE Accredited

Dr. James Wells,, Chairperson
Science Building 271/878-6731

The secondary education physics program leads to a New York state Certificate of Qualification for teaching both physics and general science in grades 7-12.

General Education Requirements.....60

Total required credit hours in Physics.....25

- PHY 111-112 University Physics I-II
- PHY 305 Modern Atomic Physics
- PHY 320 Introduction to Theoretical Physics
- PHY 425 Classical Mechanics
- PHY 430 Electricity and Magnetism
- PHY 410 Advanced Physics Lab

Total required credit hours in Professional Education.....24

- SST 200 Field Experience: Secondary Education and Related Careers
(counts as general education credit)
- EDF 303 Educational Psychology for Adolescents
- EDF 403 Forces Influencing Secondary Education
- EDU 416 Teaching Reading in the Secondary Schools
- SED 308 Methods in Teaching Secondary School Science
- SED 408 Student Teaching and Professional Seminar

Total required credit hours outside of major (some courses in this category must be credited under General Education).....12

- A. Outside major required courses (9 cr.)
 - MAT 161 Analytic Geometry and Calculus I
 - MAT 162 Analytic Geometry and Calculus II
 - MAT 263 Analytic Geometry and Calculus III

- B. Required for certification (18 cr. minimum)
 - Two semesters of biology
 - Two semesters of chemistry
 - Two semesters of geosciences

Physical Education.....2

TOTAL REQUIREMENTS.....123

"THREE-TWO" PHYSICS-ENGINEERING PROGRAM

Offered by the Physics Department
Bachelor of Science from Buffalo State and
Bachelor of Science in Engineering from a
cooperating engineering school are granted
upon completion of the five-year program

Dr. James Wells, Chairperson
Science Building 271/878-6731

This program offers an ideal combination of basic and applied science. Students in the cooperative (3-2) 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 and complete the requirements for an engineering degree in two more years.

Students electing this program will complete most requirements of the B.S. degree (0778) program, depending on the engineering school and discipline. The cooperating schools are:
SUNY at Binghamton: electrical and computer engineering; mechanical engineering
SUNY at Buffalo: aerospace engineering;

civil engineering; electrical and computer engineering; industrial engineering; mechanical engineering
Clarkson University: chemical engineering; civil and environmental engineering; electrical and computer engineering; mechanical engineering
See department chairperson for further information.

POLITICAL SCIENCE (0722)

Offered by the Political Science Department
Bachelor of Arts degree granted
(HEGIS 2207)

Dr. Lawrence G. Flood, Chairperson
Classroom Building B218/878-6116

Political science is the study of government and politics. The major is divided into American politics, international and comparative politics, and political theory. A minor is offered in public administration. The department offers a variety of courses in each of these areas. Students gain understanding of government and politics through a combination of on-campus study and such off-campus opportunities as internships in national, state or local government and the Washington Semester Program. Students are prepared for an array of career options. For example, the department offers specialized advisement in graduate study, pre-law, and public administration.

General Education Requirements.....60

Total required credit hours in Political Science.....33
(18 of the 33 credits must be in 300- or 400-level courses)

A. REQUIRED COURSES (9 cr.)

- PSC 101 Introduction to Government and Politics
- PSC 102 American Political Institutions and Problems
- PSC 300 Political Analysis

B. POLITICAL SCIENCE DISTRIBUTION REQUIREMENTS

American Government and Politics (3 cr.)

- PSC 210 American Presidency
- PSC 215 Urban Government
- PSC 220 Development of American Constitutional Law
- PSC 225 Women and American Politics
- PSC 310 American Politics and Political Parties
- PSC 311 Pressure Politics
- PSC 312 Legislative Process
- PSC 315 State and Local Government and Politics
- PSC 316 Urban Ethnic Politics
- PSC 320 U.S. Constitution and Civil Liberties
- PSC 325 Politics of Welfare
- PSC 326 Politics and Media
- PSC 327 Practical Politics
- PSC 360 Public Administration
- PSC 364 American Public Policy
- PSC 410 Political Behavior and Public Opinion
- PSC 420 Contemporary Issues in American Constitutional Law

International Relations (3 cr.)

- PSC 230 International Relations
- PSC 330 American Foreign Policy
- PSC 335 International Relations of the Middle East

Comparative Government (3 cr.)

- PSC 240 European Political Systems
- PSC 340 Politics of Developing Countries
- PSC 345 Politics and History of the Middle East
- PSC 348 Government and Politics of the Far East
- PSC 368 Comparative Public Administration
- PSC 370 Canadian Public Administration

Political Theory and Philosophy (3 cr.)

- PSC 350 Introduction to Legal Thought
- PSC 351 Political Thought: Plato to Aquinas
- PSC 352 Political Thought: Machiavelli to Marx
- PSC 355 American Political Thought
- PSC 450 Contemporary Political Thought

C. GENERAL ELECTIVES IN POLITICAL SCIENCE (12 cr.)

Additional courses from B above or from the following:

- PSC 103 Great Political Issues
- PSC 306 Politics of Energy
- PSC 307 Political Alienation
- PSC 309 Politics of International Business
- PSC 389 Topics in Political Science
- PSC 470 Honors Seminar (Pol. Sci. Junior and Senior with 3.00 only)
- PSC 497 Washington Semester Program

Foreign Language Requirement (General Education).....0-12

Electives.....28

Physical Education.....2

TOTAL REQUIREMENTS.....123

PSYCHOLOGY (0723)

Offered by the Psychology Department
Bachelor of Arts degree granted
(HEGIS 2001)

Dr. Jerry Cataldo, Chairperson
Classroom Building C312/878-6215

Students in the B.A. 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, life-span development and old age, animal behavior, industrial-organizational psychology, social processes, and normal and abnormal behavior.

General Education Requirements.....60

Total required credit hours in Psychology.....33

A. REQUIRED COURSES (15 cr.)

PSY 101	Introduction to Psychology
PSY 306	Statistics in Psychological Research
PSY 450	Experimental Psychology I
PSY 451-458	Experimental Psychology II (choose one)
PSY 472	Seminar on Psychology

B. ELECTIVES SELECTED BY ADVISEMENT (18 cr.)

Two 400-level psychology courses excluding the above required courses and excluding PSY 488-499 (6 cr.)
An additional 12 hours of psychology must be taken, with no more than six hours from PSY 205, PSY 380-399, PSY 488-499 (12 cr.)

Foreign Language Requirement (General Education)0-12

All College Electives28

Physical Education2

TOTAL REQUIREMENTS123

PSYCHOLOGY (0724)

Offered by the Psychology Department
Bachelor of Science degree granted
(HEGIS 2001)

Dr. Jerry Cataldo, Chairperson
Classroom Building C312/878-6215

A specialized B.S. degree is offered in the following areas: a) biological psychology; b) clinical psychology; c) environmental psychology; d) industrial/organizational psychology; e) psychology of aging; f) 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 Steps:

1. The student must be sponsored by an individual faculty member in the specific B.S. area. The student must be able to complete at least one academic year of supervised work in the B.S. program before graduation.

General Education Requirements.....60

Total required credit hours for specialized B.S. degree in Psychology.....36-42

A. REQUIRED COURSES (18 cr.)

PSY 101	Introduction to Psychology
PSY 306	Statistics in Psychological Research
PSY 450	Experimental Psychology I
PSY 451-458	Experimental Psychology II (choose one related to specialty)
PSY 472	Seminar on Psychology
PSY 499 or	Independent Study
PSY 495 or	Project
PSY 488	Internship

In addition, students are required to complete one of the following areas of specialization. (18-24 cr.)

Biological Psychology (24 cr.)

PSY 304	Psychology of Learning
PSY 308	Basic Concepts of Perception
PSY 321	Comparative Animal Behavior
PSY 421	Physiological Psychology
PSY 441	Introduction to Neuropsychology

or
PSY 386 Stress, Coping and Health
Elective courses selected by advisement (9 cr.)

(Continued)

Psychology (Continued)

2. All students sponsored for the B.S. programs must be accepted by the Psychology Department.

3. A student applying for the B.S. must have received at least a grade of B in the first course of the required sequence of B.S. courses.

4. A student applying for the B.S. must be in good academic standing at the college.

Clinical Psychology (24 cr.)

PSY 311	Personality: Theory and Research
PSY 411	Abnormal Psychology
PSY 480	Psychotherapy: Theory, Research and Procedures
PSY 481	Psychological Tests and Measurements

Elective courses selected by advisement (12 cr.)

Environmental Psychology (21 cr.)

PSY 370	Environmental Psychology I
PSY 470	Environmental Psychology II

Elective courses selected by advisement (15 cr.)

Industrial/Organizational Psychology (21 cr.)

PSY 365	Industrial Psychology
PSY 367	Behavior in Organizations
PSY 466	Personnel Psychology

Elective courses selected by advisement (12 cr.)

Psychology of Aging (18 cr.)

PSY 327	Adult Development and Aging I
PSY 355	Life-Span Developmental Psychology
PSY 427	Adult Development and Aging II

Elective courses selected by advisement (9 cr.)

Psychology of Infancy (18 cr.)

PSY 355	Life-Span Developmental Psychology
PSY 415	Competent Infant
PSY 417	The Atypical Infant

Elective courses selected by advisement (9 cr.)

B. ALL COLLEGE ELECTIVES (19-25 cr.)

Biological Psychology	19
Clinical Psychology	19
Environmental Psychology	22
Industrial/Organizational Psychology	22
Psychology of Aging	25
Psychology of Infancy	25

Physical Education2

TOTAL REQUIREMENTS123

HONORS IN PSYCHOLOGY

Offered by the Psychology Department
Bachelor of Arts or Bachelor of Science with
Honors degree granted
(HEGIS 2001)

Dr. Jerry Cataldo, Chairperson
Classroom Building C312/878-6215

Departmental honors is for students who are performing exceptionally well in their courses. The honors designation is an adjunct to either the B.A. or B.S. degrees with an added emphasis on independent work, and requires that students conduct a comprehensive original research project on their own.

Special Admission Requirements: A 3.5 cumulative average in psychology with a minimum of 24 hours in psychology taken at Buffalo State. (Transferred courses will be considered for credit toward a student's psychology requirements, but the grades from these courses will not be used in computing the cumulative average.) A 3.25 cumulative average in all courses taken at Buffalo State is also a requirement.

General Education Requirements.....60

Total required credit hours in Psychology:

B.A. degree.....	36
B.S. degree.....	42

Biological Psychology.....	42
Clinical Psychology.....	42
Environmental Psychology.....	42
Industrial/Organizational Psychology.....	42
Psychology of Aging.....	42
Psychology of Infancy.....	42

In addition to the required courses in either the B.A. or B.S. degree programs students must take:

PSY 496 Honors Thesis I.....	3
PSY 498 Honors Thesis II.....	3

A 36-hour sequence of courses is required if a student is enrolled in the B.A. degree in psychology. This requirement is identical to that of the B.A. degree except that PSY 496 may be used as a psychology elective and PSY 498 is an additional required course. A 42-hour sequence of courses is required if a student is enrolled in the B.S. degree in psychology. For these students both PSY 496 and PSY 498 are also required, and may be substituted where applicable for elective courses in these programs.

All College Electives (depending on B.A. or B.S. degree).....19-25

Foreign Language Requirement.....0-12 (for B.A. program)

Physical Education.....2

TOTAL REQUIREMENTS.....123

PUBLIC COMMUNICATION (0703)

Offered by the Journalism, Broadcasting, and
Speech Department
Bachelor of Arts degree granted
(HEGIS 0699)

Dr. W. Richard Whitaker, Chairperson
Bishop Hall 234/878-6008

The public communication major is designed to prepare students for the changing role of public relations in both the private and public sectors of society, where written and spoken communication skills will be required and the understanding of group dynamics is important. Under this program, students will take courses in written and oral communication, specialized courses in public relations and advertising, and optional courses which permit the completion of a program which complements individual career goals.

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

General Education Requirements.....60

Total required credit hours in Public Communication.....39

A. REQUIRED COURSES (30 cr.)

JBS 100	Introduction to Mass Communication
JBS 101	Writing for the Media
JBS 205	Experiences in Speech

To enter the public communication major, students must have satisfactorily completed ENG 101 and 102 or equivalent, and have earned a grade of "C" or better with a cumulative grade point average of 2.6 in the above three core courses.

JBS 301	Public Relations/Advertising
JBS 306	Public Speaking
JBS 307	Communication and Group Process
JBS 308	Public Relations Writing
JBS 322	Layout and Graphics
JBS 402	Oral and Visual Communication
JBS 418	Principles of Publicity and Copywriting

B. ELECTIVES SELECTED BY ADVISEMENT (9 cr.)

Four courses from those listed below or JBS courses approved by department.

JBS 201	Broadcast Copywriting
JBS 203	Writing for Publication
JBS 302	Interviewing
JBS 309	Persuasive Speaking
JBS 319	Editing
JBS 325	Magazine Article Writing
JBS 400	Mass Communication Law
	or
JBS 430	Broadcast Law
JBS 407	Organizational Communication
JBS 408	Public Relations Case Studies
JBS 422	Mass Media Criticism
JBS 488	Internship in Public Communication

Foreign Language Requirement.....0-12

Electives.....10-22

Physical Education.....2

TOTAL REQUIREMENTS.....123

SOCIAL STUDIES EDUCATION (0640)

Offered by the History and Social Studies Education Department
Bachelor of Science degree granted
(HEGIS 2201) NCATE Accredited

Dr. Monroe Fordham, Chairperson
Classroom Building C205/878-5412

The social studies education program prepares students for teaching positions at the junior and senior high school levels in those courses that make up the social studies curriculum. The program emphasizes both theoretical foundations and practical experience.

Special Admission Requirements:

Students should contact the coordinator of Social Studies Education, G.A. McFarren, Classroom Building C219, 878-6139, for admission requirements.

Admission to secondary social studies major: 2.0 GPA in general education courses; 2.5 GPA with no grade below "C" in history or social science courses.

Student Teaching: 2.5 GPA in the professional education block with no grade below "C".

General Education Requirements.....60

Total required credit hours in Social Studies.....30

TWO courses elected from anthropology, criminal justice, economics, geography, political science, psychology, social studies, sociology or history (6 cr.)

THREE additional courses from the upper division in one of the above disciplines or in either European or American history to constitute an area of concentration (9 cr.)

ONE upper-division course from the above disciplines outside the area of concentration (3 cr.)

History — two courses in American history (6 cr.)

History — two courses in European history (6 cr.)

Courses must be selected to include SST 102, Problem Solving in Social Studies, and a seminar in history or the social sciences.

Total required credit hours in Professional Education.....30

SST 200 Field Experience: Secondary Education and Related Careers.....3

EDF 303 Educational Psychology for Adolescents.....3

EDF 403 Forces Influencing Secondary Education.....3

EDU 416 Teaching Reading in the Secondary Schools.....3

SSE 309 Teaching Secondary Social Studies.....3

SSE 409 Student Teaching and Professional Seminar.....12

SST 303 Secondary Social Studies Seminar.....3

Electives.....0-3

Physical Education.....2

TOTAL REQUIREMENTS.....123

SOCIAL WORK (0435)

Offered by the Social Work Department
Bachelor of Science degree granted
(HEGIS 2104)

Ellen T. Kennedy, Chairperson
Classroom Building C114B/878-5705

The social work program prepares students for social work practice at the first professional level and is accredited by the Council on Social Work Education. Consistent with accreditation standards, the social work courses are in the following areas: human behavior in the social environment, social welfare policy and services, intervention methods, research and field instruction.

Social work is an upper-level major that builds on a liberal arts base. As such, it is

(Continued)

General Education Requirements.....60

Total required credit hours in Social Work.....42

SWK 105 Interpersonal Relations

SWK 220 Introduction to Social Work

SWK 307 Human Behavior and Social Environment I

SWK 308 Human Behavior and Social Environment II

SWK 317 Research in Social Work

SWK 319 Social Dynamics of Poverty

SWK 320 Organization of Community Services

SWK 419 Social Welfare Policy

SWK 422 Interventive Methods I

SWK 423 Interventive Methods II

SWK 493-494 Field Instruction (12 hrs.)

Electives.....19

Physical Education.....2

TOTAL REQUIREMENTS.....123

Social Work (Continued)

strongly recommended that all students have at least an introductory course in the following areas: psychology, sociology, political science, economics, philosophy, history, cultural anthropology.

Special Admission Requirements: Although this is an upper-division program, students may apply earlier. Students must have a cumulative grade point average of 2.5, or reference letters from two social work faculty if grade

point average is below 2.5. Applications for the program are available in the department office.

Special Note: Any student who receives a second "D" in the major will not be allowed to continue in the program.

SOCIOLOGY (0730)

Offered by the Sociology Department
Bachelor of Arts degree granted
(HEGIS 2208)

Dr. Rosalyn A. Lindner, Acting Chairperson
Classroom Building B307/878-5411

Sociology is the study of human beings and their societies. The sociology program leads to a B.A. degree and is designed to provide students with a well-rounded and fundamental knowledge of the discipline. The program provides a foundation both for employment, particularly in social service related areas, as well as for further graduate study. Additionally, its individual courses form important components of other major programs at Buffalo State. The various subdivisions within the department are reflected in the several different concentrations which constitute sociology minors. For further information, contact the department office.

Special Requirements: Majors must enroll in SOC 300 before accumulating 75 hours to maintain status as a major.

General Education Requirements.....60

Total required credit hours in Sociology.....34

A. REQUIRED COURSES (16 cr.)

SOC 100 Introduction to Sociology.....3

SOC 300 Methods in Social Research.....3

SOC 301 Social Statistics.....4

SOC 400 Foundations of Sociological Thought or.....3

SOC 408 Contemporary Sociology Theory.....3

SOC 490 Seminar in Sociology.....3

B. ELECTIVES WITHIN MAJOR PROGRAM (18 cr.)

Any courses designated SOC may be elected.

Foreign Language Requirement.....0-12

Electives.....15-27

Physical Education.....2

TOTAL REQUIREMENTS.....123

SOCIOLOGY (0732)

Offered by the Sociology Department
Bachelor of Science degree granted
(HEGIS 2208)

Dr. Rosalyn A. Lindner, Acting Chairperson
Classroom Building B307/878-5411

This B.S. degree program emphasizes applied sociology and prepares students to conduct and administer sociological research for external client organizations such as business and financial institutions, labor organizations, criminal justice units, government agencies, health-related organizations, and a host of social service agencies. The program rests upon a foundation of required core courses stressing research skills and sociological theory. The student selects one of two tracks, either in social structure, which emphasizes the development of applied computer skills, or social development, which requires internship experience in community agencies.

This program is designed for those students who wish to become involved in administering and conducting research for community agencies, groups, and organizations.

Special Requirements: Majors must enroll in SOC 300 before accumulating 75 hours to maintain status as a major.

General Education Requirements.....60

Total required credit hours in Sociology.....40

A. REQUIRED COURSES (22 cr.)

- SOC 100 Introduction to Sociology
- SOC 300 Methods of Social Research
- SOC 301 Social Statistics
- SOC 400 Foundations of Sociological Thought, OR
- SOC 408 Contemporary Sociological Theory

Track 1: Social Development Required Courses

- SOC 199 Social Science Computer Applications
- SOC 350 Power, Class and Inequality
- SOC 415 Population Analysis (Computer)

Track 2: Social Development Required Courses

- SOC 330 Social Psychology
- SOC 488 Internship in Sociology (6 hrs.)

B. SPECIALTY ELECTIVES (9 cr.)

Track 1: Social Structure (three of the following)

- SOC 340 Sociology of the City
- SOC 351 Sociology of Race and Ethnicity
- SOC 361 Industrial Sociology
- SOC 362 Sociology of Organizations
- SOC 380 Sociology of Crime
- SOC 382 Sociology of Law

Track 2: Social Development (three of the following)

- SOC 310 Sociology of Sex Roles
- SOC 320 Sociology of the Family
- SOC 322 Sociology of Childhood and Youth
- SOC 331 Sociology of Group Dynamics
- SOC 360 Sociology of Work
- SOC 390 Juvenile Delinquency

C. SOCIOLOGY ELECTIVES (9 cr.)

At least three additional courses in sociology.

Electives21

Physical Education.....2

TOTAL REQUIREMENTS.....123

SPANISH LANGUAGE and LITERATURE (0714)

Offered by the Foreign Language Department
Bachelor of Arts degree granted
(HEGIS 1105)

Dr. Michael Johnson, Chairperson
Bishop Hall 126/878-5414

The program is designed to develop the ability to communicate in Spanish and to introduce students to the masterpieces of the literature of Spanish-speaking countries and the most significant aspects of Hispanic culture. Students are encouraged, but not required, to study in Spain or Latin America for a semester in an approved program.

General Education Requirements.....60

Total required credit hours in Spanish.....36

A. REQUIRED COURSES (15 cr.)

- SPA 301-302 Spanish Conversation and Composition and either
- SPA 306 Civilization of Spain and
- SPA 307-308 Survey of Spanish Literature or
- SPA 309 Civilization of Latin America and
- SPA 310-311 Survey of Spanish American Literature

B. ELECTIVES SELECTED BY ADVISEMENT (21 cr.)
(Courses at 300 level or higher)

Electives25

Physical Education.....2

TOTAL REQUIREMENTS.....123

SPANISH: Secondary Education (0656)

Offered by the Foreign Language Department
Bachelor of Science (Education)
degree granted
(HEGIS 1105) NCATE Accredited

Dr. Michael Johnson, Chairperson
Bishop Hall 126/878-5414

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

General Education Requirements.....60

Total required credit hours in Spanish.....30

A. REQUIRED COURSES (18 cr.)

- SPA 301-302 Spanish Conversation and Composition
- SPA 305 Spanish Phonetics and either
- SPA 306 The Civilization of Spain and
- SPA 307-308 Survey of Spanish Literature or
- SPA 309 The Civilization of Latin America and
- SPA 310-311 Survey of Spanish-American Literature
(Note: all of the above are to be taken before student teaching)

B. ELECTIVES SELECTED BY ADVISEMENT (12 cr.)
(Courses at 300 level or higher)

Total required hours in Professional Education.....27

A. REQUIRED COURSES (12 cr.)

- EDF 303/SED 303 Educational Psychology for Teachers of Adolescents
- EDF 403/SED 403 Historical and Philosophical Forces Influencing Secondary Education
- EDU 416/SED 416 Teaching Reading in Secondary Schools
- FLE 410/SED 410 Methods and Materials for Teaching Foreign Languages in the Secondary Schools

(Continued)

Spanish: Secondary Education
(Continued)

- B. FIELD EXPERIENCE (15 cr.)**
 SST 200/SED 200 Field Experience: Secondary Education and Related Careers
 FLE 413/SED 413 Student Teaching and Professional Seminar*
 *SST/SED 200, EDF/SED 303, EDF/SED 403, EDU/SED 416 and FLE/SED 410 are prerequisites for FLE/SED 413.

Electives	4
Physical Education	2
TOTAL REQUIREMENTS	123

SPEECH LANGUAGE PATHOLOGY and AUDIOLOGY (0322)

Offered by the Speech Language Pathology and Audiology Department
 Bachelor of Science in Education degree granted
 (HEGIS 0815)

Dr. Dolores E. Battle, Chairperson
 Ketchum Hall 208/878-5719

The speech language pathology program is accredited by the Educational Standards Board of the American Speech-Language-Hearing Association. The undergraduate program prepares students for the New York state provisional certificate as teachers of the speech and hearing handicapped, which allows them to be employed by the public schools to provide speech-language services to children from preschool through grade 12 who stutter, are hearing impaired, or have voice, articulation, or language disorders.

The master's degree is necessary for the permanent teaching certificate as well as the license to practice speech language pathology and the Certificate of Clinical Competence (CCC) awarded by the American Speech-Language-Hearing Association. With the New York state license, graduates may be employed in hospitals, clinics, rehabilitation agencies, nursing homes, or may establish their own private practice.

Students must demonstrate proficiency in oral communication prior to enrollment in practicum courses. A minimum of 2.5 grade point average on previous college work is required for admission to the program.

General Education Requirements	60
Total required credit hours in Speech Language Pathology and Audiology	48

EXE 300	Nature and Needs of Exceptional Individuals
SLA 303	Language Acquisition
SLA 304	Anatomy and Physiology of Speech and Hearing Mechanisms
SLA 305	Phonetics
SLA 306	Speech Pathology I
SLA 307	Speech Pathology II
SLA 312	Speech Acoustics and Preception
SLA 325	Clinical Practicum in Communication Disorders
SLA 405	Practicum in Speech and Hearing
SLA 411	Language Diagnosis and Remediation
SLA 414	Introduction to Audiology
SLA 415	Aural Rehabilitation
SLA 416	Stuttering
SLA 424	Organization and Administration of School Speech and Language Programs
SLA 425	Diagnosis of Communication Disorders

Electives Selected by Advisement	7
SLA 429	Clinical Activity (free elective)
PSY 306	Statistics in Psychological Research (GEE)

Total required credit hours in Professional Education	6
EDF 210	Introduction to Human Development
EDF 350	Human Development During Early Childhood
or	
EDF 351	Human Development During Middle Childhood and Pre-Adolescence

Physical Education	2
TOTAL REQUIREMENTS	123

TECHNOLOGY EDUCATION (0500)

Offered by the Technology Department
 Bachelor of Science (Education) degree granted
 (HEGIS 0839) NCATE Accredited

Dr. Charles A. Beasley, Chairperson
 Upton Hall 315/878-6017

Dr. N. John Popovich, Coordinator
 Upton Hall 314/878-3026

The technology education program prepares students to teach technology, 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 systematizing knowledge for the solution of a problem. Graduates are recommended for a provisional certificate to teach technology education (formerly industrial arts) in grades K-12.

General Education Requirements	60
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Total required credit hours in Technology Education	61
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A. TECHNOLOGY CORE COURSES (33 cr.)	
TEC 101	Technical Drawing
TEC 201	Materials Processing
TEC 311	Materials Science and Testing
TEC 312	Production Planning and Control
TEC 314	Electro-Mechanical Systems
TEC 350	Graphic Communications
TEC 351	Energy Systems
TEC 400	Marketing
TEC 401	Management Science
TEC 402	Ergonomics
TEC 405	Manufacturing Technology
B. PROFESSIONAL SEQUENCE (21 cr.)	
TED 110	Introduction to Technology Education.....3
EDF 303	Educational Psychology.....3
TED 360	Technology Education Methods & Evaluation.....3
TED 450	Student Teaching for Technology Education.....12

C. TECHNOLOGY CORE ELECTIVES (7 cr.)	
Physical Education	2
TOTAL REQUIREMENTS	123

THEATER (0115)

Offered by the Performing Arts Department
Bachelor of Arts degree granted
(HEGIS 1506)

Myron H. Nadel, Chairperson
Rockwell Hall 203/878-6401

The theater program introduces students to all aspects of theater art. The theater season includes both faculty-and student-directed productions presented in Upton Auditorium and in other campus and community settings. These productions are attended by members of both the college and the area community. High standards in this program afford a foundation for careers in professional as well as educational theater. Exceptional students may be granted undergraduate assistantships. A 19-credit minor program in theater is also available.

General Education Requirements.....60

Total required credit hours in Theater.....39

A. REQUIRED COURSES (33 cr.)

- THA 100, 101, 102 Play Reading
- THA 106 Introduction to Theater Arts
- THA 200 Voice and Diction
- THA 207 Play Production
- THA 226 Acting I
- THA 315 Period Styles for the Theater
- THA 317 History of Theater-Ancient to Renaissance
- THA 318 History of Theater-Renaissance to Modern
- JBS 320 Oral Interpretation*
- THA 450 Directing
- THA 496 Seminar in Theater Arts

*Alternative coursework in Script Analysis and Dramatic Literature is pending.

B. ELECTIVES SELECTED BY ADVISEMENT (6 cr.)

Electives in theater, dance, and music

Foreign Language Requirement.....0-12

Electives.....10-22

Physical Education.....2

TOTAL REQUIREMENTS.....123

URBAN-REGIONAL ANALYSIS and PLANNING (0738)

Offered by the
Geography and Planning Department
Bachelor of Science degree granted
(HEGIS 0206)

Elbridge A. Renning Jr., Chairperson
Classroom Building A213/878-6216

Planning is a discipline concerned with effective change and development in a positive and beneficial manner. It has many sub-areas, which range from land-use planning to public-service planning. The program at Buffalo State is designed to provide students with a sound, fundamental knowledge of one of the two principle planning areas: urban or community planning. Students majoring in the program are encouraged to develop their own, secondary area of interest in planning.

General Education Requirements.....60

Total required credit hours in Urban-Regional Analysis and Planning.....39

A. REQUIRED COURSES (21 cr.)

Track 1 — Urban-Regional Analysis and Planning

- GEG 305 Principles in Economic Geography
- GEG 309 Introduction to Urban Geography
- GEG 330 Land Resource Analysis and Planning
- PLN 315 Introduction to Community Planning
- PLN 412 Community Planning Agencies and Issues
- PSC 215 Urban Government
- SOC 300 Methods in Social Research

Track 2 — Environmental Planning

- GEG 305 Principles in Economic Geography
- GEG 309 Introduction to Urban Geography
- GEG 330 Land Resource Analysis and Planning
- PLN 315 Introduction to Community Planning
- SOC 300 Methods in Social Research
- BIO 315 Ecology
- GEG/PLN 415 Seminar in Geography/Planning

(Continued)

Urban-Regional Analysis and Planning (Continued)

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

B. ELECTIVES SELECTED BY ADVISEMENT (18 cr.)

Track 1 — Urban-Regional Analysis and Planning

Group A (6 cr.)

- GEG/SST 199 Computer in Social Science
- ECO 305 Statistics for Economics
- GEG 313 Air Photo Interpretation
- GEG 413 Cartography

Group B (6 cr.)

- ECO 412 Urban Economics
- GEG 310 Geography of Transportation
- GEG 405 Advanced Urban Geography
- GEG 409 Geography of Manufacturing
- GEG/ECO 411 Regional and Urban Analysis
- GEG/PLN 415 Seminar

Group C (6 cr.)

- ANT 307 Urban Anthropology
- BIO 115 General Botany
- BIO 116 General Zoology
- BIO 315 Ecology
- DES 264 Environmental Planning and Design
- DES 364 Urban Design
- ECO 202 Principles of Microeconomics
- ECO 355 Economics of Energy and the Environment
- GEG 101 Man's Natural Environment
- GEG 307 Conservation
- PLN 488 Internship (up to 6 cr.)
- PSC 315 State and Local Government Politics
- PSC 360 Public Administration
- PSY 370 Environmental Psychology I

Track 2 — Environmental Planning

Group A (6 cr.)

- GEG/SST 199 Computer in Social Science
- ECO 305 Statistics for Economics
- GEG 313 Air Photo Interpretation
- GEG 413 Cartography

Group B (6 cr.)

- BIO 418 Limnology
- GEG 307 Conservation
- GEG/ECO 411 Regional and Urban Analysis
- GEG/PLN 415 Seminar
- PLN 488 Internship (up to 3 cr.)
- PSY 370 Environmental Psychology I

Group C (6 cr.)

- BIO 403 Economic Biology and Conservation
- BIO 419 Field Experience in Environmental Problems
- CHE 315 Environmental Chemistry
- DES 264 Environmental Planning and Design
- ENS 410 Seminar in Environmental Studies
- GEG 101 Man's Natural Environment
- GEG 307 Geomorphology
- PLN 488 Internship (up to 6 cr.)
- SCI 340 Scientific Studies in Environmental Pollution

Electives.....22

Physical Education.....2

TOTAL REQUIREMENTS.....123

VOCATIONAL TECHNICAL EDUCATION (0800)

Offered by the Technology Department
Bachelor of Science (Education)
degree granted and Certification as a
Vocational Teacher
(HEGIS 0839) NCATE Accredited

Dr. Charles A. Beasley, Chairperson
Upton Hall 315/878-6017

Dr. N. John Popovich, Coordinator
Upton Hall 314/878-3026

The program prepares vocational-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 a specific trade.

Special 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 semester hours of course work in the occupational area; or a work-study arrangement (see EPOT below).

2. High school diploma or equivalent: High school students interested in entering the program prior to completing the required work experience may apply for the EPOT program (Early Preparation of Occupational Teachers). Applicants must be able to locate a position in their trade. They will take courses in the evening leading to a B.S. degree and teacher certification while earning and learning at their trade. The program takes about five years to complete.

3. Admission review.

4. Trade proficiency verified by a practical and theoretical examination.

General Education Requirements60

Total required credit hours in Vocational Technical Education63

A. MAJOR FIELD (30 cr.)

VTE 100 Applied Skill15
VTE 200 Technical Information15

B. PROFESSIONAL REQUIREMENTS (30 cr.)

VTE 300 Introduction to Vocational Technical Education3
VTE 301 Occupational/Content Analysis3
VTE 302 Course Organization3
VTE 306 Shop/Laboratory Design Management3
VTE 307 Use of Instructional Media3
VTE 404 Methods of Teaching Vocational Technical Subjects3
VTE 411 Evaluation of Instruction3
VTE 412 Teaching Clinic3
VTE 413 Practice Teaching and Observation3
VTE 415 Professional Development Seminar3

C. REQUIRED COURSE IN BEHAVIORAL STUDIES (3 cr.)

EDF 303 Educational Psychology3

Physical Education2

TOTAL REQUIREMENTS125

5

COURSE LISTINGS



Course Listings

Course Descriptions

The following section lists and describes each undergraduate course offered for the next two years. Courses are listed alphabetically by prefix. Each description contains important information about the content of the course, when it will be offered, and how it contributes toward satisfying the 60-hour general education requirement.

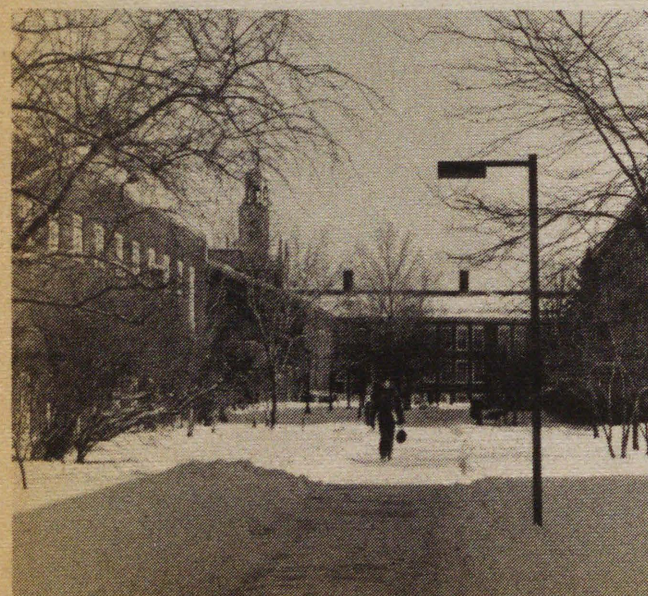
(A complete explanation of the requirement may be found in the Academic Programs section of the catalog under general requirements for B.A. and B.S. degrees.)

GUIDE TO COURSE LISTINGS

Each description lists in order: the prefix, course number, title, number of credit hours given, number of lecture hours the course meets each week, number of studio/lab hours each week, the term and year the course is scheduled to be offered (F for fall and Sp for spring), 60-hour breadth requirement designation, and course prerequisites.

Whether or not a specific course will be scheduled for a given term is contingent on student enrollment, budget support, and adequate staffing. The descriptions are current as of November 1988.

General Education Requirement Designations: If a course will satisfy the applied science/technology core requirement, it will be designated (AST). Courses satisfying the arts core requirement will be designated by the letter (A). Courses satisfying the humanities core requirement are designated (H); mathematics/science core (MS), and social science core (SS). Courses that may be included in the 18-hour general education elective category include all courses approved for core credit plus courses marked (GEE).



Course Numbering: The course number is used to indicate the degree of difficulty of each course. Generally 100- and 200-level courses are lower division (for freshmen and sophomores), while 300- and 400-level courses are upper division and often more advanced. Courses designated 098 or 099 may not be used to fulfill degree requirements.

Here's a sample course listing:

DAN 302 MODERN DANCE TECHNIQUE AND PRESENTATION

3, 1/4; F 89, 90 (A)

Prerequisite: DAN 200 or permission of instructor. Designed to develop and strengthen technical dance skills. Fundamental principles of movement in relation to dynamics, rhythm, and space; development of original movement patterns; elementary dance composition, modern dance history.

Here's what it means:

DAN 302

This is a dance course, number 302.

MODERN DANCE TECHNIQUE AND PRESENTATION

Name of course.

3, 1/4

Number of semester credit hours the course is worth,
Number of lecture hours the class meets per week/
Number of studio/lab hours per week.

F, Sp, S

If an F, Sp, or S is indicated, that means the course is offered only during the fall (F) semester, the spring (Sp) semester, or the summer (S) semester. If a course carries no designation, it is taught each semester of the regular academic year.

89, 90

This course is offered fall (F) semesters during 1989 and 1990. Some courses will show 1989-91, in which case the course is offered both fall and spring semesters during the 1989-90 and 1990-91 academic years.

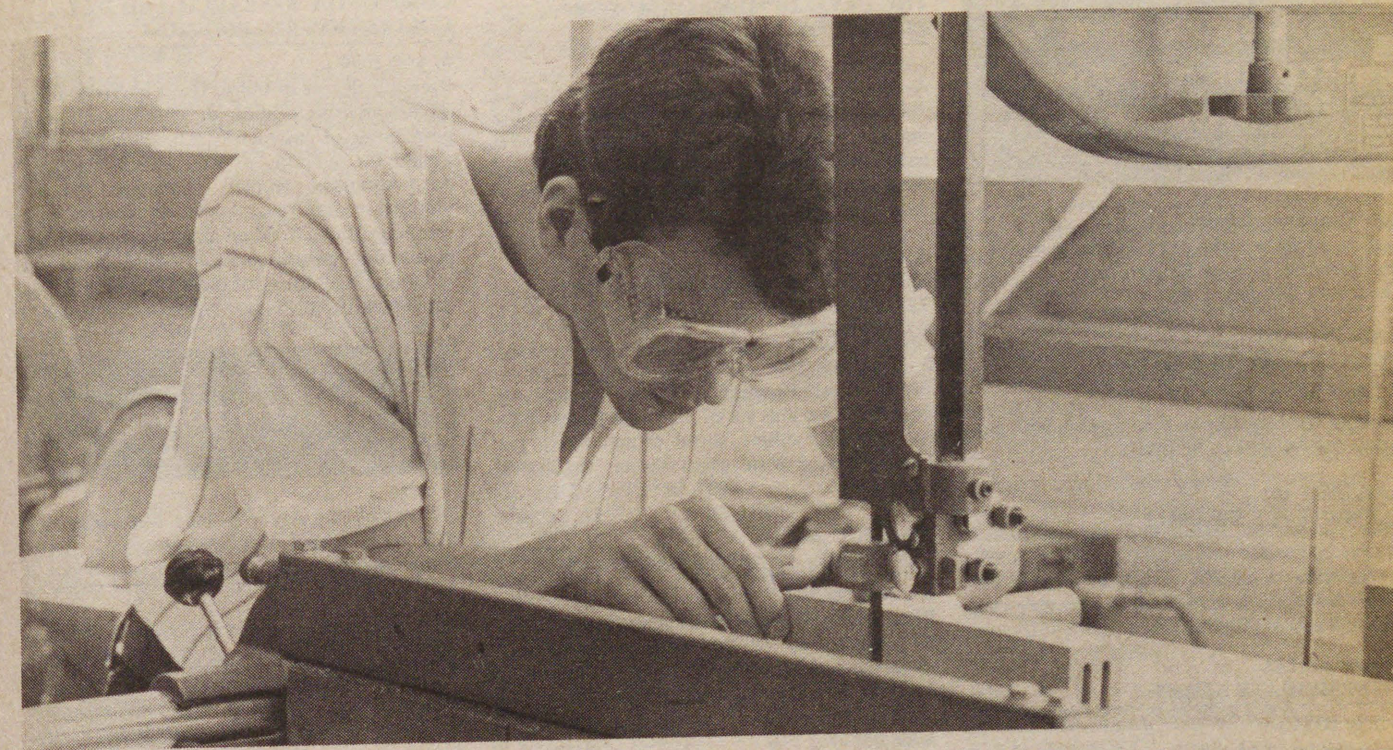
(A)

This class fulfills a requirement for an arts course. See the letter codes under General Education Requirement Designations above.

Prerequisite:

Prerequisites or requirements you must fulfill before registering for a course.

The remainder of the course listing describes what subject matter the course covers.



The following is an explanation of all prefixes:

AAS	African and African-American Studies
ANT	Anthropology
AED	Art Education
AEL	Assessment of Experiential Learning
ATS	Art Therapy Studies
BIO	Biology
BUS	Business
CHE	Chemistry
CFS	Consumer and Family Studies
CRS	Creative Studies
CRJ	Criminal Justice
DAN	Dance
DES	Design
DED	Distributive and Consumer Education
ECO	Economics
EDU	Education
ENT	Engineering Technology
ENG	English
EXE	Exceptional Education
FAR	Fine Arts
FLA	Foreign Language
FLE	Foreign Language Education
FRE	French
SCI	General Science
SEC	General Science Education
GEG	Geography
GES	Geosciences
GER	German
GRK	Greek
HPR	Health, Physical Education, Recreation
HSC	Health Science

HEB	Hebrew
HIS	History
HEE	Home Economics Education
IAE	Industrial Arts Education
INT	Industrial Technology
ISM	Information Systems Management
ITA	Italian
JBS	Journalism, Broadcasting, and Speech
LAT	Latin
LIB	Library Research
MAT	Mathematics
MED	Mathematics Education
MUS	Music
NFS	Nutrition and Food Science
PAR	Performing Arts
PHI	Philosophy
PHY	Physics
PLA	Planning
POL	Polish
PSC	Political Science
REC	Recreation
RUS	Russian
SAF	Safety Studies
SSE/SST	Social Studies Education
SWK	Social Work
SOC	Sociology
SPA	Spanish
SLA	Speech Language Pathology and Audiology
SWA	Swahili
TEC	Technology
THA	Theater Arts
VTE	Vocational Technical Education

African and African-American Studies

Interdisciplinary Minor
See Dr. Monroe Fordham for current minor requirements. History Department, Classroom Building C-205.

AAS/SWA 101 ELEMENTARY SWAHILI

3, 3/0; F 89, 91 (H)
Study of the fundamentals of Swahili with emphasis on the spoken language.

AAS/SWA 102 ELEMENTARY SWAHILI

3, 3/0; Sp 90 (H)
Prerequisite: AAS 101 or permission of instructor. Emphasis on writing and reading as a continuation of AAS 101.

ASA/SWA 201 INTERMEDIATE SWAHILI

3, 3/0; (GEE)
Prerequisite: AAS 102 or permission of instructor. Further development of basic skills with emphasis on reading, writing and casual conversation.

ASA/SWA 202 INTERMEDIATE SWAHILI

3, 3/0; (GEE)
Prerequisite: AAS 201 or permission of instructor. Emphasis on casual and formal speaking in Swahili as well as fast translation.

AAS/SWA 203 INTRODUCTION TO AFRICAN CIVILIZATION

3, 3/0; Sp 90 (GEE)
An exploration of the patterns of the evolution of African societies from earliest time to the present, with particular emphasis on the shaping of Africa's intricate social, political, cultural and religious institutions in the adjustment from the traditional to the modern.

AAS/EDU 221 THE HISTORY OF BLACK EDUCATION IN AMERICA

3, 3/0; Sp 90
An examination of the role of Blacks in the American education system. Relevant information on various changes that have taken place in order to improve or retard education for Blacks. The course will explore approaches for providing meaningful education for Blacks now and in the future.

AAS/EDU 222 THE DEVELOPMENT OF MODERN EDUCATION IN AFRICA

3, 3/0
A phase of study of educational changes in Africa beginning with the colonial era to the present time. One important aspect of the course will be the examination of the effect of these changes on social and political issues in Africa and abroad.

AAS 331 THE RELEVANCE OF SOCIAL THEORIES TO THE BLACK EXPERIENCE

3, 3/0; F 90 (SS)
Prerequisite: Permission of instructor. An analysis of various social theories as they relate to class and ethnic social structures in the United States with emphasis on the Black experience.

AAS/SOC 332 THE BLACK FAMILY IN AMERICA

3, 3/0; Sp 91
Prerequisite: Permission of instructor. An exploratory study of the effects of American social institutions upon black American family life with emphasis on intrafamily relations.

AAS 333 THE AFRO-WEST INDIAN AND SOCIAL CHANGE

3, 3/0
Prerequisite: Permission of instructor. A survey of the principles, concept theories, and studies of social, political, economic, religious, educational, and cultural change in the Afro-West Indian experience. Analysis of reform and revolutionary movements.

AAS 397 TOPICS AND PROBLEMS IN AFRO-AMERICAN STUDIES

3, 3/0; offered based on staff availability
Prerequisite: Junior or senior status with permission of instructor. An intensive investigation of the main themes and problems in the Afro-American experience.

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

3, 4/0
Prerequisite: Permission of instructor. An examination of the Black protest movements and leaders in twentieth century America.

AAS 490 COMMUNITY RESEARCH AND DATA COLLECTION COLLOQUIUM

4, 4/0; F 90
Prerequisite: Six or more credits in African and Afro-American studies, or senior status with permission of instructor. An intensive colloquium on methods of academic research in Afro-American studies, including the investigation and evaluation of sources and resources, the individual evaluation of existing community programs; and critical oral and written presentations of the results of independent research.

Anthropology

Offered by the Anthropology Department
DR. JILL NASH, Chairperson
Classroom Building B-107

ANT 100 HUMAN ORIGINS

3, 3/0; 1989-91 (SS)
An introduction to the fossil and archeological record of humanity. The emergence of the human species and its subsequent development. Exploration of the physical changes which have occurred in the human lineage and changes in our cultural behavior from hunting to farming and an urban life. *Required for all majors. Recommended as a first or second course in anthropology.

ANT 101 INTRODUCTION TO ANTHROPOLOGY

3, 3/0; 1989-91 (SS)
Culture and human behavior; formative of personality; nature of social structure, interaction, and the satisfaction of human needs; cross-cultural comparisons; archeology; linguistics; human evolution. *Required for all anthropology majors. Recommended as a first or second course in anthropology.

ANT 144 INTRODUCTION TO FOLKLORE AND FOLKLIFE

3, 3/0; 1989-91 (SS)
Introduction to the major genres of folklore and folklife and their function in contemporary society. Includes such topics as ethnic and urban folklore, the folksong revival, and the Foxfire movement.

ANT 202 WORLD PREHISTORY

3, 3/0; F 90 (GEE)
The aims and methods of prehistoric research and the interpretation of archeological materials. Major stages in the development of culture illustrated in Old and New World contexts.

ANT 203 HUMAN VARIATION

3, 3/0; F 89 (GEE)
Examination of physical variation in human populations; relationship between variation in human populations; relationship between attributes and cultural patterns; genetic basis of human evolution and variation; ecological distribution of human physical varieties with special emphasis on modern human populations.

ANT 300 INDIANS OF WESTERN NORTH AMERICA

3, 3/0
Origins of American Indians; route of migration of western Indians and affiliations with Asiatic peoples; language families; cultures of Indians of Northwest coast, Mackenzie-Yukon area, Plateau, Great Basin, Plains, California and Southwest.

ANT 301 INDIANS OF EASTERN NORTH AMERICA

3, 3/0; Sp 90 (SS)
Lifeways of Indians of eastern North America; influences from Middle to South America; sub-Arctic and Arctic. Emphasis on cultures of Iroquois and Algonkian-speaking peoples.

ANT 302 PEOPLES OF LATIN AMERICA

3, 3/0
Tribal and peasant peoples of Mexico, Guatemala, Central America, and the Caribbean. Introductory survey of pre-history; main emphasis on post-contact development of distinctive folk cultures; the relationship between these emerging national cultures.

ANT 305 PEOPLES OF AFRICA

3, 3/0; F90 (SS)
Cross-cultural comparisons of selected societies of sub-Saharan Africa, emphasizing economic conditions, migrations, indigenous states, linguistics, social structure, aesthetics, religion, prehistory, and physical types.

ANT 307 URBAN ANTHROPOLOGY

3, 3/0; (GEE) Sp 90, 91
Study of the city as a total social system with special attention to cultural diversity both in terms of backgrounds of foreign countries and of regions within our own country. Students may be requested to carry out organized field research within the city. Recommended for urban studies minors.

ANT 308 ARCHEOLOGICAL METHOD

3, 3/0; S 90 (GEE)
Laboratory and field methods in archeology will be studied. Opportunity for practical experience with various archeological techniques will be provided.

ANT 312 ARCHEOLOGY OF THE NORTH AMERICAN INDIAN

3, 3/0; Sp 90 (GEE)
Special note: ANT 100 is recommended as a prior course. Prehistory of North America beginning with man's earliest presence in North America, including the Paleo-Indian period. Archaic, Woodland and Mississippian in the East, and periods comparable in time in the West. Discussion of possible trans-Pacific and trans-Atlantic influences on the development of American Indian culture.

ANT 315 RESEARCH METHODS IN CULTURAL ANTHROPOLOGY

3, 3/0; Sp 91
Prerequisite: Any anthropology course. A study of research methods in cultural anthropology covering field work, participation, observation, sampling, measurements, documentation, statistical, and cross-cultural methods.

ANT 320 HUMAN GROWTH IN ANTHROPOLOGICAL PERSPECTIVE

3, 3/0; F 90 (GEE)
Prerequisite: A course in the natural or social sciences, or upper-level status, or permission of the instructor. An examination of the physical changes that occur from birth through old age. Child-rearing, adolescence, and the role of the elderly in other cultures. The biological and social factors which influence human growth. Methods used by the anthropologist in assessing growth.

ANT 321 PRIMATE BEHAVIOR

3, 3/0; Sp 91 (GEE)
Prerequisite: A course in the natural or social sciences, or upper-level status, or permission of the instructor. The description and analysis of social behavior among non-human primates, with particular attention to monkeys and apes.

ANT 324 THE HUMAN SKELETON

3, 3/0; Sp 91
Prerequisite: A course in the natural or social sciences, or upper-level status, or permission of the instructor. The study of the skeletal remains of past human societies. The structure and function of the skeleton, age, sex, illness, and injury to the individual. Reconstructing the population, demography, health status, growth patterns, genetic affinities. ANT 324 and ANT/CRJ 325 cannot both be taken for credit.

ANT/CRJ 325 SKELETAL INVESTIGATIONS: FORENSIC ANTHROPOLOGY

3, 3/0; Sp 90
Prerequisite: upper class standing or permission of the instructor. An examination of human skeletal anatomy and the techniques used by forensic anthropologists to identify skeletal remains. Students will work with skeletal material to learn how to determine age, sex, "race," stature, disease, trauma, and other features that aid in personal identification. ANT 324 and ANT/CRJ 325 cannot both be taken for credit.

ANT 326 THE HUMAN FOSSIL RECORD

3, 3/0; F 89 (GEE)
Prerequisite: A course in the natural or social sciences or upper-level status. Human evolution as derived from the fossil record. Examination of major fossil hominid discoveries, their interpretation and place in the development of the human species.

ANT 327 MEDICAL ANTHROPOLOGY

3, 3/0
Prerequisite: Introductory anthropology, or a social science course, or upper-division status. (Note: certain courses in social work, consumer studies, and nutrition are also acceptable. Consult department.) Introduction to medical anthropology and its relevance to contemporary American society. Includes such topics as folk and traditional healing practices, cultural definitions of illness, and modern medical technology.

ANT 330 THE ANTHROPOLOGY OF OCEANIA

3, 3/0; Sp 91 (SS)
Prerequisite: A course in the natural or social sciences, or upper-level status, or permission of instructor. A general introduction to the prehistory, physical anthropology, ethnography, and ethnology of Polynesia, Micronesia, Melanesia, and Australia, focusing on special problems of current interest.

**ANT 340
WOMEN IN AN ANTHROPOLOGICAL
PERSPECTIVE**

3, 3/0; Sp 91 (SS)

Prerequisite: A course in the natural or social sciences, or upper-level status, or permission of the instructor. The study of women's position in human society, with attention given to biological, social, and cultural influences on female status in cross-cultural and evolutionary perspective.

**ANT 360
FOLKLORE OF WOMEN**

3, 3/0; F 90 (GEE)

Prerequisite: ANT 101 or ANT 144 or a course in Women's Studies or a social science, or upper-division status. A survey of women's folklore and folklife; women as traditional performers (seen through expressive behavior such as singing, songwriting and storytelling); material folk culture of women (needlework, crafts, foodways); customary behavior (folk medicine, magic; the domestic religious tradition); folklore of the women's movement. The course will also consider women's contributions to the oral folklore in the formation of sexual stereotypes.

**ANT 362
URBAN FOLKLORE**

3, 3/0; Sp 91 (GEE)

Prerequisite: ANT 101 or ANT 144 or a course in social science or upper-division status. Folklore and folklife in the urban environment; the survival and reshaping of rural and Old World tradition; the function of folklore in the preservation of ethnic identity; craft, industrial and labor traditions, folklife forms (festivals, markets, material culture); contemporary folklore, folklore in the media and popular culture.

**ANT 370
THE ANTHROPOLOGY OF
CONTEMPORARY ISSUES**

3, 3/0; Sp 91 (GEE)

Prerequisite: ANT 101 or consent of instructor. This course provides an anthropological perspective on some of the principal dilemmas of the contemporary world, including technological, demographic, ideological, and cultural problems which provide much of the content of our daily news and have implications for the survival of our species.

**ANT 377
ANCIENT CIVILIZATIONS**

3, 3/0; F 89 (GEE)

Prerequisite: ANT 100 or ANT 101, or upper-level status, or permission of the instructor. An examination of the nature of early civilization as well as possible factors involved in both their rise and fall. Old World civilizations studied will be those in Mesopotamia, Egypt, the Indus Valley, and China. New World civilizations examined will be those in Mesoamerica and Peru. Similarities and differences between all of these civilizations will be considered.

**ANT 380
LANGUAGE AND CULTURE**

3, 3/0; Sp 90, 91 (GEE)

Examination of the concepts of language and culture as symbolic systems and an introduction to phonetics, phonemics, morphemics, syntax, and semantics from a cross-cultural and cross-lingual perspective. An exploration of the relationship between grammatical structure and modes of perception and cognition as related to world views and systems of values, with special emphasis on the Sapir-Whorf hypothesis and the work of Chomsky.

**ANT 381
RELIGION, MYTH, AND MAGIC**

3, 3/0; 1989-91 (SS)

Fetishism (animism), polytheism and monotheism. An in-depth analysis of religion, myth, and magic in prehistoric and primitive societies as well as ancient and contemporary Egypt, Mesopotamia, Asia Minor, North Africa, Iran, India, China, Japan, and the world of Islam. Their bearing on the Judeo-Christian tradition. Recommended for religious studies minors.

**ANT 382
CULTURE AND PERSONALITY**

3, 3/0; F 89, 90 (GEE)

Prerequisite: A course in the natural or social sciences, upper-level status, or permission of the instructor. A cross-cultural study of the role of individual variable genetic potentials and socioculturally variable norms, structures of modal and deviant personalities.

**ANT 389
TOPICS IN ANTHROPOLOGY**

3, 3/0

Prerequisite: A course in the natural or social sciences, or upper-level status, or permission of instructor. Analysis of current areas of research interest in anthropology. Emphasis will be placed on using concepts and methods from the subfields of anthropology to study in specific problem or series of problems. Topics include: aggression and warfare, culture and health, shifting patterns of demography, ecological anthropology.

**ANT 402
CULTURAL ANTHROPOLOGY**

3, 3/0

An intensive comparative approach to the content and process of culture problems in the interpretation of cultural materials; cross-disciplinary approaches; applied anthropology.

**ANT 405
HISTORY OF ANTHROPOLOGICAL**

3, 3/0; F 90

Study of the important contributions to the development of anthropological theory from the preanthropological philosophers such as Locke to the present. Included among the theorists will be Darwin, Tylor, Boas, Kroeber, Rivers, Malinowski, Levi-Strauss, and Sapir. Required of all anthropology majors. ANT 101 is strongly recommended as a prior course.

**ANT 409
SOCIAL STRUCTURE**

3, 3/0

Prerequisite: A course in the natural or social sciences, upper-level status, or permission of the instructor. The comparative study of social structure in different cultures, emphasizing the tribal. Kinship, occupational groups, government, social classes, and clubs will be included.

**ANT 411
AFRICAN SYSTEMS OF KINSHIP AND
MARRIAGE**

3, 3/0; Sp 90

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

**ANT 412
SEMINAR IN ANTHROPOLOGY**

3, 3/0

Anthropology has four areas of research—physical anthropology, archeology, ethnology, and linguistics. This seminar will attempt to examine and criticize literature of one of these four fields. Students may be required to do research. *Required of all anthropology majors.

**ANT 415
SEMINAR IN ARCHEOLOGY**

3, 3/0 F 90

Prerequisite: A course in the natural or social sciences, upper-level status, or permission of the instructor. A survey of the field of archeology, which includes the examination of particular cultures as well as discussion of major methodological and theoretical issues.

Art Education

Offered by the Art Education Department
DR. LAYMAN JONES, JR., Chairperson
Bishop Hall 129

All studio courses in art education require at least two hours per week of outside preparation in addition to the regular class meetings. For those courses in which the use of the studio is necessary for additional work, the instructor will schedule times when it will be open.

**AED 100
ESSENTIALS OF VISUAL ARTS**

3, 2/2; 1989-91 (A)

The development of visual and perceptual awareness through expressive learning processes inherent in the visual arts. Art experience with a variety of media that will accommodate individual interpretations of art concepts which generate the formations, judgments, and deci-

sions of a liberally-educated individual. *Non-art majors only.

**AED 200
FUNDAMENTALS OF ART INQUIRY**

3, 3/0; 1989-91 (A)

A study of functional and common-sense procedures for establishing valid criteria for making judgments about art as it is reflected in all areas of human concern. Instruments of language and logic are examined and tested on how they are useful to the inquiry.

**AED 300
FOUNDATIONS IN ART EDUCATION**

3, 2/2; 1989-91

Prerequisite: Art education major or consent of the department chairperson and completion of Math and English Basic Competency requirements. An introductory course which serves as an entry to the professional program. A review which provides a basic understanding of art education and its relationship to the arts/education careers and society. *Required of all art education majors.

**AED 301
THEORETICAL CONSTRUCTS
IN ART EDUCATION**

3, 2/2; 1989-91

Prerequisite: Art education major, AED 300 and at least one course in psychology or consent of the department chairperson. This course focuses on specific information and theories relevant to the teaching of art. Students will develop preoperational teaching models which are based on examined art and education theories and are formulated to accommodate each student's perceived personal qualities. *Required of all art education majors.

**AED 302
FUNCTIONS AND PRACTICES
IN ART EDUCATION**

3, 2/2; 1989-91

Prerequisite: Art education major, AED 300, 301 and at least one course in sociology/anthropology, or consent of the department chairperson. This course will direct students to identify specific art content and processes which are educationally beneficial. They will then develop skills necessary to design plans, to implement, and to evaluate the teaching of those art concepts. These skills will be gained and tested by practice in mini-teaching and by participation in schools. *Required of all art education majors.

**AED 303
ELEMENTARY STUDENT-TEACHING
IN ART**

6 cr., full time, ½ semester; 1989-91

Prerequisite: Art education major, AED 302, satisfaction of departmental requirements, approval of AED Coordinator of Student Teaching. Supervised teaching at assigned levels from kindergarten through sixth grade, in various types of schools and communities;

seminar discussions on professional problems of the beginning teacher. *Required of all art education majors.

**AED 304
SECONDARY STUDENT-TEACHING
IN ART**

6 cr., full time, ½ semester; 1989-91

Prerequisite: Art education major, AED 302, satisfaction of departmental requirements, approval of AED Coordinator of Student Teaching. Supervised student teaching at assigned levels from seventh grade through senior high school, in various types of schools and communities; conferences devoted to planning and evaluating teaching experiences; seminar discussions on professional problems of the beginning teacher. *Required of all art education majors.

**AED 310
ART MATERIALS EXPLORATION FOR
GROUP ACTIVITIES**

3, 2/2

Prerequisite: One visual-arts studio course for non-art majors; DES 101, 103, FAR 101, 102 for art education majors. Exploratory materials experiences basic to art activities. Class efforts will be directed toward activities-oriented processes and their ultimate use in group art activities which can occur in a variety of agency, institutional, and recreational contexts.

**AED 315
ARTS IN LIVING**

3, 2/2; 1989-91 (A)

Prerequisite: Any one art course. A study of contemporary and historic art forms as they apply to everyday living. An analysis of the individual significance and inter-relatedness of architecture, industrial design, the graphic arts, painting, sculpture, music, and the theater arts. Participation in a variety of creative activities.

**AED 319
ART FOR ELEMENTARY AND
EXCEPTIONAL-EDUCATION
CLASSROOM TEACHERS**

3, 2/2, 1989-91 (GEE)

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

**AED 330
ART EDUCATION ENVIRONMENTS**

3, 2/2

Prerequisite: AED 300 and upper-division standing or permission of instructor. The application of art education theory to the planning, developing, and expanding of art learning environments in schools. A practical course combining on-campus lecture with on-location experience.

**AED 400
STUDENT-TEACHING SEMINAR**

3, biweekly/6; 1989-91

The relationship of art education theories to teaching practices utilized in the contemporary school art program; the identification of crucial issues in art education; problems of beginning art teachers; and the value of current professional literature in the resolution of issues and problems. *Required of all art education majors. To be taken concurrently with or immediately following student teaching.

**AED 488
INTERNSHIP**

1-15

Prerequisite: Upper division standing and/or permission of instructor, 2.5 GPA, and background coursework appropriate to the internship setting. Internship programs provide students with guided and supervised field experiences (experiential learning) as part of their degree programs. An internship shall consist of supervised activities for qualified students in community based agencies or settings in which interns will apply and enhance knowledge gained through formal instruction demonstrating operational skills, as practitioners in prospective specializations.

**AED 495
PROJECT**

Credits, hours vary; 1989-91

Prerequisite: Junior or senior standing. Project undertaken and meeting hours arranged individually with instructor.

**AED 499
INDEPENDENT STUDY**

1989-91

Prerequisite: Sophomore, junior, or senior standing. Minimum 2.0 cumulative average (overall, previous semester, and in study area courses). Studies arranged and meeting hours undertaken individually with instructor.

**ATS 320
INTRODUCTION TO ART THERAPY**

3, 2/2; 1989-91 (A)

Prerequisite: One visual-arts studio course or consent of the instructor. Initial exploration of art as a mode of human expression for children and adults in therapeutic settings such as special education classes, mental health clinics,

development centers, community centers, etc. Volunteer work in human-service agency. *Required of art therapy studies minors.

ATS 325 ARTS AND SPECIAL NEEDS

3, 2/2; F 89, 90 (GEE)
Prerequisite: ATS 320 and one human service course. In-depth exploration of theoretical and practical relationships within art programs which are designed to serve people with exceptional needs in schools and other human-service agency settings. Art activities as a diagnostic agent and as a means for establishing settings which promote individual growth, self-awareness, self-concept development, and self-expression. Supervised field work in special education setting. *Required of art therapy studies minors.

ATS 329 ART AND OLDER ADULTS

3, 2/2; Sp 89, 90 (GEE)
Prerequisite: ATS 320 and SOC 365 or PSY 327. The study of art as activity, education, and therapy with the older adult. Readings, films, presentations, group experiences, and observations of art experience with older adults in settings ranging from community centers and adult education to geriatric institutions. Supervised field work in service to aged setting. *Required of art therapy studies minors.

Biology

Offered by the Biology Department
DR. BONNIE M. SAMPSELL, Chairperson
Science Building 313

BIO 100 PRINCIPLES OF BIOLOGY

3, 3/0; 1989-91 (MS)
A consideration of selected principles of modern biology, with special emphasis on their relevance to major biosocial issues. *Not open to biology majors.

BIO 104 ENVIRONMENTAL BIOLOGY

3, 3/0; 1989-91 (MS)
Principles of ecology for the non-major, applied to major environmental problems. *Not open to biology majors.

BIO 115 GENERAL BOTANY

4, 3/3; 1989-91 (MS)
Morphology, physiology, phylogeny, reproduction, and adaptation of plants.

BIO 116 GENERAL ZOOLOGY

4, 3/3; 1989-91 (MS)
Morphology, physiology, phylogeny, reproduction, and adaptation of animals.

BIO 210 BACTERIOLOGY

3, 2/2; F 89, 90 (GEE)
Prerequisite: BIO 214 or equivalent. Morphology and physiology of bacteria; general applications to household science, sanitation, hygiene, and infectious disease. *Not open to biology majors.

BIO 214 INTRODUCTION TO CELL BIOLOGY

4, 3/3; 1989-91 (GEE)
Prerequisite: One year of college chemistry. Structure of biological macromolecules; organization of eukaryotic and prokaryotic cells, and basic cell processes.

BIO 303 GENETICS

4, 3/3; 1989-91 (GEE)
Prerequisite: BIO 115 and 116. Principles of heredity; inheritance of specific plant, animal and human traits; biochemical aspects of the gene; relationship of genetics to evolution.

BIO 304 LOCAL FLORA

3, 2/3; F 90 (GEE)
Prerequisite: BIO 115. Collection and identification of representatives of regional flora. *Several Saturday field trips may be required.

BIO 305 MOLECULAR BIOLOGY

4, 3/3; Sp 90, 91 (GEE)
Prerequisite: BIO 115, 116 or 214 or CHE 201. Structure, organization, and function of living matter at the molecular level.

BIO 306 ENTOMOLOGY

3, 2/2; F 89 (GEE)
Prerequisite: BIO 116 or equivalent. The morphology, physiology, ecology, and life histories of insects; major emphasis on interrelationships of insects and man. Laboratory includes a survey of the major insect groups.

BIO 310 MICROTECHNIQUE

4, 2/4; Sp 91
Prerequisite: BIO 115, 116 and 214. Preparation of biological materials for microscopic study. Special emphasis is placed on techniques of fixation, sectioning, staining, and mounting. *Successful completion of projects often requires additional time.

BIO 311 HUMAN ANATOMY AND PHYSIOLOGY I

3, 2/2; 1989-91 (MS)
Prerequisite: BIO 100 or 214. Study of basic anatomy and physiology of cells, tissues, and selected organ systems of the human body. Emphasis will be placed on the cardiovascular, respiratory, digestive, urinary, and reproductive systems.

BIO 312 HUMAN ANATOMY AND PHYSIOLOGY II

3, 2/2; 1989-91 (MS)
Prerequisite: BIO 311. Study of the basic anatomy and physiology of selected organ systems of the human body. Emphasis will be placed on the skeletal, muscle, nervous, sensory, and endocrine systems.

BIO 314 ADVANCED CELL BIOLOGY

4, 3/3; F 89, 90
Prerequisite: BIO 115, 116, or 214 and CHE 201. An in-depth examination of the cell. The emphasis in this course reflects the contribution of the molecular approach to the understanding of cell structure and function, in particular, the contribution of recombinant DNA technology.

BIO 315 ECOLOGY

4, 3/3; 1989-91 (GEE)
Prerequisite: BIO 115 and 116; CHE 111-112. Ecosystems, biotic communities, interspecific and intraspecific relationships, biogeochemical cycles, energy flow, limiting factors, population ecology, introduction to analysis of community composition, recognition of plants and animals in selected habitats; effects of mankind in modifying natural environments. *Several half-day or all-day field trips may be required.

BIO 316 MICROBIOLOGY

4, 2/4; Sp 90, 91 (GEE)
Prerequisite: BIO 214. Microorganisms and techniques of observing their morphology growth characteristics and distribution; the relationship of microorganisms to man and his activities.

BIO 320 BIOLOGY OF THE COLD-BLOODED VERTEBRATES

4, 2/4; Sp 90 (GEE)
Prerequisite: BIO 116, or equivalent. Study of the biology of fish, amphibians, and reptiles with emphasis on their anatomy, ecology, and classification.

BIO 322 HEREDITY AND HUMAN AFFAIRS

3, 3/0; F 89, 90 (MS)
Prerequisite: BIO 100 and junior standing. A course in human inheritance and social implications of genetic to modern society. Open to B.S. in Education and non-majors only.

BIO 324 BIOLOGY OF HUMAN REPRODUCTION

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: BIO 100 and junior standing. A course in reproduction for the non-major. Includes the anatomy and physiology of the human reproductive systems, development of the human embryo, and the processes of birth and lactation.

BIO 361 BIOLOGY SEMINAR

1, 1/0; F 89, 90
A series of weekly presentations of invited personnel. Class meetings are open to any interested person, and biology majors are especially urged to attend throughout their college careers.

BIO 362 BIOLOGY SEMINAR

1, 1/0; Sp 90, 91
A series of weekly presentations by invited personnel. Class meetings are open to any interested person, and biology majors are especially urged to attend throughout their college careers.

BIO 403 ECONOMIC BIOLOGY AND CONSERVATION

3, 2/2; F 89
Prerequisite: BIO 100 or 104. Organisms of economic importance to man; basic concepts of modern agriculture; plant and animal diseases; principles of biological conservation including forests, soil, water, and wildlife. *Field trips are required.

BIO 404 PLANT MORPHOLOGY

4, 3/3; Sp 90, 91
Prerequisite: BIO 115. A phylogenetic interpretation of the plant kingdom.

BIO 405 ORGANIC EVOLUTION

3, 3/0; 1989-91
Prerequisite: A course in genetics and ecology. A study of the empirical foundation of evolutionary theory; emphasis will be on 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 the species; more recent trends, such as introgressive hybridization, polyploidy, apomixis, and genetic homeostasis will be developed.

BIO 406 BIOMETRICS

4, 3/3; 1989-91
Prerequisite: College algebra and junior standing. Quantitative aspects of biology, with analysis of biological data and its relationship to experimental design. Fundamentals of probability with applications to biological problems. Statistical decision-making applied to measurement and enumeration data. Linear regression and correlation.

BIO 408 PLANT PHYSIOLOGY

3, 2/3; F 89, 90
Prerequisite: CHE 201. Physiological processes in plants, including photosynthesis; respiration, osmosis, translocation, transpiration, effects of hormones, soil nutrients, and tropisms.

BIO 411 PARASITOLOGY

3, 2/2; Sp 90
Prerequisite: BIO 116 or equivalent. Foundations of parasitology; biology, morphology, and pathogenesis and epidemiology. Emphasis is placed on species of medical or veterinary importance.

BIO 412 EMBRYOLOGY*

4, 3/3; F 89
Prerequisite: BIO 116, 214 and CHE 201. Principles and processes of a chordate embryology, with emphasis on cellular and molecular mechanisms and development. *New title pending College Senate approval.

BIO 413 ORNITHOLOGY

3, 2/2; Sp 91
Prerequisite: BIO 100 or 116. Birds, their structure, functions, origins, and development; their identification and habits. *Field work required.

BIO 417 FIELD MYCOLOGY

3, 2/3; S 91
Prerequisite: BIO 115. Study of identification, morphology, ecology, and economic importance of those fungi most often encountered in natural environmental situations. Emphasis will be placed on the myxomycetes, ascomycetes, and basidiomycetes. *Field work required.

BIO 418 LIMNOLOGY

4, 2/4; F 90
Prerequisite: General Botany, General Zoology, and General Chemistry. Study of the physical, chemical, and biological factors influencing fresh water life. Lectures, demonstrations, and field trips. Not open to sophomores.

BIO 421 INVERTEBRATE STRUCTURE AND FUNCTION

3, 2/2; F 89, Sp 91
Prerequisite: BIO 116. Morphology, physiology, adaptation, ecology, reproduction, and evolution of the invertebrates. Functional approach. *A three-day field trip to the Atlantic shore may be required.

BIO 422 PLANT ANATOMY

4, 3/1; Sp 91
Prerequisite: One semester each of General Botany and Cell Biology. Presentation of a cellular and tissue system analysis of vascular plants. Emphasis will be placed on plant structure with respect to and in relation to physiological function as well as the classical concepts and theories in phytoanatomy.

BIO 450 RECOMBINANT DNA TECHNOLOGY

4, 2/4; Sp 90, 91
Prerequisite: BIO 314, BIO 316, and BIO 305. This course is designed to provide the student with extensive "hands on" experience using the techniques of biotechnology. The techniques involving the construction of recombinant DNA molecules and their analysis will be emphasized.

BIO 495 PROJECT

Prerequisite: Approval of the faculty adviser and department chairperson must be secured prior to registration.

BIO 498 HONORS RESEARCH

3, 0/9; 1989-91
Prerequisite: Acceptance by the Biology Honors Committee and approval of the faculty adviser. The honors biology student will conduct an individual investigation of an original problem. After two semesters of honors research, the student will submit a written paper and present the data orally at a scientific meeting or in a department seminar. Minimum of six semester hours required for Honors certification.

BIO 499 INDEPENDENT STUDY

Prerequisite: Approval of faculty adviser and department chairperson must be secured prior to registration.

Business

Offered by the Business Department
Dr. Benjamin Sackmary, Chairperson
Chase Hall 306

BUS 116 INTRODUCTION TO BUSINESS

3, 3/0; 1989-91 (AST)
An investigation of modern business functions; economic and social aspects, organization and management, operations, marketing functions, management control and decision making, financial risk and management, and career information for a changing business climate.

BUS 117 INTRODUCTION TO RETAILING

3, 3/0; 1989-91 (AST)
Role and function of retailing as a channel of distribution, the relationship and responsibilities to the producer and to the consumer.

BUS 212 ACCOUNTING FOR NON-BUSINESS STUDIES MAJORS

3, 3/0; Sp 90, 91
Prerequisite: None. A simplified approach to the analysis of the accounting cycle and the understanding of double entry bookkeeping. Students analyze business transactions in terms of accounts affected, appropriate categorization, increases and decreases, and applying rules of debits and credits. Using the worksheet device for adjusting accounts, students prepare the income statement and balance sheet of a single proprietorship type of business organization. The hands-on approach, for example, allows students to complete actual payroll documents and complete quarterly reports.

BUS 312 PRINCIPLES OF ACCOUNTING I

3, 3/0; 1989-91
Prerequisite: Bus 116 S Math Competence. Basic accounting principles underlying financial statements.

BUS 313 PRINCIPLES OF ACCOUNTING II

3, 3/0; 1989-91
Prerequisite: BUS 312. This course is a continuation of BUS 312. Topics include accounting and stocks and bonds, preparation of funds statements, elements of cost accounting, and analysis of financial statements.

BUS 320 RETAIL MARKETING

3, 3/0; 1989-91
Prerequisite: BUS 116 or BUS 117. Survey course which provides students with an understanding of concepts, policies, and prac-

tices in the retail marketing of products and services. The course will focus on the decision making process in retail marketing.

BUS 323 SALES METHODS & TECHNIQUES

3, 3/0; F 89, 90, 91 (GEE)
Prerequisite: BUS 116 or 117. An approach to selling with emphasis on the application of sales principles, analysis of consumer characteristics, behavior, and buyer motivation.

BUS 324 BUSINESS COMMUNICATION

3, 3/0; 1989-91
Prerequisite: BUS 116; junior standing, S Eng Competency; permission of instructor. An investigation of business communication as related to interaction in the private and public sector and in the social system; emphasis on routine communication, e.g., business letters and report writing.

BUS 325 PERSONNEL MANAGEMENT

3, 3/0; 1989-91 (GEE)
Prerequisite: BUS 117 or BUS 116. Designed to give an overview of philosophy of personnel management based on behavioral, classical managerial approaches, changes, human relations and operation research.

BUS 326 INTRODUCTION TO MERCHANDISING

3, 3/3; 1989-91
Prerequisite: BUS 117, junior or senior standing. The science of merchandising management together with the trends of merchandising.

BUS 327 ADVERTISING CONCEPTS AND PRACTICES

3, 3/0; 1989-91
Prerequisite: BUS 117. Analysis, solution, coordination of various media and sales materials to promote profit-producing programs with emphasis on the print media. Exploration of, relationship of the behavior sciences to advertising.

BUS 328 ADVANCED ADVERTISING CAMPAIGN MANAGEMENT

3, 3/0; Sp 89, 90, 91
Prerequisite: BUS 327. Principles of communication and advertising in non-print media. Coordination of sales promotion activities and its effect on business, organizations, industries and individuals.

BUS 329 SALES MANAGEMENT

3, 3/0; Sp 89, 90, 91
Prerequisite: Junior or senior standing. BUS 116 or BUS 117. Provides a managerial and pragmatic view of the sales management area. Examines the role of the sales manager as a

manager of people, money, and things, as well as total selling effort. Presents the goals and objectives of selling and management of selling effort in today's world, with emphasis on ultimate consumer.

BUS 334 BUSINESS LAW I

3, 3/0; 1989-91
Prerequisite: BUS 116 or 117. Junior or senior standing. A survey of legal principles applicable to business enterprises and operations. Topics such as the following will be considered: the adversary and judicial systems; business organizations; contracts and sales; commercial paper; secured transactions; property; torts; and appropriate sections of the Uniform Commercial Code.

BUS 335 BUSINESS LAW II

3, 3/0; Sp 89, 90, 91
Prerequisite: BUS 334. An advanced course in business law which examines such topics as: the nature of real and personal property; trusts, wills and estates; creditor's rights and secured transactions; government regulations of business; administrative law; insurance, and evidence. Other selected topics may include taxation of income, arbitration in resolving contract disputes and Rule 10-b-5 of the Securities and Exchange Commission.

BUS 336 VISUAL MERCHANDISING

3, 3/0; 1989-91
Prerequisite: BUS 117, DES 105 recommended. Principles of display through application, experimentation, and evaluation of basic techniques and its importance in selling merchandise. Use of color, harmony, and arrangement. \$10 lab fee required.

BUS 340 SECURITIES

3, 3/0; 1989-91
Prerequisite: BUS 116 or BUS 117; junior standing or permission of instructor. A study of securities and the securities market. An overview of the subject matter with special emphasis on the operations and the securities market, the role it plays in the economy, and its interaction with the macroeconomic system.

BUS 341 COMMODITIES

3, 3/0; Sp 89, 90, 91
Prerequisite: BUS 116 or BUS 117; junior standing or permission of instructor. A study of commodities future trading; special emphasis on terminology, hedging procedures, trading procedures, and price-making influences.

BUS 350 CURRENT PRACTICES IN BUSINESS TECHNOLOGY

3, 3/0; 1989-91
Prerequisite: BUS 116; junior standing. An explanation of the technological innovations in the business world; emphasis on student preparation to cope with computer-based information systems, decision-making processes, and equipment utilization.

BUS 360 PRINCIPLES OF MANAGEMENT

3, 3/0; 1989-91
Prerequisite: BUS 116 or BUS 117. Introduces the student to basic functions of management: strategic and operational planning, organizational structure and behavior, leadership roles and motivation, and effective control systems. Provides a base for application to all management jobs and careers; helps students explore a personal management style.

BUS 378 BUSINESS PROFESSIONAL PRACTICE

3, 3/0; 1989-91
Students in the business major may elect to take up to 12 credit hours of field experience. An introductory, part-time experience would most likely generate three credit hours, whereas a full-time culminating experience could generate as many as 12 credit hours. Credit, training, and evaluation criteria to be arranged by business instructor in charge of field experience.

BUS 379 OFFICE ADMINISTRATION PROFESSIONAL PRACTICE

3, 3/0; 1989-91
Students in the office administration major may elect to take up to 12 credit hours of field experience. An introductory, part-time experience would most likely generate three credit hours, whereas a full-time culminating experience could generate as many as 12 credit hours. Credit, training guidelines, and evaluation criteria to be arranged by business instructor in charge of field experience.

BUS 403 MARKETING II-BUYER BEHAVIOR

3, 3/0; 1989-91
Prerequisite: BUS 116 or BUS 117; Economics is recommended. Junior or senior standing. Familiarization with findings development in human behavior and applications of theory and techniques to marketing problems.

BUS 404 MARKETING RESEARCH

3, 3/0; 1989-91
Prerequisite: BUS 116 or 117; MAT 111 or ECO 305; BUS 320 or INT 400. A study of primary and secondary data as it relates to decision-making in business and government.

BUS 410 MANAGERIAL ACCOUNTING

3, 3/0; Sp 89, 90, 91
Prerequisite: BUS 313, junior standing. Use of accounting concepts and techniques in preparing, presenting, and interpreting the accounting information used by management in planning and controlling the operations of the firm. Introduction to management fundamentals and elementary economic concepts of the firm.

BUS 423 ADMINISTRATIVE OFFICE MANAGEMENT

3, 3/0; 1989-91
Prerequisite: BUS 116; junior standing or permission of instructor. Concentration on the administration of office management systems; emphasis on office location, layout, organization, and personnel assignments. Course designed primarily for people entering middle-and-upper-management positions in business and industry.

BUS 426 CREATIVE OPPORTUNITIES IN MANAGEMENT PRACTICES

3, 3/0; 1989-91
Prerequisite: BUS 360 and BUS 325, junior or senior standing. Involves the student in problems cases, and projects to reinforce the basic functions of management planning, organizing, leading, and controlling. Places the student in the role of an individual manager and team member as the class experiences practical application of the management principles.

BUS 428 ADVANCED MERCHANDISING

3, 3/0; Sp 89, 90, 91
Prerequisite: BUS 326 or permission of instructor. Techniques of merchandising fashion apparel, accessories, housewares, major and minor appliance, and furniture. Major approaches used in planning and analyzing sales and stock records and the use of operating and financial data to make profitable merchandising decisions, as well as market planning.

BUS 430 MARKET MANAGEMENT, SIMULATION AND DECISION-MAKING

3, 3/0; 1989-91
Prerequisite: BUS 116 or BUS 117, junior or senior standing. The purpose of this course is to study the actual methods and techniques commonly employed in management decision making in business and industry. Through use of management simulation programs and actual case studies the student will be given the opportunity to make all major decisions of the operations of a company for 2½ years of simulated business activities. In addition, attention will be given to the role business/labor management relations play in scheduling and continuing business operations.

BUS 440 BUSINESS SENIOR SEMINAR

3, 3/0; Sp 89, 90, 91
Prerequisite: BUS 116 or BUS 117, seniors only. Designed to help business students in the transition to professional employment. Will cover such areas as career paths and employment opportunities, employee benefit packages and policies, Affirmative Action programs, Equal Employment Opportunity, on-the-job considerations and other related subjects.

BUS 490 FIELD EXPERIENCE

Credit to be arranged.
Prerequisite: junior or senior standing. Provides non-business students the opportunity to have experience related to their majors in public or private agencies, business organizations, educational institutions. Registration by permission of the faculty. Obtain necessary forms in CS 306.

Chemistry

Accredited by the American
Chemical Society
Offered by the Chemistry Department
DR. JOSEPH S. ZINGARO, Chairperson
Science Building 313

CHE 100 CHEMISTRY AND SOCIETY

3, 3/0; 1989-91 (MS)
A non-mathematical approach to the study of matter. Presentation of the fundamentals of chemistry followed by such socially-relevant subjects as toxic waste management, environmental pollution, space technology, agricultural chemistry, chemistry of consumer products, food processing, polymers and plastics.

CHE 101 GENERAL CHEMISTRY I

3, 2/3; 1989-91 (MS)
Basic principles of chemistry, including atomic, and molecular structure. Gases, liquids, solids, and solutions. Chemical reactions: acids and bases. *Not open to chemistry majors.

CHE 102 GENERAL CHEMISTRY II

3, 2/3; 1989-91 (MS)
Prerequisite: CHE 101. A continuation of General Chemistry 101; includes chemical equilibria, electrochemistry, metals and non-metals, some fundamentals of organic chemistry, polymers, fibers and plastics, natural products, some fundamentals of biochemistry. *Not open to chemistry majors.

**CHE 111
FUNDAMENTALS OF CHEMISTRY I**

4, 3/3; 1989-91 (MS)
Fundamental principles of chemistry, with illustrative laboratory work of a quantitative nature. *Required of all chemistry and criminalistics majors.

**CHE 112
FUNDAMENTALS OF CHEMISTRY II**

4, 3/3; 1989-91 (MS)
Prerequisite: CHE 111. A continuation of Fundamentals of Chemistry I; to develop the concepts of kinetics, equilibria, and energetics as preparative material for further study in chemistry or science. Laboratory work in semi micro qualitative inorganic analysis and physicochemical experiments. *Required of chemistry and criminalistics majors.

**CHE 201
ORGANIC CHEMISTRY I**

3, 3/0; 1989-91 (GEE)
Prerequisite: CHE 112. Chemistry of carbon compounds. Bonding, stereochemistry, and structure theory. Fundamental reactions of the functional groups considered from the mechanistic viewpoint.

**CHE 201L
ORGANIC CHEMISTRY LABORATORY I**

1, 0/3; 1989-91 (GEE)
Prerequisite: CHE 201 or concurrent registration. An introduction to basic organic laboratory operations. Methods of isolation, purification, and identification of organic compounds. Experiments will be chosen from a variety of possible topics such as synthesis, qualitative organic analysis, and mechanistic studies.

**CHE 202
ORGANIC CHEMISTRY II**

3, 3/0; 1989-91 (GEE)
Prerequisite: CHE 202 (or concurrent registration) and CHE 201L. A continuation of Chemistry 201L.

**CHE 202L
ORGANIC CHEMISTRY
LABORATORY II**

1, 0/3; 1989-91 (GEE)
Prerequisite: CHE 202 (or concurrent registration) and CHE 201L. A continuation of Chemistry 201L.

**CHE 301
ANALYTICAL CHEMISTRY**

4, 2/6; Sp 90, 91 (GEE)
Prerequisite: CHE 112. Theory and laboratory applications of quantitative analysis utilizing gravimetric, volumetric, and physio-chemical methods.

**CHE 305
PHYSICAL CHEMISTRY I**

3, 3/0; F 89, 90 (GEE)
Prerequisite: CHE 202, MAT 263 and PHY 112. A study of the laws governing the behavior of chemical systems (thermodynamics, kinetic theory of gases, and the structure of matter).

**CHE 305L
PHYSICAL CHEMISTRY LABORATORY I**

1, 0/3; F 89, 90 (GEE)
Prerequisite: CHE 202L, CHE 301 (either of the foregoing may be waived for non-majors with permission of instructor) and CHE 305 (or concurrent registration). A laboratory study of fundamental chemical principles.

**CHE 306
PHYSICAL CHEMISTRY II**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: CHE 305. A study of the structure of condensed phases, electrochemistry, quantum chemistry, and reaction kinetics.

**CHE 306L
PHYSICAL CHEMISTRY
LABORATORY II**

1, 0/3; Sp 90, 91 (GEE)
Prerequisite: CHE 305L and CHE 306 (or concurrent registration). A laboratory study of fundamental chemical principles.

**CHE 310
LITERATURE OF CHEMISTRY**

1, 1/0; F 89, 90 (GEE)
Prerequisite: CHE 201 or concurrent registration. Sources of chemical literature. Experience in chemical information searching and retrieval, including examples of computer searching.

**CHE 312
CHEMISTRY AND CRIMINALISTICS**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: CHE 201, 321, 102 or 100 (with permission of instructor). The use of chemistry as an investigative aid in the process of criminal justice. General chemical techniques used in criminal investigations. The function of the criminalist considered from the gathering of evidence to the final presentation of expert testimony.

**CHE 315
ENVIRONMENTAL CHEMISTRY**

3, 3/0; F 89, 90 (GEE)
Prerequisite: CHE 112 or 102 (with permission of instructor). Discussion of air, water, and soil pollution from a chemical point of view. Relevant slides and films; trips to neighboring sites to observe pertinent waste treatment and tours of appropriate scientific laboratories.

**CHE 321
PRINCIPLES OF ORGANIC CHEMISTRY**

4, 3/3; F 89, 90 (GEE)
Prerequisite: CHE 102 or CHE 112. A survey of organic chemistry including a treatment of

the variety of functional groups and their chemical behavior. *Not open to chemistry majors.

**CHE 322
BIOLOGICAL CHEMISTRY**

4, 3/3; Sp 90, 91 (GEE)
Prerequisite: CHE 321 or CHE 202. Discussion of structure and functions of the substances of biochemical interest found in living systems supplemented by illustrative laboratory work. *Not open to chemistry majors.

**CHE 399
INTERNSHIP IN CHEMISTRY**

Up to 6, 40/week; 1989-91
Prerequisite: Approval of the Co-Op Committee must be secured prior to registration. Hands-on experience on an approved research and/or development project of current interest to local chemical industry. The student will be a full-time employee of the industry drawing full pay for the designated period.

**CHE 400
INORGANIC CHEMISTRY**

4, 4; Sp 90, 91
Prerequisite: CHE 305. An introduction to modern inorganic chemistry with special emphasis on periodic variations of structural and bonding patterns among inorganic compounds and on the kinetic and thermodynamic factors which govern the preparation and relative stabilities of inorganic compounds.

**CHE 401
BIOCHEMISTRY**

4, 3/3; F 89, 90
Prerequisite: CHE 305. Study of the structure, function, and metabolism of the classes of compounds found in living systems. Relationship of enzymology to metabolism and the cellular control of metabolism.

**CHE 403
INSTRUMENTAL ANALYSIS**

4, 2/6; F 89, 90
Prerequisite: CHE 301, CHE 305. Chemical analysis and structure determination through study of the theory and operation of instruments involving visible, ultraviolet, infrared, and atomic absorption spectrophotometry; emission spectroscopy, colorimetry; flame photometry; chromatography; nuclear magnetic resonance spectroscopy.

**CHE 410
ADVANCED SYNTHETIC METHODS**

4, 2/6; Sp 90, 91
Prerequisites: CHE 305, 400, or concurrent registration. An introduction to the theory of synthesis and advanced synthetic techniques via the synthesis and characterization of selected inorganic, organic, and organometallic compounds.

**CHE 412
INTERNSHIP IN CRIMINALISTICS**

Up to 3; 1989-91
Prerequisite: CHE 403 and senior standing. Field experience in a forensic laboratory involving routine and research work in forensic chemistry. *Required of all criminalistics majors.

**CHE 430
ORGANIC CHEMISTRY III**

3, 3/0; Sp 89
Prerequisite: CHE 305. A study of advanced topics in theoretical and physical organic chemistry with emphasis on reaction types, mechanisms and structure.

**CHE 495
PROJECT**

Prerequisite: Approval of the faculty project adviser must be secured prior to registration.

**CHE 499
INDEPENDENT STUDY**

Prerequisite: Approval of faculty project adviser must be secured prior to registration.

Consumer and Family Studies

Offered by the Consumer Studies and Home Economics Department
DR. BETTY J. CAPPELLA, Chairperson
Caudell Hall 206

Many of the courses offered in consumer and family studies are required by various programs. Please check the section of the catalog labeled Academic Programs under the headings of either consumer and family studies or home economics education to determine the requirements in your particular area of specialization.

**CFS 101
TRENDS OF CONSUMER STUDIES**

3, 3/0; F 89, 90 (AST)
Each CFS area will be presented and discussed to ascertain how it can aid the individual and society to meet the future with formative and adaptive processes, showing career options available. Speakers and media will also be used to present opposing points of view. *All-college elective.

**CFS 105
DIMENSIONS OF CONSUMER AND FAMILY STUDIES**

3, 3/0; F 89
Critical investigation into the area of consumer and family studies including the historical roots of general home economics and the development of specialized areas within the field. Also

covered are standards and ethics for professionals, career options, opportunities for education, and current issues. Majors only.

**CFS 108
APPAREL DESIGN**

3, 2/1; 1989-91
Application of principles of selective design, fitting and construction techniques using a commercial pattern, including an analysis of textiles and socio-psychological aspects of clothing.

**CFS 110
KNOW YOUR MERCHANDISE**

3, 3/0; offered upon demand
A consumer-product analysis, designed to familiarize students with men's, women's, and children's clothing on the retail market. Fashion apparel, accessories, jewelry, toys, and other consumer products will be investigated.

**CFS 206
INTRODUCTION TO TEXTILES**

3, 3/0; 1989-91 (AST)
An introduction to the consumer selection, use, and care of textile products. This course will be useful for non-majors as well as majors with little or no background in chemistry. Topics include the processes involved in producing textile products, properties of textiles, and the influence of these properties on textile utilization and performance.

**CFS 212
THE FAMILY IN SOCIETY AND CULTURE**

3, 3/0; 1989-91 (GEE)
Study of the family against the background of social and cross-cultural perspectives. Social variation in family organization, community relationships. Credit cannot be received for both CFS 212 and SOC 203.

**CFS 213
FAMILIES IN CRISIS**

3, 3/0; S 90, 91
This course examines troubled families within the family functioning spectrum. Students will gain a knowledge of the family functioning spectrum, the types, sources, and effects of stress, and a basic understanding of the preventative methods used.

**CFS 230
FAMILY HEALTH AND NURSING--
A HOLISTIC APPROACH**

3, 3/0; 1989-91 (GEE)
This course discusses family health through the logical approach of the developmental life cycle. Each stage of the life cycle will be considered holistically, stressing high-level wellness. The holistic approach will consider heredity, psychological, social-cultural, and environmental factors concurrently. Facts and procedures essential in preventing illness as well as maintaining and safeguarding the health of the individual and family will be presented.

**CFS 301
PREPARATION FOR MARRIAGE AND FAMILY**

3, 3/0; 1989-91 (AST)
Prerequisite: Junior or senior standing. This functional course examines and analyzes preparation for marriage and family relationships.

**CFS 302
CONSUMER EQUIPMENT EVALUATION**

3, 2/2; F 89
Materials and processes used in the manufacture of household equipment; problems of selection, use arrangement, and safety for satisfying home living.

**CFS 303/THA 303
FASHION ILLUSTRATION**

3, 3/0; S 89, 90
Prerequisite: DES 105, CFS 108, or THA 311, or permission of instructor. Introduction to fashion drawing; development of drawing skills that will enable students to utilize a variety of media to present the fashion figure with contemporary fashion styles from rough sketch to finished rendering.

**CFS 304
INTRODUCTION TO RESEARCH METHODS**

3, 3/0; S 89
Prerequisite: Beginning course in statistics; junior or senior standing. Introduction to the research process. Steps in conducting research; selecting, limiting, planning a study; testing the hypothesis, writing the research report.

**CFS 306
TEXTILE SCIENCE**

3, 2/2; F 89, 90
Prerequisite: Chemistry 102 or 112 strongly recommended. Study of natural and man-made fibers as they relate to use, care, and consumer satisfaction.

**CFS 307
CLOTHING DESIGN AND CONSTRUCTION**

3, 2/2; S 90, 91
Prerequisite: CFS 108; CFS 306 recommended. Creative use of commercial patterns with experimental implementation of fabrics, methods, and design; combined with a comparative study of ready-to-wear.

**CFS 308
HUMAN DEV/FAMILY REL:
ADOLESCENT YEARS THROUGH
YOUNG ADULTHOOD**

3, 3/0; 1989-91 (AST)
Individual development during adolescence and young adulthood in family context.

**CFS 309
ADULTHOOD**

3, 3/0; Sp 90

Prerequisite: Junior or senior standing. The study of human development during the adult years. Includes a consideration of the physiological and psychological development of the individual from young adulthood through old age; changing roles, conflicts, adjustments, dilemmas, aspirations, potentials, responsibilities, rights, freedoms, as indicated in theory and research.

**CFS 310
CONSUMER ECONOMICS**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: Junior or senior standing, beginning course in economics, or permission of instructor. Study of current consumer problems that arise out of dealing in the market including fraud, product safety, consumer information, evaluation of private and government consumer programs.

**CFS 311/SOC 311
FAMILY VIOLENCE**

3, 3/0; F 90

This course provides a comprehensive overview and critical investigation into the field of Family Violence. Examination covers child abuse, courtship 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 are brought to bear on family violence including the cycle theory of violence, and are integrated within the broader social science perspectives.

**CFS 315
PERSONAL AND FAMILY FINANCE**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: Junior or senior standing. Principles of financial management applied to personal and family situations. Emphasis on planning, spending, saving, and investing consumer income of various socio-economic levels.

**CFS 325
FAMILY RESOURCE MANAGEMENT**

3, 3/0; F 89, 90

Prerequisite: Junior or senior standing. Principles of management applied to the personal living and family situations. Includes decision making and problem solving as part of management. Applications are made to work analysis, use of time, handicapping conditions, and a variety of family situations.

**CFS 327
CLOTHING DESIGN THROUGH FLAT
PATTERN TECHNIQUES**

3, 2/2; F 89, 90

Prerequisite: CFS 306, CFS 307 or permission of instructor. Emphasis on fitting and figure problems; development of master pattern from

personal sloper, designing and creating garments through the use of flat pattern methods.

**CFS 328
CLOTHING DESIGN THROUGH
DRAPING**

3, 2/2; Sp 90, 91

Prerequisites: CFS 108, 306, 327 or permission of instructor. Experience with the manipulation of a two-dimensional fabric to cover three-dimensional forms — both mobile and immobile — using a variety of fabrics to achieve individualized design.

**CFS 331
CONSUMER HOUSING ISSUES**

3, 3/0; 1989-91 (GEE)

Prerequisite: Junior or senior standing. A survey course in housing covering a broad range of topics affecting consumers such as the current housing situation, housing decision-making, the housing market, and the housing activities of governmental agencies.

**CFS 335
CONSUMER AND THE LAW**

3, 3/0; F 89, 90 (GEE)

Prerequisite: Junior or senior standing. An examination of consumer protection as it exists through statutory, administrative, and case law. Discussion of appropriate redress mechanisms for various consumer problems that arise in today's marketplace.

**CFS 336
TEXTILE EVALUATION**

3, 2/2; Sp 90, 91

Prerequisite: CFS 306 or permission of instructor. Fibers, yarns, fabrics, and finishes emphasizing textile testing and utilizing test methods in relation to the consumer and the environment.

**CFS 340
INTRODUCTION TO FASHION
MERCHANDISING**

3, 3/0; 1989-91 (AST)

An introduction to Fashion Merchandising including basic market structure, operational patterns, and occupational roles.

**CFS 345/EDF 345
PARENTING**

3, 3/0 1989-91 (GEE)

This course explores the relevant issues facing parents and the professionals who work with them in today's changing society. It includes both classical and current research with emphasis on practical application and implication as well as a developmental approach to understanding parent-child relationships. Because of the diversity of contemporary families the course helps to prepare students to work more effectively with parents' varied cultural backgrounds, family structures, lifestyles, and at-risk factors.

**CFS 346/EDF 346
TEENAGE SEXUALITY**

3, 3/0; Sp 91 (GEE)

A critical examination of teenage sexuality and factors influencing its emergence; considers how sexuality education can be incorporated in the teaching-learning process at home and in school, and ways to facilitate cooperative efforts by parents and teachers. Offers opportunities to develop skills in communicating with teenagers about their sexuality and strategies whereby teens can deal with sexuality concerns more effectively. Surveys community resources for teens, parents, and teachers; examines special issues and problems.

**CFS 357
CONTEMPORARY FASHION ANALYSIS**

3, 3/0; F 89, 90

Prerequisite: CFS 108, and CFS 306, or permission of instructor. Analysis of fashion cycles and theories, and consideration of societal influences on fashion. Students will examine current fashion trends and become familiar with designers, fashion terminology and selected fashion centers. They will have the opportunity to attend and evaluate designer and/or trunk shows at area fashion retailers.

**CFS 358
FAMILIES AND ENERGY
MANAGEMENT**

3, 3/0; offered upon demand

An examination of energy use by families. Includes the physical, social, economic, political and environmental dimensions of energy use by families, historical roots and residential energy consumption, the effect of government energy policies on families and various energy-conserving life-style alternatives.

**CFS 409
ESSENTIALS OF SEX EDUCATION
PROGRAMS**

3, 3/0; offered upon demand

Course examines philosophies, approaches, content, and materials related to education for sexuality in a variety of settings.

**CFS 410
FUNDAMENTALS OF APPAREL
PRODUCTION**

3, 3/0; Sp 90, 91

Prerequisites: CFS 108, 306 or permission of instructor. Apparel production provides students with an overview of the apparel industry. It includes a study of the structure and organization of the industry as well as the design sources, techniques of pattern development, selection of raw materials, manufacturing processes, costing, quality control, and marketing strategies of the finished product.

**CFS 425
CLOTHING DESIGN THROUGH
TAILORING**

3, 2/2; Sp 90, 91

Prerequisite: CFS 306, CFS 307. Selection, design, fitting, and construction techniques pertaining to traditional and contemporary tailoring.

**CFS 431
FURNISHING THE HOME**

3, 3/0; offered upon demand

Prerequisite: CFS 331 or permission of instructor. Home environment in relation to individual and family needs and values; selection, arrangement, care, and use of home furnishings and decorations.

**CFS 434
PRINCIPLES AND PRACTICES IN
FASHION BUYING AND
MERCHANDISING**

3, 3/0; Sp 90, 91

Prerequisites: CFS 340, BUS 117. Principles and practices in fashion buying provides students with marketing skills specific to fashion buying. Market segmentation, fashion merchandising objectives, and techniques used for buying and controlling fashion inventories will be explored.

**CFS 438
COMMUNITY RESOURCES FOR
CONSUMERS**

3, 3/0; offered upon demand

Prerequisites: CFS 310, CFS 315 and CFS 335 or permission of instructor. A study of the community responses to the consumer needs of individuals and families. Characteristics and functions of services and agencies within the community are explored. Field experience in community agency and consumer action is required.

**CFS 439
PUBLIC POLICY IN THE
CONSUMER INTEREST**

3, 3/0; F 89

Prerequisites: CFS 310, 335 or permission of instructor. A survey of the nature, determinants, and impact of the consumer interest on public policy in the United States. The substantive aspects of consumer policy are analyzed at both the theoretical and the practical levels.

**CFS 440
FAMILY LAW**

3, 3/0; F 90 (GEE)

Prerequisite: Junior or senior standing or permission of instructor. Family Law deals with the various ways in which a family comes into existence, the rights and obligations of the family members, the ways in which marital dissolution takes place, and the consequences of dissolution.

**CFS 447
CLOTHING IN RELATION
TO HUMAN BEHAVIOR**

3, 3/0; F 89, 90 (GEE)

An exploration of the cultural, communicative, sociological, and psychological functions of dress as they relate to human behavior. Topics include the cultural universalities and diversities of dress, the interpretation of the communicative language of clothing, psychological clothing needs of the life cycle, clothing needs of the disabled, and contemporary issues related to dress.

**CFS 448
COSTUME THROUGH THE AGES**

3, 3/0; S 90

Prerequisite: CFS 108 and CFS 306. Survey of fashion from earliest period of time to the present, with concentration on societal influences and recurring fashion trends.

**CFS 449
TEXTILES THROUGH THE AGES**

3, 3/0; Sp 91

Prerequisite: CFS 306 or permission of instructor. Survey of textiles from earliest period of times to the present, with concentration on the technological development of textiles and its influence on today's design and culture.

**CFS 450
APPAREL/TEXTILE/FASHION
INDUSTRY**

3, 3/0; Sp 90, 91

Prerequisites: CFS 306, 357, 447, CFS 448 or 449. Overview of textile/apparel/fashion industry with emphasis on the inherent structural characteristics of the three segments, their interrelationships and current issues.

**CFS 485
SENIOR SEMINAR**

3, 3/0; offered upon demand

Intensive analysis of selected topics in human development and family relations.

**CFS 487
METHODS IN FAMILY STUDIES**

3, 3/0; Sp 90

Prerequisites: CFS 213, SWK 105. An examination of the methods and practices used in family studies. Provides students with opportunities to demonstrate the application of previously learned concepts to significant issues arising from their work in the field.

**CFS 488
INTERNSHIP**

Variable credit, 1989-91

Prerequisite: Upper division standing and permission of instructor. Designed to provide for the integration of theoretical knowledge with practical experience in an institutional, business, social, or governmental agency. Includes supervised field participation, meetings with instructor, and written or other produc-

tion. Students must have at least a 2.5 GPA and a background within the area of interest to be considered for this experience. May be taken for maximum of nine credits with no more than six being in one agency.

**CFS 495
PROJECT**

Credits vary; 1989-91

**CFS 499
INDEPENDENT STUDY**

Credits vary; 1989-91

**Creative
Studies**

Offered by the
Center for Studies in Creativity
DR. SCOTT G. ISAKSEN, Director
Chase Hall 218

**CRS 205
INTRODUCTION TO
CREATIVE STUDIES**

3, 3/0; 1989-91 (GEE)

The purpose of this course is to increase the degree to which students recognize and nurture their creative potential, especially in sensing and meeting problems, challenges and accomplishing goals, in all respects of their academic and personal lives. The focus of the course is an introduction to a problem-solving process which has been developed, researched, and refined since 1955.

**CRS 302
CREATIVE APPROACHES TO PROBLEM
SOLVING**

3, 3/0; 1989-91 (GEE)

Prerequisite: CRS 205. This course will allow students to further study and practice a variety of creative procedures for problem solving, as applied to challenges, goals, and opportunities in their college, personal, and professional lives. The emphasis on this course is on encouraging the student to broaden awareness and effective use of many different methods and techniques for creativity and innovation.

**CRS 303
CREATIVE LEADERSHIP THROUGH
EFFECTIVE FACILITATION**

3, 4/0; F 89, 90 (GEE)

This course is designed to provide students exposure to and practice with leadership and facilitation concepts as they relate to creative problem-solving groups. Students will examine their leadership style and study specific methods and techniques to help in working with groups. Students will apply these concepts and skills to their own leadership roles.

**CRS 304
ADVANCED CREATIVE STUDIES**

3, 4/0; 1989-91 (GEE)
Prerequisite: CRS 303 and CRS 302. This course is designed to provide actual facilitation and leadership practice. This experience challenges the student to use previously learned methods, techniques and leadership concepts while engaged in assisting others in understanding and applying creative problem-solving.

**CRS 305
SEMINAR/SYNECTICS**

1, 1/0; F 89, 90
Prerequisite: CRS 302. Selected topics of current interest related to methods, techniques, procedures, and models in problem solving and creativity, with particular emphasis upon synectics.

**CRS 306
SEMINAR/CREATIVE ANALYSIS**

1, 1/0; Sp 90, 91
Prerequisite: CRS 302. Selected topics of current interest related methods, techniques, procedures and models in problem solving and creativity, with particular emphasis upon creative analysis.

**CRS 320
APPLYING INTERDISCIPLINARY
PRINCIPLES OF CREATIVE BEHAVIOR**

3, 3/0; Sp 90, 91
 This course examines major principles of creativity and their interdisciplinary applications to personal, social, professional, and avocational aspects of living. It explores the nature of creative persons and those factors that encourage or inhibit creative expression. The research in the field is examined for its various implications and applications. Guest leaders from a variety of disciplines examine creativity from their diverse viewpoints. Students participate in the creative process in a variety of ways, including class activities surrounding the course topics. These experiences are used to enable questions and reflection on the act of creation and provide insights into the theories and research findings.

**Criminal
Justice**

Offered by the Criminal Justice Department
 DR. ROBERT D. PURSLEY, Chairperson
 Classroom Building C114

**CRJ 101
INTRODUCTION TO CRIMINAL
JUSTICE SYSTEMS AND
ADMINISTRATION**

3, 3/0; 1989-91 (AST)
 Analysis of the policies and practices of agencies involved in the operation of the criminal

justice process from detection of crime and arrests of suspects through prosecution, adjudication, sentencing, and imprisonment to release and revocation. The patterns of decisions and practices are viewed in the context of the entire criminal justice system, including the relationship of the public, the legislature, court, and agency in policy determination and control.

**CRJ 201
CRIMINAL LAW AND PROCEDURES**

3, 3/0; 1989-91 (AST)
 This course is concerned with the administration of criminal law and criminal procedures. It will consist of an introduction and study of legal principles, doctrines, and selected rules of the criminal law. The area of criminal procedure within the criminal justice system will also be explored, with emphasis on procedural problems and possible reforms.

**CRJ 302
COMMUNITY ISSUES IN CRIMINAL
JUSTICE**

3, 3/0; 1989-91 (AST)
 A discussion of the problems of crime as it confronts the American community and methods by which resolution may occur. This course makes extensive use of community professionals as guest speakers.

**CRJ 315
RESEARCH DESIGN IN CRIMINAL
JUSTICE**

3, 3/0; 1989-91
Prerequisite: Introductory criminal justice course; junior class standing; and ECO 305 or equivalent statistics course. Introduction to various data collection methods and questions of validity and reliability. Practical use of research devices in their criminal justice system is emphasized. The student will be required to develop a research design appropriate for use in the criminal justice field.

**CRJ 316
FIELD STUDIES**

6, 3/8; varies by need
 This course provides for the integration of theoretical knowledge with practical field work gained by working a minimum of one day (8 hours) a week in a criminal justice agency. Weekly seminar also required. (Inservice students must be placed in fields other than that in which they are employed.) *Graded S/U. All-college electives.

**CRJ 317
(PSC 320) U.S. CONSTITUTION AND
CIVIL LIBERTIES IN CRIMINAL
JUSTICE**

3, 3/0; 1989-91 (GEE)
 In-depth study of the 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 will be the focal point of this course.

**CRJ/ANT 325
SKELETAL INVESTIGATIONS:
FORENSIC ANTHROPOLOGY**

3, 3/0; varies by need
Prerequisite: Upper-class standing or permission of the instructor. An examination of human skeletal anatomy and the techniques used by forensic anthropologists to identify skeletal remains. Students will work with skeletal material to learn how to determine age, sex, "race," stature, disease, trauma, and other features that aid in personal identification. ANT 324 and ANT/CRJ 325 cannot both be taken for credit.

**CRJ 401
SEMINAR IN CRIMINAL JUSTICE**

3, 3/0; 1989-91
 Summation and evaluation of concepts, data, and perceptions acquired by students from the experience of the total criminal justice program at the two-year college and at SUCB.

**CRJ 402
ADVANCED ADMINISTRATION IN
CRIMINAL JUSTICE**

3, 3/0; 1989-91
Prerequisite: Introductory course in administration or permission of instructor. Advanced study in administration; analysis of the criminal justice organization internally and in relation to the external variable exercising organizational influence.

**CRJ 406
INTRODUCTION TO CORRECTION
MANAGEMENT**

3, 3/0; F 89, 90
 An overview of the historical foundations of corrections and the development of the principles of contemporary corrections administration. The organization, objectives, and practices of modern probation services, institutions and after-care programs for juveniles and adults are examined and evaluated from the administrators' viewpoint.

**CRJ 408
PROSEMINAR IN CRIMINAL JUSTICE**

3, 3/0; seminar varies by need.
 Investigation, examination, and discussion of topics of current interest in criminal justice, techniques and analysis of criminal justice research. Topics to be announced.

**CRJ 415
DECISION MAKING IN THE POLICE,
JUDICIAL AND CORRECTIONAL
SYSTEMS**

3, 3/0; F 89, 90
Prerequisite: Junior class standing. Analysis of the bases of critical decisions in criminal justice. For example, the decision to arrest, to prosecute, the sentencing decision and those defining the correctional approach. The theoretical base of the course is a decision making model of value and stability performed at the critical juncture points of the system.

**CRJ 418
ANALYSIS OF HOMICIDE**

3, 3/0; Sp 90, 91
Prerequisite: Upper division standing and 12 semester hours of criminal-justice-related courses or permission of instructor. An analysis of criminal-justice response to homicide through studying contemporary multiple homicide in the Buffalo area. Uses all pertinent documents and video-tapes of interrogation and confession. Surveys, theories, models, novel explications, and typologies.

**CRJ 495
PROJECT****CRJ 499
INDEPENDENT STUDY****Dance**

Offered by the Performing Arts Department
 MYRON H. NADEL, Chairperson
 Rockwell Hall 203

The 21-credit dance minor requires DAN 200, DAN 220, DAN 224, DAN 302, DAN 303, DAN 312 and DAN 330.

**DAN 200
BEGINNING MODERN TECHNIQUE I**

3, 1/4; 1989-91 (A)
 Exploration of movement in relation to time, space, energy, and principles of alignment.

**DAN 220
BEGINNING BALLET**

3, 1/4; F 89, 90 (A)
 Designed to give the beginner an intensive introduction to ballet through the exploration of ballet technique, anatomical and aesthetic foundations, and ballet history.

**DAN 224
DANCE APPRECIATION**

3, 3/0; 1989-91 (A)
 An elementary course in the history and philosophy of dance from ancient times until the present. Work in evaluation and criticism of modern dance is included.

**DAN 230
SURVEY OF AFRO-AMERICAN DANCE**

3, 1/4; Depending on availability of faculty.
 Technique, practice, readings, and projects in dance and Black culture. Current practices of Black dance in relation to Euro-American techniques.

**DAN 250
JAZZ DANCE**

3, 1/4; F, 89, 90
Prerequisite: DAN 200 or 220 or equivalent. Technique, studies and compositional problems illustrating the diverse possibilities of jazz dance, special attention to the ethnic foundations of this form.

**DAN 302
MODERN DANCE TECHNIQUE II**

3, 1/4; F 89, 90 (A)
Prerequisite: DAN 200 or permission of instructor. Designed to develop and strengthen technical dance skills. Fundamental principles of movement in relation to dynamics, rhythm, and space; development of original movement patterns; elementary dance composition, modern dance history.

**DAN 303
DANCE COMPOSITION**

3, 1/4; Sp 90 (GEE)
Prerequisite: One semester of modern dance or equivalent and/or permission of instructor. Research in individual and group composition; evaluation of original compositions.

**DAN 310
DANCE FOR THE MUSIC THEATER**

3, 1/4; Sp 90, 91
Prerequisite: DAN 250. A continuation of DAN 250 emphasizing the technique and history of the diverse dance forms required in the music theater.

**DAN 312
MODERN DANCE TECHNIQUE III**

3, 1/4; Sp 90, 91 (GEE)
Prerequisite: DAN 302 or permission of instructor. A continuation of Modern Dance Technique II. Emphasis will be placed on expanding and deepening the individual's technical range and quality of movement and expanding the individual's creative ability through the use of lecture, dance composition, and film.

**DAN 320
REHEARSAL AND PRODUCTION**

1, 0/6; repeatable, 1989-91
 Open to students by audition only. This course offers the student exposure to various dance performance experiences. The student will be given the opportunity to participate in building a finished dance production, including audition, choreographic rehearsals, and technical rehearsals.

**DAN 330
BALLET II**

3, 1/4; Sp 90, 91 (GEE)
Prerequisite: DAN 220 or permission of instructor. Comprehensive examination of the technique and historical background of ballet explored in depth through studio work, lecture, and composition. Emphasis placed upon strengthening the individual's technical range and understanding of basic concepts.

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

1, 0/2; F 89
Prerequisite: DAN 200 or 220 or permission of instructor. The first course in a two-semester sequence for majors and minors in the performing arts with at least two weekly hours of outside practice plus familiarity with selected reading. The student will be able to comprehend and execute an elementary vocabulary of stage tap.

**DAN 401
TEACHING DANCE**

3, 3/0; Sp 91
Prerequisite: DAN 302 and permission of instructor. A comprehensive survey of the methods and materials used in teaching dance to students of various ages and backgrounds, explored through research and practical experience.

**DAN 402
ADVANCED MODERN TECHNIQUE IV**

3, 0/6; F 89, 90
Prerequisite: DAN 312 or permission of instructor. This first semester course of a two-semester sequence for students already at the intermediate or advanced levels of modern dance. Opportunities to study with Buffalo State and guest instructors in various techniques chosen from Limon, Cunningham, Graham, jazz, ballet, and other contemporary approaches.

**DAN 412
ADVANCED MODERN TECHNIQUE V**

3, 0/6; Sp 90, 91
Prerequisite: DAN 402 or permission of instructor. A continuation of DAN 402.

**DAN 450
TAP DANCE FOR THE STAGE:
INTERMEDIATE**

1, 0/2; Sp 90
Prerequisite: DAN 350 or permission of instructor. Advanced vocabulary, styles and solo/duet work emphasized. Some creative work required. The student will be able to comprehend and execute a substantial portion of traditional Broadway requirements.

**DAN 495
PROJECT****DAN 499
INDEPENDENT STUDY**

Design

Offered by the Design Department
RICHARD A. BUTZ, Chairperson
Upton Hall 212

All studio courses in design require at least two hours per week of outside work for each credit, in addition to the regular class meetings. Open studio times are scheduled for this purpose. Note: students are expected to assume the costs of materials they use in their courses.

DES 101 INTRODUCTORY DESIGN 2D I

3, 0/6; 1989-91 (A)
Development of basic skills and concepts in two-dimensional design; logical and intuitive approaches to pure form and natural sources; emphasis on development of individual solutions.

DES 102 INTRODUCTORY DESIGN 2D II

3, 0/6; 1989-91
Prerequisite: DES 101. Continued development of material covered in Design 101, involving in-depth assignments stressing composition and form, idea development, design process, and color dynamics while strengthening skills and control.

DES 103 INTRODUCTORY DESIGN 3D I

3, 0/6; 1989-91 (A)
An exploration of the fundamentals of three-dimensional design, with emphasis on the development of skills related to spatial manipulation via form and structure. The development of manipulative skills in various media.

DES 104 INTRODUCTORY DESIGN 3D II

3, 0/6; 1989-91
Prerequisite: DES 103. The investigation of advanced concepts and manipulation skills related to three-dimensional design. Students are involved in the process of conceptualization, visualization, and evaluation related to design objectives.

DES 105 MECHANICAL AND PERSPECTIVE DRAWING

3, 0/6; 1989-91
Descriptive drawing, including orthographic, isometric, and perspective projection, as an aid in visualizing and planning the construction of three-dimensional art objects.

DES 114 WORKSHOP IN CRAFTS

3, 0/6; 1989-91 (A)
Creative experience in crafts, individual projects. *Non-art majors only.

DES 190 DESIGN SYMPOSIUM

3, 3/0; 1989-91 (A)
A non-technical study for non-majors as it relates to varied fields in our culture. Presentation of brief reviews of design as it functions in architecture, planning and environment, metal, wood, ceramics, textiles, advertising, and industrial design.

DES 215 INTRODUCTION TO THE HISTORY OF DESIGN

3, 3/0; 1989-91 (GEE)
A general introduction to the field of design history and criticism, tracing the evolution of form and meaning from primitive cultures through the contemporary world. Special emphasis given to the Industrial Revolution and modern and post-modern culture.

DES 220 CERAMICS I

3, 0/6; 1989-91 (GEE)
Exploration of clay as a medium of expression. Experiences in methods of forming; preparation and application of glaze; firing theory. Study of form and function.

DES 230 INTRODUCTION TO JEWELRY MAKING

3, 0/6; 1989-91 (GEE)
Basic exploration of materials and processes in jewelry making, emphasizing creative design.

DES 235 DESIGN IN METAL

3, 0/6; 1989-91 (GEE)
Metalsmithing as a medium for expression and object design, utilizing the unique qualities of various metals and working techniques.

DES 240 DESIGN IN FIBERS

3, 0/6; 1989-91 (GEE)
Exploration of traditional and experimental techniques in weaving and related fiber processes, including tapestry, twill pattern weaving, and selected problems in various off-loom techniques.

DES 245 TEXTILE PRINTING

3, 0/6; 1989-91 (GEE)
Advanced study and exploration of textile printing processes, with emphasis on such techniques as silkscreen, batik, and block printing on cloth; aesthetic and practical consideration in design of printed textiles.

DES 250 DESIGN IN WOOD

3, 0/6; 1989-91 (GEE)
Wood as a medium for expression and object design; technical and aesthetic problems.

DES 260 INTRODUCTION TO INTERIOR DESIGN

3, 0/6; 1989-91 (GEE)
Prerequisite: DES 105. A basic studio introduction to the theory and practice of interior design. The course will include specific design projects as well as a survey and critique of historical and contemporary practice.

DES 264 ENVIRONMENTAL PLANNING AND DESIGN

3, 0/6; F 89, 90
Prerequisite: DES 105. A study of how the "built-world" profoundly affects human behavior. A critical examination of our own response to the man-made environment is supplemented by observations of the responses of others. Studio projects use this shared experience to examine ways we can make our environment more "fertile," capable of sustaining and encouraging a world-wide range of human activity.

DES 270 VISUAL COMMUNICATION I

3, 0/6; 1989-91
Prerequisite: DES 101, 102, 103, 104, 105. Foundation course for graphic design. Technical knowledge for the preparation and production of art for visual communication.

DES 271 LETTERING AND TYPOGRAPHY I

3, 0/6; 1989-91
Prerequisite: DES 270. The uses of typographic forms in graphic design. Problems in expression and appropriate application and layout; type specification, indication, copyfitting. Study of the origins of the Western alphabet.

DES 307 ADVANCED DESIGN I

3, 0/6; 1989-91
Prerequisite: DES 101, 102, 103, 104, 105. The continued study of origins, meaning, and dimensions of color. Theoretical two-dimensional and multidimensional problems.

DES 308 FORM AND FUNCTION

3, 0/6; 1989-91
Prerequisite: DES 101, 102, 103, 104, 105. The practical application of two- and three-dimensional design principles toward the analysis, evolution, development, and utilization of forms in a changing environment.

DES 309 PRINCIPLES OF PERSPECTIVE DRAWING

3, 0/6; 1989-91
Prerequisite: DES 105. A continuation of DES 105. Problems in one- and two-point perspective drawing as a means of visualization. The projection of space and volume. The use of perspective as a working design process.

DES 316 DESIGN IN THE NINETEENTH CENTURY

3, 3/0; F 89, 90
Prerequisite: DES 215 or permission of instructor. Theoretical foundations and historical developments of design from the end of the 18th century to World War I. Emphasis on the effects of the Industrial Revolution on graphic design, industrial design, interiors, costume, and crafts.

DES 317 DESIGN IN THE TWENTIETH CENTURY

3, 3/0; Sp 90, 91
Prerequisite: DES 215 or permission of instructor. Examination of the historical and theoretical foundations of design in the 20th century, concentrating on developments in graphic, industrial, and craft design from the 1890s to the present and emphasizing the unique conditions of the present century with respect to new technology and new media.

DES 320 CERAMICS II

3, 0/6; 1989-91
Prerequisite: DES 220. Studio practice in pottery form, glaze, and firing methods, through assigned problems and individual interests. Lectures and laboratory in glaze materials and glaze design.

DES 321 CERAMICS: JUNIOR STUDIO

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91
Prerequisite: DES 320. Advanced study and experience in the total ceramic process through assigned problems and according to individual personal interests.

DES 330 APPLIED JEWELRY TECHNIQUES

3, 0/6; 1989-91
Prerequisite: DES 230. To develop the competence in execution of the basic jewelry techniques. Experiment with and incorporate non-traditional materials in jewelry with stress on the aesthetics of jewelry design.

DES 331 JEWELRY: JUNIOR STUDIO

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91
Prerequisite: DES 330. Advanced exploration of materials and processes used in jewelry making with emphasis on design aspects. Individually selected projects.

DES 336 METALSMITHING II

3, 0/6; 1989-91
Prerequisite: DES 235. Advanced experience in metalsmithing as a continuation of forming techniques introduced in DES 235.

DES 337 METALSMITHING: JUNIOR STUDIO

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91
Prerequisite: DES 336. Practical application of metalsmithing techniques with emphasis on raising, forging, welding, riveting, casting, spinning, and other forming methods; parallel studies of work of leading designers, craftspeople; tutorial relationship with instructor; extra class assignments, including minimum studio hours equal to class hours.

DES 341 FIBER WEAVING: JUNIOR STUDIO

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91
Prerequisite: DES 240. Study and experience in basic technique of floor loom weaving; pattern drafting; expressive and controlled design in woven fabric structures; aesthetic and practical consideration.

DES 346 FIBER-SURFACE DESIGN: JUNIOR STUDIO

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91
Prerequisite: DES 245. Advanced study and exploration of textile printing processes, with emphasis on such techniques as silkscreen, batik, and block printing on cloth; aesthetic and practical considerations in the design of printed textiles.

DES 350 TECHNICAL PROCESSES IN WOOD

3, 0/6; 1989-91
Prerequisite: DES 250. An exploratory course designed to expose students interested in contemporary design to the technical processes being utilized in the field today. Processes to be emphasized will be joinery, laminating, steam-bending, vacuum forming, veneering, and finishing.

DES 351 WOOD DESIGN: JUNIOR STUDIO

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91
Prerequisite: DES 350. The design and creation of a major project in wood, approached from the viewpoint of the designer-craftsperson utilizing a range of techniques, and hand, power, and machine tools, as needed.

DES 360 INTERIOR DESIGN II

3, 0/6; 1989-91
Prerequisite: DES 260. The exploration of skills essential to the interior designer as they relate to residential and small commercial projects.

DES 361 INTERIOR DESIGN III

3-12 (3-6 hrs/sem) 0/6-0/12; F 89, 90
Prerequisite: DES 360. A class for junior majors covering the entire interior design process from space planning to presentation through study and development of actual cases. Involves development of advanced skills and technical concepts.

DES 364 URBAN DESIGN

3, 0/6; Sp 90, 91
Prerequisite: DES 264. A study of the design of the urban environment, focusing on the use and meaning of space and its impact on human behavior. Personal observations are expanded by an examination of the urban scene worldwide. Studio projects concentrate on a single urban setting; stress is placed on both design and the development of professional presentation techniques.

DES 370 VISUAL COMMUNICATION II

3, 0/6; 1989-91
Prerequisite: DES 271. Design problems in visual communication. Emphasis on creative problem solving and appropriate application to promotional and editorial communication.

DES 371 LETTERING AND TYPOGRAPHY II

3, 0/6; 1989-91
Prerequisite: DES 370. A continuation of the exploration of typography as an expressive and functional communication medium. Emphasis on design criteria, theories of interpretation, and personal creativity. Review of current technology.

DES 372 PHOTOMECHANICAL DESIGN

3-6 (3 hrs/sem) 0/6; 1989-91
Prerequisite: DES 101, 102, FAR 220 or IAE 208. Photomechanical processes as design and illustration media. Studio experiences with copy film, color-proofing materials, and photo-stencil silkscreen process.

DES 374 ADVERTISING DESIGN

3-6 (3 hrs/sem) 0/6; 1989-91
Prerequisite: DES 271, 380. Principles of advertising design as visual communication, motivation, and persuasion; problems in advertising and publication design; illustration, media, and techniques; typographic design and reproduction processes.

DES 380 ILLUSTRATION

3-6 (3 hrs/sem) 0/6; 1989-91
Prerequisite: DES 105, FAR 101, DES 270. Application of drawing and rendering skills to client-oriented problems. Emphasis on relationship of style to required content; experimentation with techniques in black-and-white and color.

DES 384**CHILDREN'S BOOK ILLUSTRATION**

3, 0/6; 1989-91

Prerequisite: DES 270, 380, or permission. A survey of illustration in children's literature, including problems devoted to defining, developing, and evaluating an effective relationship between verbal and visual imagery; exploration of media, technique, and style, stressing individual interpretation and development based on the understanding of skill, communication, production, design, and audience.

DES 414**SENIOR SEMINAR/EXHIBITION**

4, 3/2; 1989-91

A series of lectures and discussions concerning topics such as self-presentation concepts; job and professional interviews; business practices, record keeping, and taxes; legal contracts and copyrights; exhibitions and promoting personal work.

DES 419**EXHIBITION TECHNIQUES**

3, 0/6; 1989-91

Basic design theory and communication in the field of exhibits, displays, and signage. Emphasis on structural concepts, lighting, kinetics, function, materials, and visual aesthetics. Additional credit by special arrangement with the instructor.

DES 421**CERAMICS: SENIOR STUDIO**

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91

Prerequisite: DES 321. Emphasis on the development and presentation of the student's personal direction in clay, culminating in a portfolio presentation and a final show.

DES 431**JEWELRY: SENIOR STUDIO**

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91

Prerequisite: DES 331. A concentration of studio work by the senior major in jewelry. The student will plan and execute a series of problems and projects in consultation with his or her instructor.

DES 437**METALSMITHING: SENIOR STUDIO**

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91

Prerequisite: DES 337. Practical application of metalsmithing techniques with emphasis on raising, forging, welding, riveting, casting, spinning, and other forming methods; parallel studies of work of leading designers/craftsperson; tutorial relationship with instructor; extra class assignments, including minimum studio hours equal to class hours.

DES 441**FIBER WEAVING: SENIOR STUDIO**

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91

Prerequisite: DES 240, 245, 341 desirable. Exploration of various fiber techniques on an advanced level, including multiple harness pat-

tern weaving, garment design, dyed warp methods, and various combinations of traditional and experimental techniques according to student interest and need.

DES 446**FIBER-SURFACE DESIGN: SENIOR STUDIO**

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91

Prerequisite: DES 346. A concentration of studio work by the senior major in fiber. The student will plan and execute a series of self-determined problems and projects in consultation with his/her instructor.

DES 451**WOOD DESIGN: SENIOR STUDIO**

3-12 (3-6 hrs/sem) 0/6-0/12; 1989-91

Prerequisite: DES 351. A concentration of studio work by the senior major in wood. The student will plan and execute a series of problems and projects in consultation with his/her instructor.

DES 461**INTERIOR DESIGN IV**

3-12 (3-6 hrs/sem) 0/6-0/12; Sp 90, 91

Prerequisite: DES 361. The senior interior design course in which the student/designer accepts a major project and is responsible for its development. Projects will be either on or off campus and will include significant contact with clients and the development of formal presentations. Also stressed will be the development of a personal portfolio.

DES 473**GRAPHIC DESIGN**

3-9 (3 hrs/sem) 0/6; 1989-91

Prerequisite: DES 371, 380. Advanced problems in advertising, publication, and packaging design. Materials, techniques, and processes used in preparation of visuals, design presentations, and mechanicals. Emphasis on individual solutions to problems typical of those confronting the professional graphic designer.

DES 475**GRAPHIC DESIGN PRACTICUM**

6, 0/20; 1989-91

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 six credit hours, or working on practical problems in a simulated agency situation for ten hours a week for three credit hours. *Admission by permission of graphic design advisers after portfolio review. Portfolio review takes place on the first Tuesday of December for the spring semester and on the first Tuesday of May for summer and fall.

DES 495**PROJECT****DES 488****INTERNSHIP****DES 499****INDEPENDENT STUDY**

Distributive and Business Education

Offered by the Business Department
DR. BENJAMIN SACKMARY, Chairperson
Chase Hall 3016

DED 300**PRINCIPLES OF BUSINESS AND DISTRIBUTIVE EDUCATION**

3, 3/0; 1989-91

Role of public relations, funding, history, philosophy, and business and distributive education program organization and operation in the secondary school. *Required of distributive education and business education majors.

DED 401**CURRICULUM & EVALUATION IN BUSINESS EDUCATION & DISTRIBUTIVE EDUCATION**

3, 3/0; 1989-91

Prerequisite: DED 300; junior standing or permission of instructor. The development of school strategies and materials for teaching of business education and distributive education subjects at the secondary level. Emphasis on designing modules of instruction, student evaluation in a business setting, and establishing student performance norms. *Required of business education and distributive education majors.

DED 410**METHODS OF TEACHING BUSINESS SKILLS SUBJECTS**

3, 3/0; F 89, 90, 91

Prerequisites: Business Education major, junior or senior standing. Methods of teaching business skills subjects concentrates on the process of teaching others certain office-related skills. *Required of business education majors.

BUS 411**METHODS OF TEACHING BUSINESS AND DISTRIBUTIVE EDUCATION**

3, 3/0; Sp 89, 90, 91

Prerequisite: DED 300. Basic principles and methods of teaching business and distributive education subjects. Prepares the student to effectively teach subjects in this area. *Required of distributive education majors.

DED 414**ADMINISTRATION AND SUPERVISION OF YOUTH ORGANIZATIONS IN BUSINESS EDUCATION AND DISTRIBUTIVE EDUCATION**

3, 3/0; F 89, 90, 91

Prerequisite: DED 300, Principles of Business Education. Provides potential business and distributive education teachers with those competencies needed to effectively perform the duties of Future Business Leaders of America or Distributive Education Clubs of America chapter adviser. The basic principles and concepts would be applicable to other advisers of youth organizations.

DED 415**STUDENT TEACHING**

12, 0/24; 1989-91

Prerequisite: DED 300, 401, 410/411, Successful completion of basic English and Mathematics college competency requirements, senior standing. Full-time teaching in a public school for one semester under the supervision of a master teacher and a college supervisor; daily and long-range planning, unit teaching; classroom management; individual and group instruction; participation in total school program; weekly on-campus seminar as assigned. *Required of business education and distributive education majors.

Earth Sciences (formerly Geosciences)

Offered by the Earth Sciences and Science Education Department
DR. ROBERT E. HORVAT, Chairperson
Science Building 271

All courses in earth sciences may include occasional field trips. Expenses for these trips are shared by the participants.

GES 101**INTRODUCTORY GEOLOGY**

3, 3/0; 1989-91 (MS)

An introduction to physical geology; the earth and the process operating on and within it; the formation of rocks and minerals, volcanoes, earthquakes, mountain building, continental drift, plate tectonics, glaciers, and the ice ages. Students obtaining credit for GES 101 may not obtain credit for GES 122. Concurrent registration in GES 103 is recommended for geology and geoscience majors. *Required for all majors.

GES 102**HISTORICAL GEOLOGY**

3, 3/0; 1989-91 (MS)

An introduction to the history of the earth from its formation 4½ billion years ago, and the role of continental drift, seafloor

spreading, and plate tectonics in its development. The evolution of life as shown in the fossil record. *Required for all majors.

GES 103**INTRODUCTORY GEOLOGY LABORATORY**

1, 0/2; 1989-91

Prerequisite: GES 101 or GES 122 (may be concurrent). Identification of rocks and minerals, map and aerial photograph interpretation. *Required for all majors.

GES 111**GENERAL OCEANOGRAPHY**

3, 3/0; 1989-91 (MS)

An introduction to the science of the sea; the relationship of oceans to our civilization. *Required for geoscience majors.

GES 122**PRINCIPLES OF EARTH SCIENCE**

3, 3/0; (MS)

Topics from geology, selected for relevance to concepts and processes fundamental to earth science. Students obtaining credit for GES 122 may not obtain credit for GES 101.

GES 131**INTRODUCTORY ASTRONOMY**

3, 3/0; 1989-91 (MS)

A non-mathematical survey of the universe. The sun, planets, moons, and comets comprising our solar system. Also an investigation of stars, galaxies, and finally the universe. *Required for geoscience majors.

GES 223**ENVIRONMENTAL EARTH SCIENCE**

3, 3/0 (MS)

Study of the interrelation of earth and human systems. Energy resources, non-renewable earth materials, earthquake prediction and control, volcanoes, land movements, man's effect on weather and climate. *Included in environmental sciences minor.

GES 241**METEOROLOGY**

3, 3/0; F 90 (MS)

An introduction to weather, including prediction, meteorological instruments, atmospheric movements, humidity and precipitation, high and low pressure areas, air masses and fronts, heat balance, and climate past and present. *Required for geoscience majors.

GES 301**STRATIGRAPHY**

3, 3/0; F 89, 90

Prerequisite: GES 101 or GES 122; GES 102 (may be concurrent). Basic principles governing the interpretation, correlation, and nomenclature of stratified rock units. *Required for geology majors.

GES 302**INVERTEBRATE PALEONTOLOGY**

3, 2/2; Sp 90, 91

Prerequisite: GES 102, BIO 116 and one additional semester of biology. Invertebrate fossils and their stratigraphic distribution. *Required for all majors.

GES 304**THE COMMON ROCKS AND MINERALS**

3, 2/2; F 89, 90 (GEE)

Prerequisite: GES 101 or GES 122; CHE 112 or CHE 102 (may be concurrent). The common rocks and minerals, emphasizing how they are identified, where they occur, and how they form. *Required for all majors.

GES 305**OPTICAL MINERALOGY**

3, 2/2

Prerequisite: GES 304. The use of the petrographic microscope and the identification of minerals in crushed grains and thin section.

GES 307**GEOMORPHOLOGY**

3, 3/0; Sp 90, 91

Prerequisite: GES 101 or GES 122 or GEG 101. Description and analysis of landscapes with emphasis on the processes which lead to landform development; includes an introduction to quantitative studies. *Required for geoscience majors.

GES 308**STRUCTURAL GEOLOGY**

3, 2/2; F 89, 90

Prerequisite: GES 101 or 122; GES 103. Analysis of folds, faults, and other structural features in sedimentary and metamorphic terrains; introduction to rock mechanics, regional tectonics. *Required for geology majors.

GES 314**GEOLOGICAL OCEANOGRAPHY**

3, 2/2; F 90 (GEE)

Prerequisite: GES 111. A descriptive and analytical approach to the sedimentation, stratigraphy, and structure of the ocean basins.

GES 331**MODERN SOLAR SYSTEM ASTRONOMY**

3, 3/0 (GEE)

Prerequisite: GES 131 or equivalent. The moon and the planets, their appearance, atmospheres, and surfaces, planetary magnetic fields, asteroids, meteoroids, comets, theories of the origin of the planetary system, the possibility of life elsewhere in the solar system. Emphasis on recent NASA research and current problems in our understanding of the solar system.

**GES 332
STELLAR AND GALACTIC
ASTRONOMY**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: GES 131 or equivalent. How astronomers have determined the properties of stars, the energy of stars, the masses and composition of stars, stellar evolution, the structure of the galaxy, the movement of stars in the galaxy.

**GES 335
METHODS OF OBSERVATIONAL
ASTRONOMY**

3, 3/0; (GEE)

Prerequisite: GES 131. Locating celestial objects in the night sky; use of astronomical telescopes to locate, observe, and photograph stars, nebulae, and galaxies; using the sextant for navigation.

**GES 337/SCI 337
ASTRONOMY AND THE
ASTRONOMERS TO 1650**

3, 3/0; F 89, 90 (GEE)

Prerequisite: GES 131 or equivalent. The saga of man's developing understanding of his universe, from prehistoric efforts to predict celestial events, to the heliocentric revolution sparked by Copernicus and supported by Galileo.

**GES 338/SCI 338
ASTRONOMY AND THE ASTRONOMERS,
FROM 1650 TO THE PRESENT**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: GES 131 or equivalent. An examination of the men and women, the ideas and the forces which brought us from the heliocentric mechanical universe of Copernicus and Newton to an immense expanding universe of galaxies, quasars, and black holes.

**GES 339
ASTRONOMY AND COSMOLOGY**

3, 3/0; F 89, 90 (GEE)

Prerequisite: GES 131 or equivalent. Cosmology, the primeval fireball, quasars, pulsars, black holes, origin of the elements.

**GES 401
IGNEOUS AND METAMORPHIC
PETROLOGY**

3, 2/2; Sp 90, 91

Prerequisite: GES 304 and CHE 112 or permission of instructor. Description, origin, and classification of igneous and metamorphic rocks. *Required for geology majors.

**GES 403
GLACIAL GEOLOGY**

3, 3/0; F 89, 90

Prerequisite: GES 307. Glacial landscapes, the behavior of ice, and the sequence of Pleistocene events. Includes theories on causes of Ice Ages. Emphasis on glacial history of the New York State Great Lakes Region.

**GES 404
FIELD GEOLOGY**

3, 2/2; Sp 90, 91

Prerequisite: GES 101 or GES 122. Application of geological principles and techniques in the interpretation of earth features in the field.

**GES 405
GEOLOGY OF NORTH AMERICA**

3, 3/0; Sp 90

Prerequisite: GES 101 or GES 122; GES 102. Major physical provinces of the United States and adjacent areas; their geological history structure, and topographic development.

**GES 407
INTRODUCTION TO PETROLEUM
GEOLOGY**

3, 3/0; Sp 91

Prerequisite: GES 301 or permission of instructor. Basic investigation of geologic processes concerning the origin, migration, and accumulation of oil and natural gas; techniques of the petroleum geologist; extent and distribution of petroleum reserves.

**GES 409
FLUVIAL GEOMORPHOLOGY**

3, 2/2; F 90

Prerequisite: GES 307. Variables which influence the behavior of water flowing on the surface of the earth, the effects of flowing water on the landscape; emphasis on field and lab work.

**GES 410
PETROLOGY LABORATORY**

1, 0/2

Prerequisite: GES 305; GES 401 (may be concurrent). The description, classification, and determination of rocks and their textures by means of the petrographic microscope.

**GES 415
GEOLOGY FIELD CAMP**

6, 0/35

Fee: Group transportation and meals are arranged. Costs paid by the students.

Prerequisite: GES 404 or permission of instructor. Field mapping and field study of sedimentary rocks such as in Cody, Wyoming, and Lovell, Wyoming; igneous and metamorphic rocks such as in the Beartooth Mountains, Wyoming and Montana; Yellowstone National Park; and Craters of the Moon National Monument, Idaho.

**GES 421
DYNAMICS OF SEDIMENTATION**

3, 2/2; Sp 90, 91

Prerequisite: GES 101 or 122; junior standing or permission of instructor. An introduction to the dynamics of erosion, transportation and deposition of sedimentary particles including formation of bedforms and sedimentary structures. Present-day sedimentary environments and facies analysis.

**GES 422
SEDIMENTARY PETROLOGY**

3, 2/2

Prerequisite: GES 421; GES 305 or instructor permission. Interpretation of ancient depositional environments, from the petrologic study of sedimentary rocks. Descriptive and predictive sedimentological models.

**GES 431
PLANETARIUM SEMINAR**

3, 2/2; F 90

Prerequisite: Two semesters of astronomy. Star identification and operation of the planetarium instrument. Developing and presenting planetarium programs for school children and/or the general public.

**GES 488
GEOLOGY INTERNSHIP**

1-15, 0/2-30; 1989-91

Prerequisite: Senior standing as department major, a minimum 3.0 GPA in major, and 2.5 GPA overall. Requires department application and approval. Practical work on an individual basis with a participating organization.

**GES 495
PROJECT**

1-3, 0/2-6; 1989-91

Prerequisite: Approval of a faculty sponsor must be secured prior to registration. Environmental, energy, geology, or astronomy-related areas.

**GES 498
HONORS RESEARCH**

3-6, 0/6; 1989-91

Prerequisite: Acceptance in Geology or Geoscience Honors Program. Includes completion of an honor's thesis and seminar. May be repeated for a maximum of six credits.

**GES 499
INDEPENDENT STUDY**

3-6, 0/6-12; 1989-91

Prerequisite: Approval of a faculty sponsor must be secured prior to registration. Environmental, energy, geology or astronomy-related areas.

Economics

Offered by the Economics Department
DR. ALEX J. RATKOWSKI, Chairperson
New Classroom B207

**ECO 101
THE ECONOMIC SYSTEM**

3, 3/0; (SS)

An overview course which presents fundamen-

tal economic concepts, basic economic institutions, and contemporary economic issues. Topics include supply and demand, markets, gross national product (GNP), inflation and recession, and the role of government. In addition, economic issues such as energy, environment, education, and health care will be included when appropriate. Will not count toward the credit hour requirement of majors. May not be taken concurrently with or subsequent to ECO 201 or 202.

**ECO 103
ECONOMIC HISTORY
OF THE UNITED STATES**

3, 3/0; F 89, 90 (SS)

Development of the U.S. economy, the role of government in the economy, and organized labor from the colonial era to the present.

**ECO 201
PRINCIPLES OF MACROECONOMICS**

3, 3/0; (SS)

A study of the major forces in the economic system—consumer expenditures, business investment, and government spending—to determine their influence on the level of national income. Includes a discussion of money and banking, monetary and fiscal policies, inflation and recession, economic growth, and international monetary problems. *Required for majors. Either ECO 201 or 202 may be taken first.

**ECO 202
PRINCIPLES OF MICROECONOMICS**

3, 3/0; (SS)

A study of the individual economic units in the economy—consumer, firms, and resource owners—to determine how their decisions influence market prices and industrial output. Includes a discussion of supply and demand, competition and monopoly, corporations, and capitalism and socialism, labor and international trade. *Required for majors. Either ECO 201 or 202 may be taken first.

**ECO 301
ECONOMICS OF LABOR RELATIONS**

3, 3/0; (SS)

Prerequisite: Upperclass standing. A study of present-day techniques in labor management negotiations; the collective bargaining agreement; the development and structure of organized labor; labor law, and labor economics.

**ECO 302
WOMEN IN THE ECONOMY**

3, 3/0; Sp 90, 91

An examination of women's position in the U.S. economy, how it has changed, how it compares to men's position and to women's position in other countries. A study of the theoretical and empirical issues in analyzing women's economic status.

**ECO 304
MONEY AND BANKING**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: ECO 201 or consent of instructor. 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 the level of prices and employment.

**ECO 305
STATISTICS FOR ECONOMICS**

3, 3/0; (GEE)

Introduction to elementary statistical principles, descriptive statistics and statistical inference; applications in economics, business, and criminal justice. *Required for majors. (Majors may substitute MATH 111, but may not receive credit for both Math 111 and Eco 305.)

**ECO 307
INTERMEDIATE MICROECONOMICS**

3, 3/0; (GEE)

Prerequisite: ECO 202 and MAT 124 or equivalent. An advanced study of the individual economic units in the economy to determine how their decisions influence market prices and industry output. Topics include the theory of consumer demand, the theory of the firm, resource allocation, income distribution, and welfare economics. *Required for majors.

**ECO 308
INTERMEDIATE MACROECONOMICS**

3, 3/0; (GEE)

Prerequisite: ECO 201 and MAT 124 or equivalent. An advanced study of aggregate economic activity to determine its influence on the level of national income. Topics include classical and Keynesian theory, monetary and fiscal policies, business cycles, forecasting, and economic growth. *Required for majors.

**ECO 314
CORPORATION FINANCE**

3, 3/0; F 89, 90 (GEE)

Prerequisite: ECO 101 or ECO 201 plus some background in accounting is recommended. Introduction to corporate financial management, and the U.S. capital markets, including the stock market.

**ECO 317
ECONOMIC POLICY: GOVERNMENT
AND BUSINESS**

3, 3/0; F 89 (GEE)

Prerequisite: ECO 202 or ECO 101 and consent of instructor. An examination of government efforts to improve the economic performance of industries in the U.S. economic system. Topics include antitrust policy, regulation of utilities, conglomerates, and multinational corporations.

**ECO 320
MANAGERIAL ECONOMICS**

3, 3/0; F 89, 90 (GEE)

Prerequisite: ECO 305, MAT 124 or equivalent is recommended. The utilization of economic analysis to formulate and provide guides to the solution of management decision and control problems and the development of appropriate business policies.

**ECO 340
FEDERAL INCOME TAXATION**

3, 3/0; Sp 90, 91

Prerequisite: Upperclass standing or consent of instructor. An examination of the tax principles and policies, drawn from public finance theory, that have shaped the federal income tax system. In addition, students will learn how to prepare individual income tax returns in conformity with the IRS codes.

**ECO 350
PUBLIC FINANCE**

3, 3/0; F 89

Prerequisite: ECO 202 or consent of instructor. Analysis of the nature and growth of public expenditures; principles of taxation; federal, state and local revenue; introduction to fiscal policy and theory; significance of public debt; selected problems in intergovernmental fiscal relations.

**ECO 355
THE ECONOMICS OF ENERGY AND
THE ENVIRONMENT**

3, 3/0; (GEE)

Offered based on staff availability.
Prerequisite: ECO 202 or consent of instructor. An examination of the micro and macroeconomic interrelationships between the flow of economic activity and the constraints on the flow of economic activity imposed by the availability of energy resources and by environmental considerations. Alternative policy strategies relating to energy and the environment will be evaluated in terms of their economic impact.

**ECO 360
INTRODUCTION TO THE ECONOMIC
ANALYSIS OF LAW**

3, 3/0; F 90

Prerequisite: ECO 202 or permission of instructor. An introductory approach to the study of law from an economic perspective. No prior knowledge of law is necessary and all the economic concepts needed will be presented. The objective is to use economic concepts and reasoning to explain and predict the consequences of legal rules. For this purpose, important issues found in court cases involving, for example, contracts, property law, liability, and environmental law will be used.

**ECO 401
INTERNATIONAL ECONOMICS**

3, 3/0; Sp 90, 91

Prerequisite: ECO 201 and ECO 202 or consent of instructor. Basic theories of international trade; the international monetary mechanism and the institutions which facilitate its operation; foreign economic policy and contemporary problems relating to tariffs, payments balances, devaluation, and gold as a means of setting international payments in balances.

**ECO 402
SEMINAR IN CURRENT ECONOMIC PROBLEMS**

3, 3/0

Offered based on staff availability.

Prerequisite: ECO 307 and ECO 308. Readings, discussion and research on current economic problems. Topics to be selected by the seminar.

**ECO 403
COMPARATIVE ECONOMIC SYSTEMS**

3, 3/0; Sp 91

Prerequisite: ECO 201 and ECO 202 or consent of instructor. Essential characteristics of the market economy as it has evolved to the present time; increasing social control; its strengths and weaknesses; the contrast with the socialist system as it operates in the Soviet Union today; strengths and weaknesses of Soviet socialism.

**ECO 405
HISTORY OF ECONOMIC THOUGHT**

3, 3/0; F 89, 90

Prerequisite: ECO 201 and ECO 202 or consent of instructor. A study of the attempts of key economic thinkers from Aristotle until the present time to analyze economic phenomena and to provide guidance for economic policy.

**ECO 409 (GEG 409)
GEOGRAPHY OF MANUFACTURING**

See description listed under GEG 409.

**ECO 411 (GEG 411)
REGIONAL ECONOMIC ANALYSIS**

3, 3/0; S 90, 91

Prerequisite: ECO 201 and ECO 202 or consent of instructor. Analysis of location of economic activity, urbanization patterns, and regional growth and development. Techniques in measuring the level of economic activity of a region will be discussed. Particular emphasis will be given to the Western New York area and the impact of the Buffalo urban area on development of the surrounding region.

**ECO 412
URBAN ECONOMICS**

3, 3/0; F 89, 90

Prerequisite: ECO 201 or ECO 202 or consent of instructor. An application of economic analysis to urban growth, land use, poverty,

housing, segregation, pollution, congestion, and urban public finance.

**ECO 414
INVESTMENT MANAGEMENT**

3, 3/0; F 89, 90

Prerequisite: ECO 201, 202; ECO 314 is recommended. An examination and analysis of operating and efficiency characteristics of security markets. The application of institutional, technical, and theoretical approaches to security analysis and evaluation of investment portfolios.

**ECO 415
CASES IN CORPORATE FINANCE**

3, 3/0; Sp 90, 91

Prerequisite: ECO 314. An application of the case approach to problems in business finance. Topics include working capital financing, term borrowing, capital budgeting, mergers, and acquisitions.

**ECO 420/GEG 420
ECONOMIC EVALUATION OF
WATER RESOURCES**

See description listed under GEG 420.

**ECO 424
ECONOMETRICS**

3, 3/0; F 89, 90

Prerequisite: ECO 201, ECO 305 or equivalent industry statistics course. Introduces students 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 sciences as well as for many types of employment.

**ECO 425
BUSINESS AND ECONOMIC
FORECASTING**

3, 3/0; Sp 90, 91

Prerequisite: ECO 424. Introduces students to basic methods and problems in applied economic research and advanced econometric techniques. Is an extension of ECO 424 into the topics of organizing research projects, finding sources of data, selecting econometric techniques, using the computer, and writing research reports.

**ECO 488
INTERNSHIP**

3-6

Prerequisite: ECO 201, 202, and one relevant ECO elective; 2.5 GPA; junior/senior standing. The internship program is designed to provide an opportunity to apply and integrate 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 three hours of ECO 488, 495, 499 may be used in the major.

**ECO 495
PROJECT**

Prerequisite: 3.0 GPA (in major and overall); ECO 307, 308, or approval by Curriculum Committee. A maximum of three hours of ECO 488, 495, 499 may be used in the major.

**ECO 498
HONORS RESEARCH I**

3

Prerequisite: Admission to honors in economics. A review of the literature and development of the theoretical issues relevant to the research topic.

**ECO 498
HONORS RESEARCH II**

3

Prerequisite: Honors Research I. Appropriate applied analysis relevant to the development and resolution of the research topic begun in Honors Research I prepared in written form and orally defended before the faculty mentor, economics Curriculum Committee, and interested students and faculty.

**ECO 499
INDEPENDENT STUDY**

Prerequisite: 3.0 GPA (in major and overall); ECO 307, 308, or approval by Curriculum Committee. A maximum of three hours of ECO 488, 495, 499 may be used in the major.

Education

Offered by the Elementary Education and Reading Department
DR. LAWRENCE L. SMITH, Chairperson
Bacon Hall 302

**EDU 120
READING AND STUDY STRATEGIES**

3, 3/0; 1989-91

A competency-based course designed to improve students' college reading and study skills. Classes include lecture and laboratory work. Students are encouraged to become aware of their own levels of competency in order to improve areas of weakness.

**EDU 150
ADVANCED READING & STUDY
STRATEGIES**

3, 3/0; 1989-91

A course designed to help students improve their strategies for effective learning. Topics included in this course are study strategies, taking notes, taking exams, and time management.

**EDU 300
INTRODUCTION TO TEACHING THE
URBAN CHILD**

3, 3/0; offered based on staff availability

An elective course offering the student an overview of the urban child, urban community and urban school. Each area will be treated as it relates to the school curriculum. Course affords opportunity for exposure to children in urban schools, guides appropriate career decisions. Each student will be involved in supervised field experience.

**EDU 314
TEACHING READING AND
THE OTHER LANGUAGE ARTS IN THE
ELEMENTARY SCHOOL**

6, 4/4; 1989-91

Prerequisite: EDF 201; 210; 350; cumulative avg. of 2.5 or higher; junior status; must have passed the English Composition and Math Requirement. Development of attitudes, knowledges, skills necessary to extend reading and other communication skills of elementary children; interrelationships of strands of language arts; exploration of diagnostic teaching and differentiated instruction. Experiences with children are provided in schools on a planned basis. *Required of EE and EXE majors.

**EDU 315
THE TEACHING OF SOCIAL STUDIES,
SCIENCE AND MATHEMATICS**

6, 3/6; 1989-91

Prerequisite: EDF 201, EDF 210, EDU 314, EDF 350 or EDF 351; cum. avg. of 2.5, C or higher in EDU 314. Basic curriculum course, selecting, organizing and presenting elementary school science, mathematics, and social studies material; evaluating pupil progress, observation and elementary school participation. *Required of all EE majors and EXE majors seeking dual certification.

**ECS 329
TECHNIQUES AND PARTICIPATION IN
EARLY CHILDHOOD**

6, 4/4; 1989-91

Prerequisite: EDF 210 or equivalent, or by permission of instructor. Overview of the learning sequence of the young child; instructional materials and procedures for program development for groups of young children, e.g., creative play, art, music, science, mathematics, and language arts experiences. Students observe, record behavior, and participate in the teaching process with children two to six years of age.

**EDU 401
PRACTICUM IN TEACHING**

12, 0/30; 1989-91

Prerequisite: Grade of "C" or higher in EDU 314 and EDU 315; cumulative average of 2.5 or higher in all course work. Successful completion of math and English competency required as well as passing the Communication Skills

and General Knowledge sections of the NTE. Teaching under supervision in elementary grades five days per week, individual conferences and seminars with the college supervisor; tutorial and group instruction; daily and long view planning; teacher-pupil planning; unit teaching; audio-visual aids; classroom management; record-keeping; evaluation techniques. *Required of EE majors or with special permission of the chairman. EE extending majors and EXE majors (MR/PH, LBD) are required to take EDU 404.

**EDU 402
SEMINAR IN EDUCATION**

3, 3/0; 1989-91

Nature and function of a philosophy of education; study of teaching research methods and techniques; crucial issues in education; problems of beginning teachers. To be taken concurrently with or preferably subsequent to EDU 401. *Required of all EE majors.

**EDU 404
PRACTICUM IN
ELEMENTARY SCHOOL TEACHING**

6, 1/30 (½ sem) 1989-91

Prerequisite: Grade of "C" or higher in EDU 314 and EDU 315; cumulative average of 2.5 or higher in all course work. Successful completion of math and English competency required as well as passing the Communication Skills and General Knowledge sections of the NTE. Teaching under supervision in elementary grades five days per week; individual conferences and seminars with college supervisor, tutorial and group teaching; audio-visual aids; classroom management, record keeping, evaluation techniques. *Required of EE extended majors seeking dual certification.

**ECS 405
PARENT-INFANT EXPERIENCE**

3, 3/0; offered based on staff availability (GEE). Sp 90, Sp 91

An overview of the infant period (birth to 36 months) and techniques and materials to be used with parents to facilitate infant development. Innovative infant programs will be examined and practical experience with parents and infants will be provided. Elective for juniors and seniors.

**EDU 416/SED 305
TEACHING READING
IN SECONDARY SCHOOLS**

3, 3/0; 1989-91

An analysis of the special problems in reading encountered in the secondary school. Topics to be discussed as they relate to the secondary school include: the reading process, reading skills, and techniques for assessing developing reading skills. Special emphasis placed on critical reading in the content area. Required of Secondary Ed. majors.

**ECS 417
PARENTS AND EDUCATION**

3, 3/0; 1989-91

Prerequisite: EDF 210 or PSY 355, or equivalent, or by permission of instructor. The dynamics of working with parents individually or in groups for the purpose of enhancing their understanding of their children or of themselves as parents. Course is designed for prospective teachers or human service specialists.

**EDU 418
MEDIA IN EDUCATION**

3, 2/2; S 90, S 91

Audio-visual materials in teaching; audio-visual equipment; selecting, securing and using films and other materials; audio-visual programs in the school; teacher and pupil-produced materials; photography.

**EDU 419
METHODS AND MATERIALS IN THE
ELEMENTARY SCHOOL**

3, 3/0; offered based on staff availability.

School curriculum in the common branch subjects; selecting and presenting curriculum material, adapting the curriculum to the varying needs, interests and abilities of the pupils; evaluating pupil progress in terms of school objectives. *Elective for juniors and seniors.

**EDU 422
INTRODUCTORY LABORATORY
PRACTICUM IN READING**

3, 2/2; offered based on staff availability.

Prerequisite: EDU 314. Supervised laboratory experience in tutorial work with children demonstrating mild reading disability. The student will review available school information and/or the child's diagnostic evaluation completed in the Reading Center and structure and implement a corrective reading program. An instructional report for the parent will be prepared.

**EDU 426
TEACHING READING IN THE PRIMARY
GRADES**

3, 3/0; offered based on staff availability.

Prerequisite: EDU 314. Recognition and development of reading readiness; approaches to primary reading; methods and materials of instruction; grouping plans; development of word recognition, comprehension/interpretation, and oral reading skills; evaluation of reading, and professional growth.

**ECS 429
COGNITIVE AND SOCIALIZATION
PROGRAMS FOR PRE-KINDERGARTEN
CHILDREN**

3, 3/0; 1989-91

Prerequisite: EDF 210 or equivalent, EDU 329, or by permission of instructor. Consideration of theories and research in cognitive development and their application in various model

early childhood programs. Elements of program design and assessment will be explored. Upper division elective.

ECS 488 INTERNSHIP IN NON-SCHOOL SETTINGS

Credit hours vary.

Prerequisite: Junior or senior status, 2.5 cum. avg., and permission of adviser, faculty supervisor, and chairperson. The Internship component provides opportunities for students to integrate theoretical knowledge and practical experiences in non-classroom professional settings. Students are supervised by college faculty and meet them regularly in the professional field setting and on campus.

EDU 495 PROJECT

EDU 499 INDEPENDENT STUDY

Educational Foundations Department
DR. THOMAS J. QUATROCHE,
Chairperson
Bacon Hall 306

EDF 201 SCHOOL AND SOCIETY

3, 3, 3/0; 1989-91

Education as a function of a democratic society; sociological and historical backgrounds of the schools; current issues and problems affecting the schools; objectives, control and financial support of education in the State of New York and the U.S.; directed observation. *Required of EE and EXE sophomores in mental retardation, physical handicap, learning, and behavioral disorders.

EDF 206 INTRODUCTION TO THE GROUP EXPERIENCE

3, 3/0; (AST)

Exploration and development of basic attitudes, understandings and skills involved in democratic group participation through laboratory and academic experiences. Elective.

EDF 207 LEARNING IN COLLEGE ORIENTATION FOR UNDERGRADUATE

3, 3/0; 1989-91

This course is designed to acquaint students with the psychological and sociological understandings necessary for achievement within, and adjustment to college. Topics include human development during adulthood, higher education in the U.S., communication, self-awareness, learning, vocational goals, and the college as a sociocultural system.

EDF 210 INTRODUCTION TO HUMAN DEVELOPMENT

3, 3/0; 1989-91

An introduction to human behavior and development. Topics include a study of forces that shape human behavior and development, developmental characteristics during the life cycle, learning, development and the educative process, ways of studying children, and understanding self. *Required of EE majors and EXE majors according to program; elective for others beyond freshman levels.

EDF 217 PERSPECTIVES ON EARLY CHILDHOOD EDUCATION

3, 3/0; F 89, F 91

Prerequisite: EDF 210 or equivalent. A chronological overview of the influences of social and philosophical theories on early childhood. Attention is given to the changing needs of families of child care and child development services for pre-kindergarten children. Classification: elective.

EDF 221 (AAS 221) THE HISTORY OF BLACK EDUCATION IN AMERICA

3, 3/0

An examination of the role of Blacks in the American educational system. Relevant information on various changes that have taken place in order to improve or retard education for Blacks. The course will explore approaches for providing meaningful education for Blacks now and in the future.

EDF 222 (AAS 222) THE DEVELOPMENT OF MODERN EDUCATION IN AFRICA

3, 3/0

A phase of study of educational changes in Africa beginning with the colonial era to the present time. One important aspect of the course will be the examination of the effect of these changes on social and political issues in Africa and abroad.

EDF 225 ETHNIC STUDIES IN THE EDUCATIVE PROCESS

3, 3/0; F 90

This course is responsive to ethnic diversity in American life and education. Cultural minorities, e.g., Native-American, Blacks, Spanish-speaking, Jews and White ethnic groups, are treated as unique groups with their own special values and needs. This course is sensitive to the conflicts, internal and external, between the various ethnic groups, and mainstream American life and education.

EDF 303 EDUCATIONAL PSYCHOLOGY

3, 3/0; (GEE) 1989-91

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 observations. *Classification: Required for secondary education majors according to program, and HEE and IAE education majors.

EDF 321 THE TEACHER AS A DRUG EDUCATOR

3, 3/0; offered based on staff availability.

Prerequisite: Junior or senior standing, completion of introductory courses in human development, psychology and/or behavioral studies. An encounter group exploration of personal and professional components of drug education; the drug scene and its cultural context; psychological aspects of drug use and abuse; strategies of drug education. *Elective for juniors and seniors in Education.

EDF 338 OBSERVATION AND STUDY OF CHILDREN: NURSERY/PRIMARY

3, 3/0; Sp 90

Prerequisite: EDF 210 or equivalent. Provides opportunity for students interested in early childhood education to study child behavior and development in nursery/primary school or other settings; special individual projects including observation and participation experience.

EDF/CFS 346 TEENAGE SEXUALITY

3, 3/0; (GEE) F 89, F 91

A critical examination of teenage sexuality and factors in influencing its emergence; considers how sexuality education can be incorporated in the teaching-learning process at home and in school and ways to facilitate cooperative efforts by parents and teachers. Offers opportunities to develop skills in communicating with teenagers about their sexuality and strategies whereby teens can deal with sexuality concerns more effectively. Surveys community resources for teens, parents and teachers; examines special issues and problems.

EDF 350 HUMAN DEVELOPMENT DURING EARLY CHILDHOOD

3, 3/0; 1989-91

Prerequisite: EDF 210. A consideration of behavior and development during early childhood with emphasis on teaching/learning implication. Topics include a study of developmental processes during these ages, methods of studying young children, problems of child behavior and development, and an analysis of learning in home, pre-school, and primary school. *Required of EE and EXE major; permissible substitution: EDF 353; elective for others.

EDF 351 HUMAN DEVELOPMENT DURING MIDDLE CHILDHOOD AND PRE- ADOLESCENCE

3, 3/0; 1989-91

Prerequisite: EDF 210. A consideration of child development and behavior with emphasis on teaching/learning implications. Topics include a study of developmental processes during these ages, methods of studying children, problems of child behavior and development, and analysis of learning in home and elementary school. *Required of EE and EXE majors; permissible substitutions — EDF 350; elective for others.

EDF 353 HUMAN DEVELOPMENT DURING EARLY ADOLESCENCE

3, 3/0; 1989-91

An introduction to the study of early adolescent and adolescent behavior and development with emphasis on implications for teaching. Includes a consideration of 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. *Required for secondary education majors according to program; elective for others.

EDF 403 HISTORICAL AND PHILOSOPHICAL FORCES INFLUENCING SECONDARY EDUCATION

3, 3/0; F 89, F 91

European influences in American education; religious influences in education; secular influences in education, evolving concepts of education in a democracy; social and economic pressures in education; development of the secondary school; conflicting philosophies in current education. *Required for secondary education majors in English, mathematics, science, social studies, and foreign languages. Taken concurrently with EDU 306, 307, 308, 309, or 310 when student teaching occurs in the last semester of the senior year.

EDF 410 PHILOSOPHY OF EDUCATION

3, 3/0; F89, F90

Examination and evaluation of the more influential theories of education and their effect upon education, past and present, effect of democratic, as opposed to authoritarian, concepts of the good life upon school policy and practice, nature and function of academic freedom, the public school and the religious dimension of life; importance of continuity between avowed values and actual school practices. *Elective for juniors and seniors.

EDF 412 COMPARATIVE EDUCATION

3, 3/0; Sp 91

Education as an influence in world affairs; comparison of educational problems and their

solutions, in various countries; relationship of education programs to the cultural heritage and its future; selection of programs studies in terms of student interests and current developments. *Elective for juniors and seniors.

English

Offered by the English Department
DR. JOHN F. DWYER, Chairperson
Ketchum Hall 326

ENG 099 DEVELOPMENTAL WRITING

0, 3/0; 1989-91

An introductory course designed to reinforce sentence and paragraph structure through emphasis on unity, consistence, order, and coherence. *Does not carry credit.

ENG 101 COLLEGE WRITING I

3, 3/0; 1989-91

Emphasis on expository prose, writing assignments.

ENG 102 COLLEGE WRITING II (COMPOSITION AND LANGUAGE)

3, 3/0; 1989-91

Prerequisite: ENG 101 or exemption therefrom. Introduction to the study of language with emphasis on the relationship of oral and written English.

ENG 102 COLLEGE WRITING II (COMPOSITION AND LITERATURE)

3, 3/0; 1989-91

Prerequisite: ENG 101 or exemption therefrom. Readings in literature with emphasis on the techniques of analyzing and writing about literature.

ENG 102 COLLEGE WRITING II (COMPOSITION AND MEDIA)

3, 3/0; 1989-91

Prerequisite: ENG 101 or exemption therefrom. Introduction to mass media with emphasis on written analysis of form and content.

ENG 110 ENGLISH LITERATURE I: SELECTED TOPICS

3, 3/0; 1989-91 (H)

A survey of topics, themes, and authors in English literature to 1700.

ENG 111 ENGLISH LITERATURE II: SELECTED TOPICS

3, 3/0; 1989-91 (H)

A survey of topics, themes, and authors in English literature from 1700 to 1900.

ENG 130 BIBLICAL AND CLASSICAL LITERATURE

3, 3/0; 1989-91 (H)

A study of Greek, Roman, and Biblical literature.

ENG 131 MEDIEVAL AND RENAISSANCE LITERATURE

3, 3/0; 1989-91 (H)

A study of major European writers prior to 1600.

ENG 132 MODERN EUROPEAN LITERATURE

3, 3/0; 1989-91 (H)

A study of major European writers after 1600.

ENG 140 AMERICAN LITERATURE I: SELECTED TOPICS

3, 3/0; 1989-91 (H)

A survey of topics, themes, and authors in American literature prior to the Civil War.

ENG 141 AMERICAN LITERATURE II: SELECTED TOPICS

3, 3/0; 1989-91 (H)

A survey of major American writers after the Civil War.

ENG 151 INTRODUCTION TO POETRY

3, 3/0 1989-91 (H)

A study of the verbal and formal techniques of English and American poetry; prosody, verse forms, conventions, genres, diction, and imagery.

ENG 180 INTRODUCTION TO FOLKLORE

3, 3/0; Sp 91 (GEE)

A general introduction to the nature, form of folklore, and its function in society.

ENG 202 CREATIVE WRITING: NARRATIVE

3, 3/0; 1989-91 (GEE)

An introductory course emphasizing the writing of fiction. Open to students who have satisfied the freshman writing requirement.

ENG 203 CREATIVE WRITING: POETRY

3, 3/0; 1989-91 (GEE)

An introductory course emphasizing the writing of poetry. Open to students who have satisfied the freshman writing requirement.

**ENG 205
HISTORY OF CINEMA I****3, 3/0; 1989-91 (H)**

A broad survey of the development of the motion picture from its earliest form in the 1890s to the inception of sound.

**ENG 206
HISTORY OF CINEMA II****3, 3/0; 1989-91 (H)**

A survey of the development of the motion picture from the inception of sound to the present.

**ENG 230
COMPARATIVE LITERATURE****3, 3/0; 1989-91 (H)**

Recurring ideas, themes, and theories in world literature.

**ENG 231
WOMEN IN LITERATURE:
SELECTED TOPICS****3, 3/0; Sp 90, 91 (GEE)**

An examination of the images of women in literature as they reflect attitudes about women and their roles. Emphasis on authors and eras varies with instructors.

**ENG 240
AFRO-AMERICAN LITERATURE
TO 1940****3, 3/0; 1989-91 (GEE)**

Survey of black American slave narratives, poetry, fiction, essays, and drama, noting the influence of the African oral tradition on the black American writer. The Harlem renaissance of the 1920s and its relation to the development of black revolutionary thought will be emphasized.

**ENG 241
AFRO-AMERICAN LITERATURE
SINCE 1940****3, 3/0; 1989-91 (GEE)**

Survey of black revolutionary thought and artistry in such writers as Richard Wright, William Demby, Ralph Ellison, LeRoi Jones, James Baldwin, Don L. Lee, Gwendolyn Brooks, Nikki Giovanni, John Henrik Clarke, and Ed Bullins.

**ENG 250
LITERARY CRITICISM****3, 3/0; 1989-91**

An introduction to the basic questions of theoretical and practical literary criticism. Intended primarily for those students who have or are considering a major or a concentration in English.

**ENG 252
CONTEMPORARY LITERATURE I****3, 3/0; 1989-91 (H)**

A study of literature in English from 1900 to 1945.

**ENG 253
CONTEMPORARY LITERATURE II****3, 3/0; 1989-91 (H)**

A study of literature in English from 1945 to the present.

**ENG 260
CHILDREN'S LITERATURE****3, 3/0; 1989-91 (GEE)**

A study of the types of children's literature with attention to the principles of book selection and reading interests of children. *Sophomores, juniors, and seniors only.

**ENG 280
AMERICAN FOLKLORE****3, 3/0; Sp 90 (GEE)**

Introduction to American folklore and its uses.

**ENG 300
WRITING FOR THE PROFESSIONS****3, 3/0; 1989-91 (GEE)**

Prerequisite: Fulfillment of the freshman writing requirement. Practice for students who wish to improve their competence in writing and editing for a variety of professions.

**ENG 301
ADVANCED COMPOSITION****3, 3/0; 1989-91 (GEE)**

Prerequisite: Fulfillment of the freshman writing requirement. Practice in writing expository papers.

**ENG 303
LITERATURE IN THE FILM****3, 3/0; 1989-91 (GEE)**

A study of the motion picture as a vehicle for literature. Analysis and composition of the verbal and pictorial forms.

**ENG 304
FORMS OF THE FILM****3, 3/0; 1989-91 (GEE)**

A study of breadth and depth of selected film forms. Emphasis on the films as art, medium of communication, and social document. May be taken for credit more than once where content is different.

**ENG 309
TEACHING AND EVALUATING
WRITING****3, 3/0; 1989-91**

Prerequisite: Fulfillment of the freshman writing requirement. Methods for teaching and evaluating writing including theories of composition and rhetoric, approaches to teaching composition, ways to respond to writing-in-progress and completed texts, methods of measuring growth, and means to evaluate writing performance.

**ENG 315
SHAKESPEARE I****3, 3/0; 1989-91 (GEE)**

Prerequisite: Sophomore standing or three hours of English. A study of the earlier comedies, tragedies, and histories.

**ENG 316
SHAKESPEARE II****3, 3/0; 1989-91 (GEE)**

Prerequisite: Sophomore standing or three hours of English. A study of the later comedies, tragedies, and histories.

**ENG/MUS 328
WORDS AND MUSIC****3, 3/0; 1989-91 (GEE)**

Broadway musicals, songs, operas, and other works of art which combine words and music, analyzed in terms of the relations between musical structure and linguistic structure.

**ENG 330
LITERATURE OF THE BIBLE****3, 3/0; 1989-91 (GEE)**

Prerequisite: Sophomore standing or three hours of English. A study of the Bible as literature.

**ENG/FRE 331
FRENCH LITERATURE IN
TRANSLATION****3, 3/0; See FRE for offerings. (GEE)**

Prerequisite: A literature course at the college level or permission of instructor. Selected masterpieces of contemporary French literature in translation. Knowledge of French not required. *Open to French majors only upon approval of both the department chairperson and the course instructor.

**ENG/RUS 332
RUSSIAN LITERATURE IN
TRANSLATION****3, 3/0; (GEE)**

Prerequisite: A literature course at the college level or permission of instructor. Writers: Gogol, Pushkin, Turgenev, Goncharov, Tolstoy, Dostoevsky, Chekhov, etc. Knowledge of Russian not required.

**ENG/POL 334
POLISH LITERATURE
IN TRANSLATION****3, 3/0; (GEE)**

Prerequisite: A literature course at the college level or permission of instructor. Introduction to Polish culture and literature through readings from the major dramatists and poets from the Middle Ages to the Post-Romantic Period. Lectures and readings to be enhanced by audio-visual material. Knowledge of Polish not required.

**ENG/ITA 335
ITALIAN RENAISSANCE
LITERATURE IN TRANSLATION****3, 3/0**

Prerequisite: A literature course at the college level or permission of instructor. The development of humanism from Petrarch to Tasso. Knowledge of Italian not required.

**ENG/ITA 336
MODERN ITALIAN
LITERATURE IN TRANSLATION****3, 3/0; (GEE)**

Prerequisite: A literature course at the college level or permission of instructor. Major writers since World War II. Knowledge of Italian not required.

**ENG/RUS 338
RUSSIAN LITERATURE
SINCE THE REVOLUTION****3, 3/0; (GEE)**

Prerequisite: A literature course at the college level or permission of instructor. An examination of the state of Russian literature from the revolution to the present. Such writers as Gorky, Sholokhov, Terz, Solzhenitzyn, Pasternak, and Yevtushenko. Knowledge of Russian not required.

**ENG/POL 339
MODERN POLISH LITERATURE
IN ENGLISH TRANSLATION****3, 3/0; (GEE)**

Prerequisite: A literature course at the college level or permission of instructor. Selected masterpieces of Polish literature and culture from 1863 to the present: novels, short stories, drama, and poetry. Knowledge of Polish not required.

**ENG 341
MODERN HEBREW LITERATURE IN
TRANSLATION****3, 3/0; F 89, 90 (GEE)**

Israeli literature today, its background and influences. Poetry and fiction translated from the Hebrew.

**ENG 345
WORLD LITERATURE AFTER 1945****3, 3/0; Sp 90, 91 (GEE)**

Post-World War II literature around the globe. Study of poetry and fiction along with the cultural background of at least two continents per semester.

**ENG 350
DRAMA: IBSEN TO 1945****3, 3/0; 1989-91 (GEE)**

Prerequisite: Sophomore standing or three hours of English. Drama from the 1880s until the end of World War II of such playwrights as Ibsen, Strindberg, Chekhov, Lorca, Synge, O'Casey, and O'Neill.

**ENG 351
DRAMA SINCE 1945****3, 3/0; 1989-91 (GEE)**

Prerequisite: Sophomore standing or three hours of English. Drama since World War II. Includes epic theater, absurdism, and theater of cruelty of such playwrights as Brecht, Ionesco, Beckett, Genet, Miller, Albee, Pinter, Baraka, and Arrabal.

**ENG 354
ETHNIC-AMERICAN MINORITY
LITERATURE****3, 3/0; F 89, 90 (GEE)**

Background, development, and contemporary contribution of ethnic-American minority literature (folk, poetry, short story, novel, biography, and plays) and individual authors. A study of the literary characteristics of the literature, its contribution to the field of American literature, and its place in today's society.

**ENG 355
THE SHORT STORY****3, 3/0; 1989-91 (GEE)**

Prerequisite: Sophomore standing or three hours of English. Major writers in the development of short fiction; may include stories of writers from Poe or Gogol to Pirandello, Joyce, Faulkner, Camus, Malamud, Boll, Sillitoe, or W.M. Kelley.

**ENG 356
FUTURISTIC FICTION****3, 3/0; 1989-91 (GEE)**

Prerequisite: Sophomore standing or three hours of English. Background, development, and present status of futuristic fiction. Short story and novel forms. A study of the quality of the literature and its place in today's society.

**ENG 357
COMEDY****3, 3/0; 1989-91 (GEE)**

Prerequisite: Sophomore standing or three hours of English. Exploration of the nature and forms of comedy in stage and television drama, poetry, fiction, jokes, and life situations. Relationship to respective cultures and periods from Aristophanes into the 1970s.

**ENG 359
TELEVISION DRAMA****3, 3/0; 1989-91 (GEE)**

A study of TV drama as one of the most recent manifestations in the history of drama generally. Analysis of structure, characterization, tone, style, and texture of selected TV scripts and viewings from the "Golden Age" forward.

**ENG 360
REALISTIC FICTION FOR CHILDREN****3, 3/0; Sp 90, 91**

Prerequisite: ENG 260, or consent of instructor. A study of the literary characteristics, recurring themes, significant authors, and major categories of realistic fiction for children. Students will read and discuss classic and contemporary realism, and illustrations in realistic fiction will be viewed and evaluated in terms of relationship to literary elements.

**ENG 377
INTRODUCTION TO SEMANTICS****3, 3/0; 1989-91 (GEE)**

Analysis of the relations between words and meaning, cognition and language, culture and connotation. Review of classic and contemporary semantic theories.

**ENG 402
ADVANCED CREATIVE WRITING:
NARRATIVE****3, 3/0; F 89, 90**

Prerequisite: ENG 202, publication of fiction, or permission of instructor. A creative workshop for students who wish to attempt longer forms of narrative than the short story.

**ENG 403
ADVANCED CREATIVE WRITING:
POETRY****3, 3/0; Sp 90, 91**

Prerequisite: ENG 203 or consent of instructor. A creative workshop for students experienced and/or talented in the writing of poetry.

**ENG 404
STUDIES IN CINEMA****3, 3/0; 1989-91**

Prerequisite: Minimum of one lower-level film course or consent of instructor. May be taken more than once where content is different. An analytical, in-depth study of a film genre, performer, director, or period.

**ENG 411
CHAUCE****3, 3/0; Sp 90, 91**

Prerequisite: Six hours of literature courses. A study of representative works of Geoffrey Chaucer.

**ENG 413
MILTON****3, 3/0; F 89**

Prerequisite: Six hours of literature courses. A study of representative works of John Milton.

**ENG 415
SEVENTEENTH CENTURY ENGLISH
LITERATURE****3, 3/0; Sp 90**

Prerequisite: Six hours of literature courses. A study of the literature of 17th-century England.

**ENG 416
EIGHTEENTH CENTURY ENGLISH
LITERATURE****3, 3/0; Sp 91**

Prerequisite: Six hours of literature courses. A study of the literature of 18th-century England.

**ENG 417
ENGLISH NOVEL TO 1800****3, 3/0; Sp 91**

Prerequisite: Six hours of literature courses. A study of the English novel prior to 1800.

**ENG 418
ENGLISH NOVEL 1800-1900****3, 3/0; F 89**

Prerequisite: Six hours of literature courses. A study of representative 19th-century English novels.

**ENG 419
ROMANTIC MOVEMENT IN
ENGLISH LITERATURE****3, 3/0; F 89**

Prerequisite: Six hours of English. A study of English Romantic writers.

**ENG 420
EARLY VICTORIAN LITERATURE**

3, 3/0; Sp 90

Prerequisite: Six hours of English. Study of English writers, 1832-59.**ENG 421
LATER VICTORIAN LITERATURE**

3, 3/0; Sp 90

Prerequisite: Six hours of English. A study of English writers, 1859-1914.**ENG 422
JAMES JOYCE AND HIS
CONTEMPORARIES**

3, 3/0; 1989-91

Prerequisite: Six hours of English. A study of the major fiction of James Joyce; supplemental readings in other writers of the period.**ENG 432
COMPARATIVE DRAMA: TRAGEDY**

3, 3/0; F 90

Prerequisite: Six hours of English. A study of the tragic drama from Aeschylus to the present.**ENG 441
ROMANTIC MOVEMENT IN
AMERICAN LITERATURE**

3, 3/0; Sp 90

Prerequisite: Six hours of English. A study of American Romantic writers.**ENG 442
AMERICAN NOVEL TO 1900**

3, 3/0; F 90

Prerequisite: Six hours of English. A study of the 19th-century American novel.**ENG 450
STUDIES IN POETRY**

3, 3/0; 1989-91

Prerequisite: Six hours of English. A study of a particular aspect of poetry: theme, motif, philosophy, concept, or literary movement in English, American, or world literature. May be taken more than once where content is different.**ENG 451
STUDIES IN FICTION**

3, 3/0; 1989-91

Prerequisite: Six hours of English. Analysis of selected aspects of the novel, novella, or short story: theme, motif, concept, or movement in English, American, or world literature. May be taken more than once where content is different.**ENG 452
STUDIES IN DRAMA**

3, 3/0; 1989-91

Prerequisite: Six hours of English. A study of particular aspects of drama: theme, motif, philosophic content, or literary movement in English, American, or world literature. May be taken more than once where content is different.**ENG 454
CONTEMPORARY NOVEL I**

3, 3/0; 1989-91

Prerequisite: Six hours of English. A study of major British and/or American novels from 1914-1945.**ENG 455
CONTEMPORARY NOVEL II**

3, 3/0; 1989-91

Prerequisite: Six hours of English. A study of major British and American novels from 1945 to the present.**ENG 461
YOUNG ADULT LITERATURE**

3, 3/0; 1989-91

Prerequisite: Six hours of English. A study of literature appropriate to students in grades 7-12.**ENG 462
METHODS AND MATERIALS IN
TEACHING SECONDARY-SCHOOL
ENGLISH**

3, 3/0; F 89, 90

Prerequisite: ENG 470, EDU 303, SST 200 and minimum cumulative average of 2.00. A study of secondary-school curriculum materials and methods in instruction. Open only to juniors and seniors majoring in secondary English or elementary majors seeking certification in English; to be taken the semester before student teaching.**ENG 464
STUDENT TEACHING IN SECONDARY-
SCHOOL ENGLISH**

12, 30/0; Sp 90, 91

Prerequisite: Completion of ENG 462 with minimum grade of C. Cumulative average minimum of 2.00. Full-time practice teaching, five days per week, for 14 weeks; seven weeks in a junior high school situation and seven weeks in a senior high school situation. College supervision bi-weekly. Elementary extension students teach one situation. *Required of juniors and seniors in secondary English and elementary extension students.**ENG 470
FOUNDATIONS OF LANGUAGE**

3, 3/0; 1989-91

Prerequisite: A study of the structure of language with emphasis on English, relation to speech, to writing; language families and their relationships; language change, significance of regional and social dialects.**ENG 472
ENGLISH GRAMMARS**

3, 3/0; Sp 90, 91

Prerequisite: ENG 470. A study of different approaches to the analysis of the English language; brief history of the development of the English language; historical survey of the study of language; detailed study of the contemporary scientific approaches to the study of English.**ENG 474
BLACK ENGLISH SPEECH**

3, 3/0; F 89

Prerequisite: ENG 470. A study of social, economic, and educational implications of speech patterns among black Americans.**ENG 476
NON-VERBAL COMMUNICATION**

3, 3/0; Sp 89, 90

Prerequisite: Six hours of English. A study of the history and development of non-verbal communication and communication systems including grimaces, gestures, posture, tone of voice.**ENG 490
ENGLISH SEMINAR**

3, 3/0; 1989-91

Prerequisite: Six hours of English. A study of specific writers.**ENG 495
PROJECT**

ENG 499

INDEPENDENT STUDY

Exceptional Education

Offered by the
Exceptional Education Department
DR. MARK POSLUSZNY, Acting Chairperson
Ketchum Hall 201

**EXE 100
NATURE AND NEEDS OF INDIVIDUALS
WHO ARE EXCEPTIONAL**

3, 3/0; 1989-91 (AST)

Prerequisite: The study of individuals who are exceptional due to factors of intelligence, physical development, behavior, and sensory impairment. The course examines the causes, characteristics, and implications — educational, social, and vocational — of individuals who deviate from the average or normal. Required of all exceptional education majors.**EXE 245
COMMUNITY SERVICE WITH
INDIVIDUALS WHO ARE EXCEPTIONAL**

1-3, 1-3/2-6/3-9; 1989-91 (GEE)

Prerequisite: Service in community agencies with individuals who are exceptional. May be taken for one, two, or three credits. Three credit hours required for majors in exceptional education.**EXE 306
BEHAVIOR MANAGEMENT**

3, 3/1; 1988-91 (AST)

Prerequisite: EXE 100. Reviews various procedures and strategies for managing behavior

of students in special education settings. The course focuses on the prevention of undesirable classroom behavior, the assessment and remediation of behavior problems, and the effective delivery of instruction. Students are required to complete a project in an approved educational settings. Required of all exceptional education majors.

**EXE 309
INTRODUCTION TO INDIVIDUALS WITH
LEARNING AND BEHAVIORAL
DISORDERS**

3, 3/0; 1989-91

Prerequisite: EXE 300. The study of personal and social factors related to the problem child in educational settings. This course provides basic understanding of techniques used with learning and behaviorally disordered students. For non-majors.**EXE 314
PSYCHOLOGY OF INDIVIDUALS WHO
ARE EXCEPTIONAL**

3, 3/0; 1989-91 (AST)

Prerequisite: Examination of behavior trends common to various types of exceptionality; description, analysis, examination of educational implications.**EXE 320
EVALUATING INDIVIDUALS WHO ARE
EXCEPTIONAL**

3, 3/1, 1989-91

Prerequisite: EXE 100. Introduction to the educational assessment of students who are handicapped. Models, issues, basic terminology and practice, interpreting scores, testing and test construction are included. Required of all exceptional education majors.**EXE 330
INDIVIDUALS WITH MILD HANDICAPS**

3, 3/0, 1989-91

Prerequisite: EXE 100. This course provides in-depth consideration of the history, causes, personal and social factors, and needs of individuals exhibiting mild handicapping conditions. Required of all exceptional education majors.**EXE 331
INDIVIDUALS WITH
MODERATE/SEVERE/AND
MULTIPLE HANDICAPS**

3, 3/0, 1989-91

Prerequisite: EXE 100. This course provides in-depth consideration of the history, causes, personal and social factors, and needs of individuals exhibiting moderate and severe handicapping conditions. Required of all exceptional education majors.**EXE 340
CURRICULUM FOR INDIVIDUALS WITH
MILD HANDICAPS**

3, 3/1, 1989-91

Prerequisites: EXE 306; EXE 330. Basic cur-

ricular practices, procedures in developing, implementing, and revising programs for students who are mildly handicapped. Required of all exceptional education majors.

**EXE 341
CURRICULUM FOR INDIVIDUALS WITH
MODERATE/SEVERE/MULTIPLE
HANDICAPS**

3, 3/1, 1989-91

Prerequisites: EXE 306; EXE 331. Curriculum methods, materials, problems, in educating students with moderate, severe, or multiple handicaps in public school classes, residential settings, vocational programs, and other service programs. Required of juniors and seniors in exceptional education.**EXE 385
OBSERVATION AND PARTICIPATION IN
SPECIAL EDUCATION**

6, 5/12, 1989-91

Prerequisites: Cumulative GPA of 2.00 or higher; EXE 320; EXE 340; EXE 341. Observation, classroom participation, selection, organization, presentation of curriculum material at different grade levels; evaluation of pupil progress in classes for students with handicapping conditions. Required of juniors and seniors in exceptional education.**EXE 420
PRACTICUM IN SPECIAL EDUCATION**

6, ½ semester, 1989-91

Prerequisites: Grade of C or higher in EXE 385. Minimum overall cumulative GPA of 2.5. Minimum cumulative GPA of 2.5 in the major. Practice teaching with students who are learning and behavior disordered, mentally retarded, and physically and neurologically impaired in public school special classes, private agencies, or residential settings. Required of seniors in exceptional education.**EXE 495
PROJECT****EXE 499
INDEPENDENT STUDY**

Fine Arts

Offered by the Fine Arts Department
FRANK C. ECKMAIR, Chairperson
Upton Hall 502

All studio courses in fine arts require at least three hours per week of outside preparation in addition to the regular class meetings.

**FAR 100
INTRODUCTION TO FINE ARTS**

3, 0/6 (A)

Prerequisite: A study of the critical bases for procedures in

the fine arts; introductory problems in studio performance. Lecture and studio experience. Note: For non-art majors only.

**FAR 101
DRAWING I**

3, 0/6; 1989-91 (A)

Prerequisite: 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; involves lecture and studio experience.**FAR 102
DRAWING II**

3, 0/6; 1989-91 (GEE)

Prerequisite: FAR 101. Drawing from the nude using various media with an emphasis on proportion anatomy and pictorial structure; involves lecture and studio experience.**FAR 103
MODELING**

3, 0/6; 1989-91

Prerequisite: Modeling as an introductory experience in the exploration of three-dimensional form; development of perceptual and analytical attitudes; involves lecture and studio experiences. Note: First-year B.F.A. students only.**FAR 210
INTRODUCTORY PAINTING**

3, 0/6; 1989-91 (A)

Prerequisite: FAR 101. An introduction to the methods, techniques, standards, and values of painting; exploration of color, form, and compositional problems; includes lecture and studio experiences.**FAR 220
INTRODUCTORY PHOTOGRAPHY**

3, 0/6; 1989-91 (A)

Prerequisite: FAR 101. Basic technique: camera use, film development, enlarging, print finishing, and presentation. Emphasis will be placed concurrently upon image and technique to produce personal expressive images; includes lecture and studio experiences. Note: 35mm camera with meter and full manual controls required.**FAR 230
INTRODUCTORY PRINTMAKING**

3, 0/6; 1989-91 (A)

Prerequisite: FAR 101. An introduction to printmaking and its basic processes and techniques, involving demonstrations, lectures, and studio experiences in one or more areas such as intaglio, lithography, and relief.**FAR 240
INTRODUCTORY SCULPTURE**

3, 0/6; 1989-91 (A)

Prerequisite: FAR 101. Introduction to the fundamentals of sculptural form; exploration of additive, subtractive, and constructive approaches to sculpture through lecture and studio experiences.

**FAR 250
ART HISTORY I****3, 3/0; 1989-91 (A)**

Development of art from ancient times through the Gothic period. Particular emphasis will be placed upon significant works of painting, sculpture, and architecture.

**FAR 251
ART HISTORY II****3, 3/0; 1989-91 (A)**

Prerequisite: FAR 250. The development of art from the Renaissance to the modern period. Particular emphasis will be placed upon the significant works of painting, sculpture, and architecture.

**FAR 300
DRAWING III****3-6 (3 hrs./sem.) 0/6; 1989-91**

Prerequisite: FAR 102. A continuation of FAR 102 with an emphasis on surface anatomy and pictorial structure; includes lecture and studio experience.

**FAR 311
INTERMEDIATE PAINTING I****3, 0/6; 1989-91**

Prerequisite: FAR 210. A continuation of the problems dealt with in Introductory Painting, working toward a greater awareness of a personal statement; includes lecture and studio experience.

**FAR 312
INTERMEDIATE PAINTING II****3, 0/6; 1989-91**

Prerequisite: FAR 311. A continuation of the problems dealt with in the first two painting courses, allowing the opportunity for more thorough fundamental awareness at a more intense concentration; includes lecture and studio experience.

**FAR 313
ADVANCED PAINTING****3-9 (3 hrs./sem.) 0/6; 1989-91**

Prerequisite: FAR 312. Advanced painting, with media, style, and content based on individual needs; concentration on individually-selected areas of painting; includes lecture and studio experience.

**FAR 316
PAINTING IN SIENA****3, 0/6; 1989-91**

Prerequisite: For Art credit — FAR 210; For non-art-credit — none. An upper-level course in painting taught in Siena, Italy. Students will work at the level of their experience and in the materials and techniques currently available in Siena.

**FAR 321
INTERMEDIATE PHOTOGRAPHY****3, 0/6; 1989-91**

Prerequisite: FAR 220. A continuation of in-

troductory photography with more in-depth studies; concurrent emphasis on technique and image to produce personal, expressive, and significant images; includes lecture, field and studio experience. Note: 35mm camera with meter and full manual controls required; tripod, hand meter, and flash desirable.

**FAR 322
INTERMEDIATE PHOTOGRAPHY II****3, 0/6; 1989-91**

Prerequisite: FAR 321. An advanced course in the photographic disciplines, stressing the individual, expressive, and creative approach to the making of significant photographic images. Includes lecture, field and studio experiences. Note: 35mm camera with meter and full manual controls, tripod, flash, hand meter required.

**FAR 323
ADVANCED PHOTOGRAPHY****3-9 (3 hrs./sem.) 0/6; 1989-91**

Prerequisite: FAR 322. An advanced course in which individual directions and advanced photographic concerns may be explored; includes lecture, field and studio experiences.

**FAR 327
NON-SILVER PHOTOGRAPHIC
PROCESSES****3, 0/6; Sp 90**

Prerequisite: FAR 220. An investigation of light-sensitive, non-silver photographic processes. Areas covered will be cyanotype, Vandyke brown, casein, and gum bichromate. Students will be given instruction in the basic processes and then individually assigned problems. Papers, fabrics, and other working materials and supplies will be provided by the student.

**FAR 331
INTERMEDIATE PRINTMAKING I****3, 0/6; 1989-91**

Prerequisite: FAR 230. An exploration of the relief processes in the making of prints through woodcuts and wood engravings; emphasis upon personal expression and creative possibilities. Lectures and studio experiences.

**FAR 332
INTERMEDIATE PRINTMAKING II****3, 0/6; 1989-91**

Prerequisite: FAR 331. An exploration of the intaglio process in making prints through etching and dry point; emphasis upon personal expression and creative possibilities. Includes lectures and studio experiences.

**FAR 333
ADVANCED PRINTMAKING****3-9 (3 hrs./sem.) 0/6; 1989-91**

Prerequisite: FAR 331 and 332. Advanced printmaking, media determined by the student in consultation with the instructor; includes lectures and studio experiences.

**FAR 335
PAPERMAKING****3, 9 (3 hrs./sem.) 0/6; 1989-91 (GEE)**

Prerequisite: Any studio experience in FAR/DES. The theory and practice of hand-made papermaking involving demonstrations, lectures, and studio experience. Note: Required of B.F.A. printmaking majors (0165).

**FAR 341
INTERMEDIATE SCULPTURE I****3, 0/6; 1989-91**

Prerequisite: FAR 240. A further exploration of sculptural form with a more complete study of the numerous sculptural approaches and techniques; practice in planning and executing sculpture projects. Lecture and studio experience.

**FAR 342
INTERMEDIATE SCULPTURE II****3, 0/6; 1989-91**

Prerequisite: FAR 341. A continuation of Intermediate Sculpture I with further emphasis on exploration of the variations within each technique and approach, development of personal modes of expression; lecture and studio experience.

**FAR 343
ADVANCED SCULPTURE****3-9 (3 hrs./sem.) 0/6; 1989-91**

Prerequisite: FAR 342. Concentration on individually-selected areas of development in sculpture based on personal interests and needs; includes lecture and studio experience.

**FAR 345
FIGURE MODELING****3, 0/6; 1989-91**

Prerequisite: FAR 240. Figure modeling as a basic sculptural discipline; portrayal interpretation of the human form; includes lecture and studio experience.

**FAR 346
SCULPTURE IN SIENA****3, 0/6; 1989-91**

Prerequisite: For Art credit — FAR 240; For non-art credit — none. An upper-level course in sculpture taught in Siena, Italy. Students will work at the level of their experience and in the materials and techniques currently available in Siena.

**FAR 400
DRAWING IV****3-6 (3 hrs./sem.) 0/6; 1989-91**

Prerequisite: FAR 300. Advanced drawing with media and content based upon individual needs. Concentration on individually-selected areas of development in drawing; use of model; lecture and studio experiences included.

**FAR 410
SENIOR STUDIO IN PAINTING****6, 0/12; 1989-91**

Prerequisite: FAR 313. A six-credit-hour concentration of studio work by the senior major in painting; the student will plan and execute a series of problems and projects in consultation with major adviser. Note: B.F.A. painting majors only.

**FAR 420
SENIOR STUDIO IN PHOTOGRAPHY****6, 0/12; 1989-91**

Prerequisite: FAR 323. A six-credit-hour concentration of studio work by the senior major in photography; the student will plan and execute a series of problems and projects in consultation with major adviser. Note: B.F.A. photography majors only.

**FAR 430
SENIOR STUDIO IN PRINTMAKING****6, 0/12; 1989-91**

Prerequisite: FAR 333. A six-credit-hour concentration of studio work by the senior major in printmaking; the student will plan and execute a series of problems and projects in consultation with major adviser. Note: B.F.A. printmaking majors only.

**FAR 440
SENIOR STUDIO IN SCULPTURE****6, 0/12; 1989-91**

Prerequisite: FAR 343. A six-credit-hour concentration of studio work by the senior major in sculpture; the student will plan and execute a series of problems and projects in consultation with major adviser. Note: B.F.A. sculpture majors only.

**FAR 454
GREEK ART****3, 3/0; F 89, 91 (GEE)**

Prerequisite: FAR 250 and 251. A concentrated study of the architecture, painting, and sculpture of ancient Greece from Minoan and Mycenaean ages to the end of the Hellenistic period. Note: Required of art history majors.

**FAR 455
ETRUSCAN AND ROMAN ART****3, 3/0; Sp 90 (GEE)**

Prerequisite: FAR 250 and 251. A concentrated study of the architecture, painting, and sculpture of the Etruscan civilization and of the Roman Republic and Empire. Special emphasis will be given to Roman sculpture and architecture of the Republican and Imperial periods.

**FAR 456
EARLY MEDIEVAL ART****3, 3/0; Sp 90 (GEE)**

Prerequisite: FAR 250 and 251. A concentrated study of the art and architecture of western Europe in relation to the arts of the classical world and Byzantium from the 6th through the 11th centuries, emphasizing historical and religious meaning of art, architecture,

manuscript illumination, and jeweled arts of the period. Illustrated lectures, extra class assignments.

**FAR 457
GOTHIC ART****3, 3/0; Sp 91 (GEE)**

Prerequisite: FAR 250 and 251. A comprehensive study of architecture, sculpture, painting, and the decorative arts of the Gothic era from the rise of the new aesthetic, through its international development, to its culmination from Abbot Suger and the Abbey Church of St. Denis to the Henry VII Chapel at Westminster Abbey. Note: Required of art history majors.

**FAR 458
EARLY RENAISSANCE ART IN ITALY****3, 3/0; F 89 (GEE)**

Prerequisite: FAR 250 and 251 except in Siena. Survey of painting, sculpture, and architecture of 15th-century Italy. Special attention to Donatello, Brunelleschi, and Alberti. Consideration will be given to important earlier artists and movements as well as to the aesthetic implications of the rebirth of classical tradition in western civilization.

**FAR 459
HIGH RENAISSANCE AND MANNERISM****3, 3/0; Sp 90 (GEE)**

Prerequisite: FAR 250 and 251. Survey of Italian art and architecture in the 16th century. Special attention to Bramante, Leonardo, Raphael, and Michelangelo, and the emergence of Mannerism.

**FAR 460
NORTHERN RENAISSANCE ART****3, 3/0; F 89 (GEE)**

Prerequisite: FAR 250 and 251. A concentrated study of the artistic production, including illuminated manuscripts, in the Netherlands, France, Germany, England, from the 14th through the early 16th centuries.

**FAR 461
ITALIAN BAROQUE ART****3, 3/0; F 90 (GEE)**

Prerequisite: FAR 250 and 251. A concentrated study of the architecture, sculpture, and painting in Italy during the 17th and 18th centuries. Emphasis will be placed on key centers such as Rome, Venice, Turin, and Naples.

**FAR 462
NINETEENTH-CENTURY ART****3, 3/0; F 89 (GEE)**

Prerequisite: FAR 250 and 251. A concentrated study of architecture from neo-classicism of the Adam Brothers to the skyscraper; painting from David to Cezanne in France, the Nazarenes and Pre-Raphaelites in Germany and England; sculpture from Houdon and Canova to Rodin, in relationship to the social, political, economic, and intellectual climate of the times.

**FAR 463
TWENTIETH-CENTURY ART****3, 3/0; Sp 89, 90 (GEE)**

Prerequisite: FAR 250 and 251. A study of the major trends and works of the 20th century, with an emphasis on historical, artistic, judgmental, and cultural meanings as they reflect the twentieth century and past civilizations; includes painting, sculpture, architecture, and other areas.

**FAR 465
AMERICAN ART I****3, 3/0; F 90 (GEE)**

Prerequisite: FAR 250 and 251. A comprehensive study of architecture, painting, and sculpture in the United States from the 17th century to the Civil War. Emphasis will be given to colonial architecture, early Republican painting, and the Romantic movement.

**FAR 467
BAROQUE OF NORTHERN EUROPE****3, 3/0; Sp 91 (GEE)**

Prerequisite: FAR 250 and 251. A concentrated study of the architecture, sculpture, and painting in northern Europe during the 17th and 18th centuries. Major emphasis will be placed on developments in France, Holland, and Germany.

**FAR 468
ROMANESQUE ART****3, 3/0; F 90 (GEE)**

Prerequisite: FAR 250 and 251. A comprehensive study of architecture, sculpture, painting, and the decorative arts of Europe from the origins of a Romanesque style in the 11th century through its culmination in the late 12th century — from the era of the Bayeux Tapestry and the churches of the Pilgrimage Road to the age of Abbot Suger.

**FAR 470
SENIOR SEMINAR IN FINE ARTS****3, 3/0; F 89, 91**

Prerequisite: FAR 313, 323, 333, or 343. A final evaluative process regarded as a culminating experience in the program; discussions and lectures in major areas; theory and significance of selected problems; a critical analysis of the student's work resulting in the preparation of a professional portfolio. Note: B.F.A. majors only.

**FAR 472
MASTERWORKS OF ARCHITECTURE****3, 3/0; Sp 91**

An introduction to masterworks of architecture for non-art majors, emphasizing architecture as a living organism. Buildings selected from various periods, cultures, styles from early civilization to the present day, including places of worship and interment, public and commercial structures, private residences.

**FAR 495
PROJECT****FAR 499
INDEPENDENT STUDY****FOREIGN
LANGUAGE****Foreign Language Requirement**

All students in B.A. degree programs must demonstrate proficiency in a single foreign language equivalent to the successful completion of the first two years of college-level study (101-202 level). Courses taken to satisfy the language requirement may be applied to the following sections of the B.A. degree audit sheet: Humanities (maximum of two courses), general education electives, all-college electives. Students who have successfully completed foreign language study on the high school level may register for the appropriate course or take a placement examination administered by the Foreign Language Department. Normally, one year of high school study is equivalent to one semester of college level work. Successful completion of one language through the fourth year in high school satisfies the requirement. Transfer students may apply language courses successfully completed at other institutions in fulfillment of the requirement. Foreign language courses currently numbered 201-202 shall carry upper-level credit, i.e., they may be applied toward fulfillment of the 45-credit upper-division requirement. For further information regarding placement or any aspect of the requirement, contact the Foreign Language Department, Bishop Hall 126, 878-5414.

Note: The four years of high school study which shall constitute fulfillment of the requirement are to be verified by the appearance of level IV on the high school transcript.

Major programs (B.A.) are offered in French, Italian, and Spanish. There are secondary education programs (B.S.) in French and Spanish. Minors are offered in French, German, Italian, and Spanish. Polish and Russian courses may be applied to the East European Studies Minor.

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**FLA 461
LANGUAGE TEACHING WORKSHOP**

3, 3/0; F 89, 90
Prerequisite: Mastery of language to be taught and permission of instructor. A course in foreign language teaching at the college level; includes practice in techniques for teaching

listening, speaking, reading, and writing skills. Student has responsibilities in small and/or large group instruction.

**FLA 462
LANGUAGE TEACHING WORKSHOP**

3, 3/0; Sp 90, 91
Prerequisite: Mastery of language to be taught and permission of instructor. Continuation of FLA 461.

**FLA 495
PROJECT**

1-3 cr.; offered based on staff availability
Prerequisite: Permission of instructor.

**FLA 499
INDEPENDENT STUDY**

3 cr.; offered based on staff availability
Prerequisite: Permission of instructor.

See also:

Classics	Italian
Foreign Language	Latin
Education	Polish
French	Russian
German	Spanish
Greek	Swahili
Hebrew	

**Foreign Language
Education****FLE 210
FIELD EXPERIENCE IN FOREIGN
LANGUAGE EDUCATION**

3, 0/6; F89, 90

Prerequisite: Sophomore; completion of 302 in language of specialization; GPA of 2.5 or above in language of specialization or GOOD on MLA scale; proficiency in English (FSI-3); permission of FLE coordinator. Ninety clock hours in a middle, junior high, or senior high school in observation and participation of various types. Conducted by school and college staff.

**FLE/SED 410
METHODS AND MATERIALS FOR
TEACHING FOREIGN LANGUAGES IN
THE SECONDARY SCHOOLS**

3, 3/0; F 89, 90

Prerequisite: Second semester junior; SST/SED 200, EDF/SED 303, EDF/SED 403. 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 Foreign Language teacher certification programs should take this course immediately before FLE 413.

**FLE/SED 413
PRACTICUM IN THE TEACHING OF
FOREIGN LANGUAGES IN THE
SECONDARY SCHOOLS**

12, 0/30; 1989-91

Prerequisite: All required courses in language of specialization; grade of C or higher in FLE 410; EDU/SED 416; if referred, satisfactory completion of EXE 100; proficiency in English (FSI-3); permission of FLE coordinator. Teaching under supervision in a middle, junior high, or senior high school five days per week, with additional participation in school program. Evaluation by college and school personnel.

Classics

See also: Greek, Latin

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**FLA 200
LITERATURE, CIVILIZATION AND
INSANITY**

3, 3/0; Sp 91

A study of the relationship of literature, civilization, and insanity from the time of the ancient Greeks to the present.

**FLA 337
GREEK AND ROMAN MYTHOLOGY**

3, 3/0; F 89, 90 (GEE)

Prerequisite: A literature course at the college level or permission of instructor. The stories of the gods, goddesses, and heroes of Greece and Rome as presented in Greek and Roman literature, with emphasis upon determining the possible origins and meaning of the myths studied.

**FLA 338
INTRODUCTION TO
CLASSICAL GREEK DRAMA**

3, 3/0; Sp 90 (GEE)

Prerequisite: A literature course at the college level or permission of instructor. Study and discussion of selected ancient Greek plays in modern translations, with emphasis upon their uniqueness as cultural documents and their enduring quality as drama. Characteristics of Greek drama, the ancient theater, and theatrical conventions.

See also: Greek, Latin

French

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**FRE 101
ELEMENTARY FRENCH**

3, 3/0; 1989-91 (H)

Fundamentals of French with emphasis on the spoken language.

**FRE 102
ELEMENTARY FRENCH**

3, 3/0; 1989-91 (H)

Prerequisite: FRE 101 or equivalent. Continuation of FRE 101.

**FRE 201
INTERMEDIATE FRENCH**

3, 3/0; 1989-91 (GEE, upper level credit)

Prerequisite: FRE 102 or equivalent. Further development of the basic skills with emphasis on reading and writing.

**FRE 202
INTERMEDIATE FRENCH**

3, 3/0; 1989-91 (GEE, upper level credit)

Prerequisite: FRE 201 or equivalent. Continuation of FRE 201.

**FRE 301
FRENCH CONVERSATION AND
COMPOSITION**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: FRE 202 or equivalent. Practice in spoken and written French.

**FRE 302
FRENCH CONVERSATION AND
COMPOSITION**

3, 3/0; F89, 90 (GEE)

Prerequisite: FRE 301 or permission of instructor. Practice in spoken and written French.

**FRE 305
SPOKEN FRENCH**

3, 3/0; F89, 90

Prerequisite: FRE 301 and FRE 302, or permission of instructor. Introduction to French phonetics and applied linguistics.

**FRE 306
THE CIVILIZATION OF FRANCE**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: FRE 301, or permission of instructor. Survey of French civilization, its economic, social, and cultural aspects based on a review of the history of France.

**FRE 307
SURVEY OF FRENCH LITERATURE**

3, 3/0; Sp 90

Prerequisite: FRE 301 or permission of instructor. The Middle Ages through the Renaissance.

**FRE 308
SURVEY OF FRENCH LITERATURE**

3, 3/0; F 90

Prerequisite: FRE 301 or permission of instructor. Classicism and the Enlightenment.

**FRE 309
SURVEY OF NINETEENTH AND
TWENTIETH-CENTURY FRENCH
LITERATURE**

3, 3/0; F 89, Sp 91

Prerequisite: FRE 301 or permission of instructor. Introduction to representative works from a variety of genres. From Romanticism to contemporary writing.

**FRE/ENG 331
FRENCH LITERATURE IN
TRANSLATION**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: A literature course at the college level or permission of instructor. Selected masterpieces of contemporary French literature in translation. Knowledge of French not required. *Open to French majors only upon approval of both the department chairperson and the course instructor.

**FRE 401
CLASSICAL FRENCH THEATER**

3, 3/0; F 90

Prerequisite: FRE 307-308 or permission of instructor. The French theater of the seventeenth century.

**FRE 403
NINETEENTH-CENTURY
FRENCH NOVEL**

3, 3/0; Sp 91

Prerequisite: FRE 307-308 or permission of instructor. A study and analysis of major works of the period.

**FRE 404
CONTEMPORARY FRENCH NOVEL**

3, 3/0; Sp 90

Prerequisite: FRE 307-308 or permission of instructor. A study and analysis of major works of the twentieth century.

**FRE 408
CONTEMPORARY FRENCH THEATER**

3, 3/0; F89

Prerequisite: FRE 307-308 or permission of instructor. The French theater of the twentieth century.

**FRE 415
ADVANCED GRAMMAR AND
COMPOSITION**

3, 3/0; F89, 90

Prerequisite: FRE 301-302. Systematic study of advanced topics of French grammar with work in French composition. *Recommended for secondary education majors.

**FRE 416
ADVANCED CONVERSATION AND
COMPOSITION**

3, 3/0; Sp 90

Prerequisite: FRE 302 and 415, or permission of instructor. Advanced conversation dealing with contemporary French civilization and institutions. *Recommended for secondary education majors.

**FRE 417
BUSINESS FRENCH**

3, 3/0; Sp 91

Prerequisite: FRE 301-302. A study of areas of the French business world to develop competency in French commercial language. Practice in translating and writing business communiques.

Special note:

Any of the following courses may be added to the French electives offered. These may also be studied under FLA 495 (Special Project) or FLA 499 (Independent Study) with the approval of the appropriate instructor.

FLA 212	Contemporary France: Its Heritage, Its Influence
FRE 407	The French Enlightenment
FRE 430	French Renaissance
FRE 450	Directed Readings I
FRE 451	Directed Readings II
FRE 490	Nineteenth-Century French Drama
FRE 496	Senior Seminar I
FRE 497	Senior Seminar II

German

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**GER 101
ELEMENTARY GERMAN**

3, 3/0; F 89, 90, (H)

Fundamentals of German with emphasis upon speaking.

**GER 102
ELEMENTARY GERMAN**

3, 3/0; Sp 90, 91 (H)

Prerequisite: GER 101 or equivalent. Continuation of GER 101.

**GER 201
INTERMEDIATE GERMAN**

3, 3/0; F 89, 90 (GEE, upper level credit)
Prerequisite: GER 102 or equivalent. Further development of the basic skills with emphasis upon reading, aural comprehension, and speaking.

**GER 202
INTERMEDIATE GERMAN**

3, 3/0; Sp 90, 91 (GEE, upper level credit)
Prerequisite: GER 201 or equivalent. Continuation of GER 201.

**GER 301
GERMAN CONVERSATION AND
COMPOSITION**

3, 3/0; F 89, 90 (GEE)
Prerequisite: GER 202 or equivalent. Practice in written and spoken German with emphasis upon the spoken language.

**GER 302
GERMAN CONVERSATION AND
COMPOSITION**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: GER 202 or equivalent. Practice in spoken and written German with emphasis upon the written language.

**GER 306
GERMAN CIVILIZATION**

3, 3/0 (GEE)
Prerequisite: GER 201-202. Study of the growth of German civilization, with emphasis on the artistic and intellectual contributions to the Western world.

**GER 401
TWENTIETH-CENTURY GERMAN
LITERATURE**

3, 3/0; Sp 91
Prerequisite: GER 202 or approval of instructor. A study of the chief literary trends and the major authors of German literature in the twentieth century.

Greek

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**GRK 101
ELEMENTARY NEW TESTAMENT
GREEK (KOINE)**

3, 3/0; F 89 (H)
Fundamentals of Koine Greek with emphasis upon reading.

**GRK 102
ELEMENTARY NEW TESTAMENT
GREEK (KOINE)**

3, 3/0; Sp 90 (H)
Prerequisite: GRK 101 or equivalent. Continuation of GRK 101.

**GRK 201
INTERMEDIATE NEW TESTAMENT
GREEK (KOINE)**

3, 3/0; F 90 (GEE, upper level credit)
Prerequisite: GRK 102 or equivalent. Further development of reading and writing ability, with continuing emphasis on the comprehension of the written language.

**GRK 202
INTERMEDIATE NEW TESTAMENT
GREEK (KOINE)**

3, 3/0; Sp 91 (GEE, upper level credit)
Prerequisite: GRK 201 or equivalent. Continuation of GRK 201.

See also: Classics

**Hebrew
Language and
Literature**

Offered by the Foreign Language Department in cooperation with the Institute of Jewish Studies, Bureau of Jewish Education of Greater Buffalo, Inc.
Dr. Gerald Berkowitz, Director
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**HEB 101
ELEMENTARY HEBREW I**

3, 3/0; 1989-91 (H)
Fundamentals of Hebrew with emphasis upon speaking and reading. No previous knowledge of Hebrew necessary. Oral-aural method.

**HEB 102
ELEMENTARY HEBREW II**

3, 3/0; 1989-91 (H)
Prerequisite: HEB 101 or equivalent. Continuation of HEB 101.

**HEB 201
INTERMEDIATE HEBREW I**

3, 3/0; 1989-91 (GEE, upper level credit)
Prerequisite: HEB 102 or equivalent. Further development of the basic skills with emphasis upon reading and speaking. Oral-aural method.

**HEB 202
INTERMEDIATE HEBREW II**

3, 3/0; 1989-91 (GEE, upper level credit)
Prerequisite: HEB 201. Continuation of HEB 201. Completion of Habet Ushma method.

**HEB 301
HEBREW CONVERSATION AND
COMPOSITION I**

3, 3/0; 1989-91
Prerequisite: HEB 202 or equivalent. Practice in spoken and written Hebrew with emphasis upon the spoken language.

**HEB 302
HEBREW CONVERSATION AND
COMPOSITION II**

3, 3/0; 1989-91
Prerequisite: HEB 301 or equivalent. Advanced course in spoken and written Hebrew with selections from modern Hebrew literature and publications.

**HLI 102
INTRODUCTION TO HEBREW
LITERATURE**

3, 3/0; Sp 90 (GEE)
Major trends in 2,000 years of Hebrew literary creativity, with emphasis on the modern period; examination of major authors and analysis of their contributions to literary excellence, to Jewish thought, and to contemporary themes. Selections are studied in English translation.

**HLI 141
INTRODUCTION TO THE TALMUD**

3, 3/0; F 89
Introduction to the Talmud, the nature, structure, and development of the Talmudic literature. Representative selections on a variety of subject matters, both legal and narrative, analyzing the Talmudic method of interpreting the Bible.

**HLI 201
THE PENTATEUCH (WITH
COMMENTARIES)**

3, 3/0; Sp 90
Prerequisite: HLI 101 or permission of instructor. An introduction to the Five Books of Moses (Torah) based upon the most important selections of narrative, legislative, and religious (mythological) content, using modern and traditional commentaries.

**HLI 202
THE PROPHETIC BOOKS OF THE
HEBREW BIBLE**

3, 3/0; F 90
Prerequisite: HLI 101 or permission of instructor. Prophecy in ancient Israel; the development of prophecy in the context of relevant historical data; the interpretation of representative texts with the help of commentaries and historical documents.

Italian

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**ITA 101
ELEMENTARY ITALIAN**

3, 3/0; 1989-91 (H)
Fundamentals of Italian with emphasis on listening and speaking skills.

**ITA 102
ELEMENTARY ITALIAN**

3, 3/0; 1989-91 (H)
Prerequisite: ITA 101 or equivalent. Continuation of ITA 101.

**ITA 201
INTERMEDIATE ITALIAN**

3, 3/0; 1989-91 (GEE, upper level credit)
Prerequisite: ITA 102 or equivalent. Further development of the basic skills with emphasis on reading and writing.

**ITA 202
INTERMEDIATE ITALIAN**

3, 3/0; 1989-91 (GEE, upper level credit)
Prerequisite: ITA 201 or equivalent. Continuation of ITA 201.

**ITA 301
ITALIAN CONVERSATION AND
COMPOSITION**

3, 3/0; F 89, 90 (GEE)
Prerequisite: ITA 202 or equivalent. Practice in written and spoken Italian.

**ITA 302
ITALIAN CONVERSATION AND
COMPOSITION**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: ITA 202 or equivalent. Practice in written and spoken Italian.

**ITA 306
CONTEMPORARY ITALIAN
CIVILIZATION**

3, 3/0; F 90 (GEE)
Prerequisite: None, if offered in English; if offered in Italian, the prerequisite is ITA 202 or equivalent. An examination of cultural, intellectual, and social developments in Italy past and present. To be offered in English or Italian as noted in master schedule. When offered in English, this course may not be applied to the ITA minor.

**ITA 307
SURVEY OF ITALIAN LITERATURE**

3, 3/0; F 89, 90
Prerequisite: ITA 202 or equivalent. Readings and discussion of major works from the origins through the Cinquecento.

**ITA 308
SURVEY OF ITALIAN LITERATURE**

3, 3/0; Sp 90, 91
Prerequisite: ITA 202 or equivalent. Readings and discussion of major works from the Seicento through the Ottocento.

**ITA 401
DANTE'S DIVINA COMMEDIA**

3, 3/0; Sp 90
Prerequisite: An upper-division Italian course or permission of instructor. Study of selected cantos as an introduction to Dante's work and times.

**ITA 406
NINETEENTH-CENTURY ITALIAN
LITERATURE**

3, 3/0; F 89
Prerequisite: An upper-division Italian course or permission of instructor. Readings and discussions of representative works of poetry and novels.

**ITA 410
MODERN ITALIAN LITERATURE**

3, 3/0; Sp 91
Prerequisite: An upper-division Italian course or permission of instructor. Readings and discussions of representative novels and short stories of the twentieth century.

**ITA 450
DIRECTED READINGS I**

3, 3/0
Prerequisite: Permission of instructor. Variable topics.

**ITA 451
DIRECTED READINGS II**

3, 3/0
Prerequisite: Permission of instructor. Variable topics.

Latin

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**LAT 101
ELEMENTARY LATIN**

3, 3/0; F 89 (H)
Fundamentals of the Latin language with emphasis upon reading.

**LAT 102
ELEMENTARY LATIN**

3, 3/0; Sp 90 (H)
Prerequisite: LAT 101 or equivalent. Continuation of LAT 101.

**LAT 201
INTERMEDIATE LATIN**

3, 3/0; F 90 (GEE, upper level credit)
Prerequisite: LAT 102 or equivalent. Further development of reading and writing ability, with continuing emphasis on the comprehension of the written language.

**LAT 202
INTERMEDIATE LATIN**

3, 3/0; Sp 91 (GEE, upper level credit)
Prerequisite: LAT 201 or equivalent. Continuation of LAT 201.

See also: Classics

Polish

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**POL 101
ELEMENTARY POLISH**

3, 3/0; F 89, 90 (H)
Fundamentals of Polish; speaking, reading, and writing.

**POL 102
ELEMENTARY POLISH**

3, 3/0; Sp 90, 91 (H)
Prerequisite: POL 101 or equivalent. Continuation of POL 101.

**POL 201
INTERMEDIATE POLISH**

3, 3/0; F 89, 90 (GEE, upper level credit)
Prerequisite: POL 102 or equivalent. Further development of the basic skills with emphasis on reading and writing.

**POL 202
INTERMEDIATE POLISH**

3, 3/0; Sp 90, 91 (GEE, upper level credit)
Prerequisite: POL 201 or equivalent. Continuation of POL 201.

Russian

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**RUS 101
ELEMENTARY RUSSIAN**

3, 3/0; F 89, 90 (H)
Fundamentals of Russian: reading, speaking, and writing.

**RUS 102
ELEMENTARY RUSSIAN**

3, 3/0; Sp 90, 91 (H)
Prerequisite: RUS 101 or equivalent. Continuation of RUS 101.

**RUS 101
INTERMEDIATE RUSSIAN**

3, 3/0; F 89, 90 (GEE, upper level credit)
Prerequisite: RUS 102 or equivalent. Further development of the basic skills with emphasis upon reading and writing.

**RUS 202
INTERMEDIATE RUSSIAN**

3, 3/0; Sp 90, 91 (GEE, upper level credit)
Prerequisite: RUS 201 or equivalent. Continuation of RUS 201.

Spanish

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**SPA 100
BEGINNING CONVERSATIONAL
SPANISH**

3, 3/0; Sp 90
A beginning Spanish course with a video component. Designed for students with no previous training in the language. Prior to class, students are individually responsible for viewing videotapes for at least one hour each week. (Note: For those who continue the study of Spanish, this course is the equivalent of SPA 101, the prerequisite for SPA 102.)

**SPA 101
ELEMENTARY SPANISH**

3, 3/0; 1989-91 (H)
Fundamentals of Spanish with emphasis on speaking and listening skills.

**SPA 102
ELEMENTARY SPANISH**

3, 3/0; 1989-91 (H)
Prerequisite: SPA 101 or equivalent. Continuation of SPA 101.

**SPA 201
INTERMEDIATE SPANISH**

3, 3/0; 1989-91 (GEE, upper level credit)
Prerequisite: SPA 102 or equivalent. Further development of basic skills with increasing emphasis on reading and writing.

**SPA 202
INTERMEDIATE SPANISH**

3, 3/0; 1989-91 (GEE, upper level credit)
Prerequisite: SPA 201 or equivalent. Continuation of SPA 201.

**SPA 204
SPANISH FOR NATIVE SPEAKERS**

3, 3/0; F 89, 90
Prerequisite: Spanish for Spanish Speakers exam; contact E. Rosario, EOP, Ext. 4426 or 6029, or C. Kirby, Foreign Language Department, Ext. 4837 or 5414. An overview of the Spanish language and a study of Spanish grammar, lexicon, and sound system that will enhance bilingual students' effectiveness in oral and written communication in Spanish, especially in academic and formal style. Emphasis placed on spelling, sound system, mechanics, vocabulary, and reading. Student may not earn credit for both SPA 201 and SPA 204.

**SPA 205
SPANISH FOR NATIVE SPEAKERS**

3, 3/0; Sp 90, 91
Prerequisite: Spanish for Spanish speakers exam; contact E. Rosario, EOP, Ext. 4426 or 6029, or C. Kirby, Foreign Language Department, Ext. 4837 or 5414. An overview of the Spanish language and a study of Spanish grammar, lexicon, and sound system that will enhance bilingual students' effectiveness in oral and written communication in Spanish, especially in academic and formal style. Emphasis placed on oral expression, grammar, and composition, and differences between formal and informal language. Student may not earn credit for both SPA 202 and SPA 205.

**SPA 301
SPANISH CONVERSATION AND
COMPOSITION**

3, 3/0; 1989-91 (GEE)
Prerequisite: SPA 202 or equivalent. Practice in spoken and written Spanish with emphasis on the written language.

**SPA 302
SPANISH CONVERSATION AND
COMPOSITION**

3, 3/0; 1989-91 (GEE)
Prerequisite: SPA 202 or equivalent. Practice in spoken and written Spanish with emphasis on the spoken language.

**SPA 305
SPANISH PHONETICS**

3, 3/0; F 89, 90
Prerequisite: SPA 301-302 or equivalent. An analysis of the speech sounds of Spanish. A consideration of comprehension and pronunciation difficulties caused by differences in the sound systems of English and Spanish. Exercises aimed at improvement of pronunciation and intonation.

**SPA 306
THE CIVILIZATION OF SPAIN**

3, 3/0; F 90 (GEE)
Prerequisite: SPA 301 or 302 or permission of instructor. A consideration of the culture of the Spanish people. A focus on their achievements, customs, and way of life as affected by geographic, historical, political, and economic factors.

**SPA 307
SURVEY OF SPANISH LITERATURE**

3, 3/0; F 90
Prerequisite: SPA 301 or 302 or permission of instructor. The Middle Ages through the Golden Age.

**SPA 308
SURVEY OF SPANISH LITERATURE**

3, 3/0; Sp 91
Prerequisite: SPA 301 or 302 or permission of instructor. The eighteenth century to the present.

**SPA 309
THE CIVILIZATION OF
LATIN AMERICA**

3, 3/0; F 89 (GEE)
Prerequisite: SPA 301 or 302 or permission of instructor. A consideration of the culture of the Latin American people. A focus on their achievements, customs, and way of life as affected by geographic, historical, political, and economic factors.

**SPA 310
SURVEY OF SPANISH-AMERICAN
LITERATURE**

3, 3/0; F 89
Prerequisite: SPA 301 or 302 or permission of instructor. The Colonial period through Romanticism.

**SPA 311
SURVEY OF SPANISH-AMERICAN
LITERATURE**

3, 3/0; Sp 90
Prerequisite: SPA 301 or 302 or permission of instructor. Realism to the present.

**SPA 317
BUSINESS SPANISH**

3, 3/0; Sp 90, 91
Prerequisite: SPA 301 or 302 or equivalent. An introduction to Spanish commercial language. Extensive practice in translating and composing Spanish business communications.

**SPA 408
20th-CENTURY SPANISH LITERATURE:
POETRY AND THEATER**

3, 3/0; Sp 90
Prerequisite: SPA 308 or permission of instructor. A study in the appreciation, analysis, and criticism of the major trends in the development of Spanish poetry and theater of the twentieth century.

**SPA 411
SPANISH-AMERICAN LITERATURE OF
THE 19th AND 20th CENTURIES: NOVEL,
SHORT STORY AND ESSAY**

3, 3/0; F 90
Prerequisite: SPA 310, 311, or permission of instructor. Study of the major trends in these genres in the context of the cultural diversity of the hemisphere.

**SPA 415
ADVANCED GRAMMAR AND
COMPOSITION**

3, 3/0; Sp 90, 91
Prerequisite: SPA 301-302 or permission of instructor. Elements of stylistics and selected grammar topics. Special attention given to common errors of English speakers. Recommended for secondary education majors.

**SPA 496
SENIOR SEMINAR I**

3, 3/0; F 89
Prerequisite: Permission of instructor. Topic to be chosen by the instructor.

**SPA 497
SENIOR SEMINAR II**

3, 3/0; Sp 91
Prerequisite: Permission of instructor. Topic to be chosen by the instructor.

Swahili

Offered by the Foreign Language Department
DR. MICHAEL JOHNSON, Chairperson
Bishop Hall 126

**SWA/AAS 101
ELEMENTARY SWAHILI**

3, 3/0; F 89, 90 (H)
Study of the fundamentals of Swahili with emphasis on the spoken language.

**SWA/AAS 102
ELEMENTARY SWAHILI**

3, 3/0; Sp 90, 91 (H)
Prerequisite: SWA 101 (AAS 101) or permission of instructor. Continuation of SWA 101 (AAS 101), with emphasis on writing and reading.

**SWA/AAS 201
INTERMEDIATE SWAHILI**

3, 3/0 F 89, 90 (GEE, upper level credit)
Prerequisite: SWA 102 (AAS 102), or permission of instructor. Further development of the basic skills, with emphasis on reading, writing, and casual conversation.

**SWA/AAS 202
INTERMEDIATE SWAHILI**

3, 3/0 Sp 90, 91 (GEE, upper level credit)
Prerequisite: SWA 201 (AAS 201) or permission of instructor. Continuation of SWA 201 (AAS 201), with emphasis on casual and formal speaking as well as fast translation.

Geography

Offered by the Geography and Planning Department
ELBRIDGE A. RENNING JR., Chairperson
Classroom Building A 213

**GEG 101
MAN'S NATURAL ENVIRONMENT**

3, 3/0; 1989-91 (SS)
Nature of geography; earth-sun relationship; maps and map interpretation; and classification, distribution, and origins of the major elements of the natural environment: weather, climates, soils, natural vegetation, and landforms. *Required of Geography majors.

**GEG 102
MAN'S CULTURAL ENVIRONMENT**

3, 3/0; 1989-91
Introduction to cultural geography and the cultural landscape. An examination of the distribution of value systems, ethnicity, religion, language, population, and politics as indices of human variety; an introduction to evolution of rural and urban socioeconomic patterns. *Required of all Geography majors.

**GEG 104
ECONOMIC GEOGRAPHY**

3, 3/0; Sp 90 (GEE)
An introduction to economic geography focusing on the location of economic activities — retail trade and services, manufacturing and agriculture. The role of communication and transportation in economic location is also examined.

**GEG 107
RESOURCES AND MAN**

3, 3/0; 1989-91 (SS)
A geographical analysis of man's use and misuse of natural resources; air, water, soils, vegetation, animal life, minerals, and energy sources. Problems are placed in a world context but emphasis is on the United States.

**GEG 199/SST 199
COMPUTER IN SOCIAL SCIENCE**

3, 3/0; F 89, 90
See description listed under SST 199.

**GEG 200
INTRODUCTION TO
REGIONAL GEOGRAPHY**

3, 3/0; Sp 90 (SS)
An introduction to the geographic analysis of selected world regions. Emphasis is placed upon providing the student with an understanding of the regions' major natural environmental features (terrain, climate, natural vegetation, and soils) as well as how these features relate to and influence man's occupancy of each region.

**GEG 202
GEOGRAPHY OF THE UNITED STATES
AND CANADA**

3, 3/0; F 89, 90 (GEE)
Analysis of the basic geographic elements of North America including the natural environment, natural resources, economic activities, population, and urbanization.

**GEG 203
GEOGRAPHY OF MIDDLE AMERICA**

3, 3/0; Sp 91 (SS)
Physical, cultural, historical and regional geography of Mexico, Central America, and the West Indies; emphasis on man's relationship to the natural environment.

**GEG 205
GEOGRAPHY OF ASIA**

3, 3/0; F 89 (SS)
Excludes the Soviet Union. Regional divisions; landform, climate, and natural resources; cultural and economic geography; social and political problems related to the natural environment; industrial development. *Open to sophomores, juniors, and seniors.

**GEG 206
GEOGRAPHY OF NEW YORK STATE**

3, 3/0; 1989-91 (SS)
Landforms, regions, climates, and natural resources; distribution of population; location and functions of the cities; development of transportation; utilization and conservation of soil, mineral, forest, wildlife, and water resources; industrial development.

**GEG 303
WORLD CLIMATOLOGY**

3, 3/0; Sp 91
Prerequisite: GEG 101. Discussion of world climatic regions. Fundamentals of climate classification systems. Classification, distribution, and comparative analysis of world climatic regions. *Required of Track 1 (physical geography/conservation) geography majors.

**GEG 304
MAP INTERPRETATION**

3, 3/0; F 89, 90 (GEE)
History of maps; types of maps; techniques of map interpretation; methods of developing map-reading skills.

**GEG 305
PRINCIPLES OF ECONOMIC
GEOGRAPHY**

3, 3/0; F 89, 90 (GEE)

Prerequisite: Junior or senior and ECO 202.

An introduction to the theoretical study of economic geography; utilizing the approach of location theory, the course develops a theoretical spatial distribution of economic activities, including: agriculture, manufacturing, urban land use, services, and transportation. *Required of urban-regional analysis and planning majors and of Track 3 (urban/economic) geographic majors.

**GEG 307
CONSERVATION AND
ENVIRONMENTAL MANAGEMENT**

3, 3/0; Sp 90, 91 (SS)

Discussion of natural, human, and cultural resources; concepts and philosophy of conservation; problems and strategies in environmental management and resources considered. *Required of Track 1 (physical geography/conservation) majors.

**GEG 309
INTRODUCTION TO
URBAN GEOGRAPHY**

3, 3/0; 1989-91 (SS)

Spatial arrangement of land uses existing within the American city; differences of American cities of function, size and location; dynamics of change in city structures; central place theory and urban structures. *Required for urban regional analysis and economic geography majors and Track 3 (urban/economic) geography majors.

**GEG 310
GEOGRAPHY OF TRANSPORTATION**

3, 3/0; Sp 90

Geography of urban transportation; factors affecting the location and economics of cities; intraurban mass transit; highways, rail, air transportation. Planning and techniques of transportation and transit.

**GEG 313
AIR PHOTO INTERPRETATION**

3, 3/0; Sp 90

Prerequisite: One of GEG 101, 102, GES 101 or PLN 315. Techniques of aerial photography interpretation as applied to natural and man-made environments; technical aspects of obtaining and using aerial photographs and remote sensing.

**GEG 320
HISTORICAL GEOGRAPHY OF THE
UNITED STATES**

3, 3/0; Sp 90 (GEE)

The approach and methods of historical geography; exploration and discovery; regional variation of cultural landscapes; origin and dispersals of selected cultural traits. *Required of Track 2 (historical cultural) geography majors.

**GEG 322
GEOGRAPHY OF WORLD HUNGER**

3, 3/0; 1989-91 (GEE)

The dimensions of world hunger; a geographical analysis of factors contributing to world hunger: population growth, destruction of the natural environment, limited amount of arable land, natural disasters, political-social-economic conflicts, distribution problems, etc.; steps taken to alleviate world hunger; and a geographical examination of the world's major hunger areas.

**GEG 330
LAND RESOURCE ANALYSIS &
PLANNING**

3, 3/0; F 90

Prerequisite: PLN 315; junior or senior.

Analysis of the principles of land resource management with emphasis upon land use patterns, controls and policy. Attention is given to urban, suburban and rural land use situations. Required of urban-regional analysis and planning majors.

**GEG 350
COMPARATIVE CANADIAN-U.S.
METROPOLITAN SYSTEMS**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: Junior or senior. Contrasts between the spatial structure and functions of Canadian and U.S. cities, and the reasons why; historical processes, ethnic and housing patterns, retail structure, transportation, metropolitanization and metropolitan government, and planning processes. Buffalo will be compared with Toronto and Kitchener-Waterloo, Ontario. Field trips to these areas will constitute an integral part of the course.

**GEG 351
GEOGRAPHY OF AFRICA**

3, 3/0; Sp 90

Prerequisite: Junior or senior. An introduction to the geography of Africa through a systematic discussion of selected prominent environmental and cultural characteristics of the continent and its people. Topics include the physical environment, historical development, population, and economic activities.

**GEG 352
GEOGRAPHY OF EUROPE**

3, 3/0; F 90 (SS)

Excludes the Soviet Union. Physiographic regions, landforms, climate, natural vegetation, soils, and drainage patterns; major economies and their relationships to the natural environment; interdependence of regions.

**GEG 353
GEOGRAPHY OF THE SOVIET UNION**

3, 3/0; Sp 91 (SS)

Physiographic regions; landforms, climate, natural vegetations, soils, and drainage pat-

terns; major economies and their relationship to the natural environment; problems resulting from changes in land use; interdependence of regions.

**GEG 356
FIELD STUDIES IN BUFFALO AND
WESTERN NEW YORK**

3, 3/0; summers only

Through lectures and walking tours, students gain firsthand exposure to geographic field work and analysis. Emphasis on impact of past landscapes on present land and relationship between economic, social and physical aspects of place.

**GEG 357
GEOGRAPHY OF BUFFALO AND THE
NIAGARA FRONTIER**

3, 3/0; F 89, 90, Sp 91 (GEE)

Explores the people, problems, and interesting places of Buffalo and the Niagara Frontier. Emphasis on qualities of physical site and cultural situation. Studies the relationship of the urban Niagara Frontier with nearby urban areas in North America. A field trip experience is an integral part of the course.

**GEG 401
DEVELOPMENT OF GEOGRAPHIC
THOUGHT**

3, 3/0; Sp 90

Seminar on the development of geographic thought and methodology from the ancient Greeks to modern times. Discusses the evolution of schools of thought among the Greeks, Romans, Medieval Europeans, Arabs, and Moslems. *Required of Geography majors.

**GEG 405
ADVANCED URBAN GEOGRAPHY**

3, 3/0; F 89

Prerequisite: GEG 309. Growth of cities in a national system; relationships between cities; regional growth within the national system; central place theory and urban hierarchies; role of urban geography in urban planning; and the role of planning on a regional scale.

**GEG 409
GEOGRAPHY OF MANUFACTURING**

3, 3/0; Sp 91

Prerequisite: GEG 305; junior or senior. Analysis of manufacturing of developed economies as illustrated by reference to the United States, location theory, location decision making process, and location factors including labor, transport, taxes and government incentives.

**GEG/ECO 411
REGIONAL AND ECONOMIC ANALYSIS**

3, 3/0; offered based on staff availability

See description listed under ECO 411.

**GEG 413
CARTOGRAPHY**

3, 3/0; Sp 91

Drafting set and tools required.

Prerequisite: GEG 101. History of cartography, use of drafting materials; the study and construction of map projections and cartograms; principles of map reproduction. *Required of geography majors.

**GEG 415
PROSEMINAR**

3, 3/0; offered based on staff availability

Prerequisite: Permission of instructor. One seminar, appropriate to the major's track is required of Track 1 (physical geography/conservation) geography majors. Investigation, examination, and discussion of topics of current interest in geography. Techniques and analysis of geographic research.

**GEG 420/ECO 420
ECONOMIC EVALUATION OF WATER
RESOURCES**

3, 3/0; F 90

Prerequisite: PLN 315 and ECO 202. An examination of the process, procedures and regulations affecting the evaluation of water resources projects as practiced by water resource planning and development agencies of the U.S. government. Emphasis will be placed upon the benefit-cost methodology.

**GEG 495
PROJECT****GEG 499
INDEPENDENT STUDY**

Health, Physical Education, and Recreation

Offered by the Health, Physical Education and Recreation Department
DR. DONALD E. BARR, Chairperson
Houston Gym 204

Also see Recreation listings.

**PHYSICAL EDUCATION
HPR 100 Series**

The college currently requires completion of two semesters of courses selected from the following HPR-100 series. Each course (1) meets the equivalent of two hours per week for one-hour credit; (2) includes instruction in techniques, rules, and tactics; (3) involves written and skill evaluations; (4) is offered generally every semester except for II levels, which de-

pend on demand, and HPR 124, 125, 128, and 129, offered spring semester only.

Those courses designated with "I" are for students with limited previous experience. Those designated "II" require previous experience in the form of a semester course or permission of instructor.

HPR 200 (2 credits) also can be used to fulfill the physical education requirement. In this case, only this one course is needed.

Health science and other theory courses do not satisfy the above physical education requirement.

Students may elect up to four additional courses for graduation credit.

HPR 100 Special Project

Limited selection for certain PE experiences not included in the list below. Necessary form must be obtained from HPER office and chairperson's approval secured prior to the registration.

COED PHYSICAL EDUCATION**Individual**

- 100 Special Project
- 101 Individual Physical Education
- 102 Archery I
- 106 Bowling I
- 110 Golf I
- 114 Jogging for Physical Fitness
- 118 Self Defense I
- 119 Self Defense II
- 122 Skiing Conditioning (Fee)
- 124 Skiing I (slopes) (Fee)
- 125 Skiing II (slopes) (Fee)

Dual/Team

- 128 Cross-Country Skiing (Fee)
- 129 Advanced Cross-Country Skiing
- 136 Badminton I
- 137 Badminton II
- 140 Fencing I
- 141 Fencing II
- 144 Tennis I
- 148 Volleyball I
- 149 Volleyball II

Swimming

- 151 Swimming — Nonswimmers
- 152 Swimming — Beginners
- 153 Swimming — Intermediate
- 154 Fitness Through Swimming
- 155 Life Saving

Students must be of intermediate swimmer level or secure permission of instructor. American Red Cross course requirement must be met.

- 156 Basic SCUBA Diving (Fee)
Prerequisite: see instructor
- 157 Assistant SCUBA Instructor (Fee)
Prerequisite: see instructor

Dance

- 160 Aerobic Movement
- 162 Ballroom Dance
- 164 Folk Dance I
- 165 Folk Dance II
- 166 Jazz Dance
- 167 Jazz Dance II
- 168 Tap Dance
- 170 Modern Dance I
- 171 Modern Dance II

Women

- 175 Stunts and Tumbling
- 176 Gymnastics (stunts-apparatus)
- 178 Field Hockey
- 180 Physical Fitness I
- 182 Racquetball

Men

- 190 Aquatic Sports
- 192 Fencing — Sabre & Epee
- 194 Handball
- 196 Racquetball
- 198 Weight Training

A course may not be repeated for credit. Students may challenge HPR 102, 106, 155 by applying to HPER Department by the second week of the semester, and following the assigned reading, knowledge test, and performance test procedure as scheduled.

ELECTIVE AND PROFESSIONAL

A minor in coaching is offered. See the required programs in the section on minors.

The pattern of courses to meet the coaching requirement, approved by the State Education Department, includes HPR 300, 301, 335, plus one more of the HPR 202-209 Techniques and Theories (of Sports).

**HPR 200
PHYSICAL EDUCATION:
CONTEMPORARY MOVEMENTS
CONCEPTS**

2, 2/0

A series of lecture/discussion sessions, laboratory experiences and specific movement experiences presenting the HOW, WHAT and WHY of physical activity and exercise. Fulfills the two-credit physical education requirement.

**HPR 202
TECHNIQUES AND THEORIES OF
SOCCER**

3, 3/0; offered based on staff availability

A complete analysis of the sport of soccer with particular emphasis on history, present status, rules, techniques, and theories.

**HPR 203
TECHNIQUES AND THEORIES OF
FOOTBALL**

3, 3/0; offered based on staff availability

A complete analysis of the sport of football with particular emphasis on history, present status, rules, techniques, and theories.

**HPR 204
TECHNIQUES AND THEORIES OF
TRACK AND FIELD**

3, 3/0; offered based on staff availability
A complete analysis of the sport of track and field with particular emphasis on history, present status, rules, techniques, and theories.

**HPR 207
TECHNIQUES AND THEORIES OF
BASEBALL**

3, 3/0; offered based on staff availability
A complete analysis of the sport of baseball with particular emphasis on history, present status, rules, techniques, and theories.

**HPR 208
TECHNIQUES AND THEORIES OF
SWIMMING**

3, 3/0; offered based on staff availability
A complete analysis of the sport of swimming with particular emphasis on history, present status, rules, techniques, and theories.

**HPR 209
TECHNIQUES AND THEORIES OF
BASKETBALL**

3, 3/0; Sp 90, 91
A complete analysis of the sport of basketball with particular emphasis on history, present status, rules, techniques, and theories.

**HPR 210
WATER SAFETY INSTRUCTION**

3, 3/0 (2 cl. in pool); Sp 90, 91
Prerequisite: HPR 155 or current lifesaving card. A course in the knowledge and techniques of aquatic instruction, principles of site selection, class organization, teaching progressions, drill, and skill instruction. Successful completion would lead to certification by the American Red Cross in water safety instruction. *Students may challenge HPR 210 by applying to HPER Department by the announced date each semester, and following the assigned reading and knowledge test procedure as scheduled.

**HPR 250
MOVEMENT AND MEANING:
INTRODUCTION TO THE ART &
SCIENCE OF HUMAN MOVEMENT**

3, 3/0; F 89, 90 (SS)
Critical orientation to the discipline of physical education, philosophical and historical perspectives; psychological, sociological, physiological foundations.

**HPR 300
ATHLETICS IN EDUCATION**

3, 3/0; Sp 90, 91 (SS)
Prerequisite: Sophomore. A study of the philosophy and principles of athletics in education. A required course for students choosing either to meet minimal state standards for the coaching requirement or to concentrate in a selected area of coaching.

**HPR 301
BIOMECHANICAL PRINCIPLES OF
HUMAN MOVEMENT**

3, 3/0; F 89, 90
Prerequisite: Sophomore. Study of selected anatomical, physiological, and mechanical principles of movement and their application to human motion. *Required for the coaching requirement.

**HPR 305
MOTOR DEVELOPMENT**

3, 3/0; offered based on staff availability
A study of the development basis of physical activity.

**HPR 311
GAMES FOR SCHOOL AND
PLAYGROUND**

3, 3/0; offered based on staff availability
Prerequisite: HPR 250 for P.E. concentration. Participation in, analysis and recording of, a variety and progression of games, skill activities and sports lead-ups suitable for "play" situation in the home, school, and community setting.

**HPR 312
CREATIVE AND TRADITIONAL DANCE
FOR CHILDREN**

2, 2/0; offered based on staff availability
Prerequisite: Sophomore standing or HPR 250. Participation in the exploratory study of creative and traditional dance for children.

**HPR 315
AQUATICS FOR THE
EXCEPTIONAL CHILD**

2, 2/0; offered based on staff availability
Prerequisite: Intermediate or higher swim level. Lecture and laboratory experience in adapting the skill and teaching methods of swimming for the exceptional child. American Red Cross certification is possible.

**HPR 316
DEVELOPMENTAL MOTOR ACTIVITIES
FOR EARLY CHILDHOOD**

3, 3/0; offered based on staff availability (GEE)
Prerequisite: PSY 101 or EDU 210. The exploratory study of developmental motor activities and materials for early childhood.

**HPR 319/SOC 324
SOCIOLOGY OF SPORT**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. The study of sport and related social phenomena of social statuses, norms, goals, values, and organizational network.

**HPR 325
PHYSICAL EDUCATION FOR
CHILDREN**

3, 4/0; offered based on staff availability
Prerequisite: Upperclass. Lecture and laboratory experiences stressing development of the child through physical education activities.

**HPR 330
PHYSICAL EDUCATION AND
RECREATION FOR THE EXCEPTIONAL
CHILD**

3, 3/0; offered based on staff availability
Prerequisite: EXE 300 or upperclass. Lecture and laboratory experiences in adapting the skills and teaching methods of physical education and recreation for the exceptional child.

**HPR 335
PREVENTION AND CARE
OF ATHLETIC INJURIES**

3, 3/0; offered based on staff availability
The study of the relationship between conditioning, performance and injury prevention. Includes techniques and programs of body conditioning for specific sports, as well as the possible treatment of athletic injuries. *Required to meet minimum state standards for the coaching requirement.

**HPR 345
PHYSICAL FITNESS AND AGING**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: Junior. Designed to acquaint students of gerontology with the implications of exercise and physical fitness for the quality of life of older citizens. The course deals with 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.

**HPR 495
PROJECT****HPR 499
INDEPENDENT STUDY**

Health Sciences

Offered by the Health, Physical Education and Recreation Department
DR. DONALD E. BARR, Chairperson
Houston Gym 204

**HSC 204
PERSONAL AND COMMUNITY HEALTH**

3, 3/0; offered based on staff availability (SS)
Develop a deeper understanding of the many

problems and advances in medicine and public health as they affect the student's own personal health status and that of the individual, family, school, and community.

**HSC 310
ADVANCED FIRST AID
AND EMERGENCY CARE**

3, 3/0; Sp 90, 91
Prerequisite: BIO 311 or permission of instructor. This course is designed to promote Advanced First Aid training and competencies in various areas of emergency medicine including, bandaging, splinting, victim examination and emergency childbirth. American Red Cross certification in Advanced First Aid and Cardiopulmonary Resuscitation will be awarded upon successful completion of the course.

**HSC 320
PSYCHOACTIVE DRUGS AND HEALTH**

3, 3/0; 1989-91 (GEE)
Prerequisite: Sophomore standing. Emphasis is placed upon development of an understanding of the widespread effects of abusive use of drugs, their relationship to health and disease, and the implication and application for education and theory. *Students may challenge HSC 320 by applying to HPER Department by the announced date each semester and following the assigned reading and knowledge test procedure as scheduled.

**HSC 425
ALCOHOL PROBLEMS**

3, 3/0; offered based on staff availability
Prerequisite: Upperclass. A seminar designed for students as prospective citizens, teachers, supervisors, and voluntary governmental personnel concerned with individual and community health problems. Emphasis placed upon development of an understanding of the widespread effects of alcohol, its relationship to health and disease, and the implication for health and therapy.

**HSC 495
PROJECT****HSC 499
INDEPENDENT STUDY**

History

Offered by the History and Social Studies Education Department
DR. MONROE FORDHAM, Chairperson
Classroom Building C205

**HIS 101
UNITED STATES IN
THE TWENTIETH CENTURY**

3, 3/0; 1989-91 (SS)
Political reform and reaction; isolationism, in-

terventionism, and internationalism in foreign relations; big government, industry, and labor; revolution in foreign policy, national security in the nuclear age; social and intellectual ferment in a pluralistic society. Students may take either HIS 101 or HIS 107 but not both. They will only receive credit for one of these courses.

**HIS 106
HISTORY OF AMERICAN LIFE I**

3, 3/0; 1989-91 (SS)
Exploration and colonization; the meeting of cultures; Colonial America; prologue to independence; independence and the new nations; Jeffersonian Republicanism; nationalism and economic expansion; 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 the war.

**HIS 107
HISTORY OF AMERICAN LIFE II**

3, 3/0; 1989-91 (SS)
The New South; reunion and readjustment; the end of the old frontier; the economic revolution; the urban society; American politics in the gilded age; America's emergence as a world power; the progressive era; World War I and its aftermath; abandonment of isolation; World War II; the cold war; the Eisenhower years; America since 1960. Students may take either HIS 101 or HIS 107 but not both. They will only receive credit for one of these courses.

**HIS 110
HISTORY AND IDEAS**

3, 3/0 (GEE)
Topics and problems in history developed in an historical frame of reference with course attention devoted to methods and techniques of historical analysis articulating and writing critiques; class discussion and interaction.

**HIS 115
FOUNDATIONS OF
WESTERN CIVILIZATION**

3, 3/0; 1989-91 (SS)
Major contributions of the Greek, Roman, and Medieval civilizations to the creation of our western heritage in philosophy, art, literature, science, political structure, economy and law.

**HIS 116
EUROPE SINCE 1500**

3, 3/0; 1989-91 (SS)
Growing concern of man and his relation to his world; development of nationalism, the concepts of freedom and democracy; increasing attention to the spirit of inquiry; scientific development and technology and their impact on society; the formulation of fascism, communism, socialism and the concern for political ideology.

**HIS 117
TWENTIETH CENTURY EUROPE**

3, 3/0; 1989-91 (SS)

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; the western democracies between the wars; the road to World War II; restoration of the Atlantic Community, and the challenge of the nuclear age.

**HIS 121
INTRODUCTION TO JEWISH HISTORY
AND HISTORIOGRAPHY**

3, 3/0; 1989-91 (GEE)
The ancient Near East; the Bible as history; Moses and the prophets; daily life in Bible times; Jesus and the rise of Pauline Christianity; the fall of the Jewish state; Jews in exile.

**HIS 155
WORLD WAR II**

3, 3/0; 1989-91 (GEE)
Delineates the factors which led to the outbreak of the war; the conduct of the war from its continental phase through its spread to global dimensions. Campaigns, theaters of operations as well as the process of decision-making by both Allied and Axis Powers constitute the substance of the course.

**HIS 201
THE AGE OF DISCOVERY**

3, 3/0; Sp 90, 91 (GEE)
Classical and Medieval background of the Age of Discovery; myth and reality of cosmography at the beginning of the Great Age of Discovery; early travelers; technological innovation; economic, social, and cultural forces supporting discovery and exploration; Portuguese, Spanish, French, and English voyages; impact of discovery on economic, literary, artistic, and cultural conditions; New World on the eve of period of colonization.

**HIS 206
A HISTORY OF POLAND**

3, 3/0; F 89, 90 (GEE)
An examination of major Polish historical and cultural achievements through the ages, the growth and development of the nation and state, scientific, cultural and religious forces in Polish life.

**HIS 207
IMPERIAL SPAIN**

3, 3/0 (GEE)
Ferdinand and Isabella unify Spain; rise of the Spanish empire; Columbus, Cortes and the conquest of Spanish America; Charles V and Spain's domination of Europe; the Spanish colonial system in America; the problems of Philip II; war with England; revolt in the Netherlands; decline of Spain under the later Hapsburgs; reform and revolution in the 18th century; Spanish America's wars for independence.

**HIS 208
HISTORY OF ENGLAND SINCE 1485****3, 3/0 (GEE)**

Rise and transition of representative, parliamentary government; commercial and industrial development; social, intellectual, and economic trends manifested through literature, art, the press, and other social agencies; transition from empire to commonwealth of nations; impact abroad of such concepts as mercantilism, laissez-faire, classical economics, and collectivism.

**HIS 210
HISTORY OF MODERN ASIA****3, 3/0; 1989-91 (SS)**

China, Japan, and Southeast Asia in modern times; rise of nationalism, internal social and political conflict, response to western powers; impact of ideology and totalitarianism; industry and technology and the problems of international wars.

**HIS 211
HISTORY OF MODERN AFRICA
SINCE 1919****3, 3/0 (SS)**

Partition of Africa by European nations; impact of colonial regimes; African resistance movements; drive toward independence; problems of economic and social change; cultural and intellectual currents in Modern Africa.

**HIS 212
HISTORY OF THE JEWS IN EUROPE****3, 3/0; Sp 90, 91 (GEE)**

A history of European Jews from 70 A.D. to the end of the nineteenth century. Considers Jewish communities in Roman and Byzantine Empires, in Reconquest Spain and feudal Europe, and during the Renaissance, Enlightenment and post-Napoleonic periods. Analyzes patterns of religious intolerance in European history.

**HIS 213
HISTORY OF CITIES****3, 3/0; F 90 (GEE)**

Cities and their development, the making of cities in a historical context, the geo-political impetus to development of cities as well as the historical economic necessities in a developing society; case examples of city development include the developing politics, the social structure, the relationship to environment, the impact of structure and location on attitudes, problems unique and general in modern cities.

**HIS 215
HISTORY OF CHRISTIAN THOUGHT****3, 3/0; F 90 (GEE)**

An analysis of classic and current Catholic Orthodox, Anglican and Protestant explanations of major Christian ideas. Such concepts as the nature of revelation; the nature of man; evil; authority; historicity and eschatology; and worship.

**HIS 220
CLASSICAL GREECE AND ROME****3, 3/0; Sp 90 (GEE)**

An examination of the development of Greece, the western Hellenistic world and the Roman Empire with emphasis on cities, economic development, technology, social change, and ideas.

**HIS 222
THE AMERICAN REVOLUTION****3, 3/0; F 89, 90 (GEE)**

Historiographical approaches to the American Revolution; ideological origins of revolutionary America; the British Empire and the growth of American discontent after 1760; a decade of crisis, 1765-1775; America's war for independence, 1775-1783; the revolution's impact on American society; revolutionary politics, 1775-1787.

**HIS 260
THE TURBULENT SIXTIES****3, 3/0; F 89, 90 (GEE)**

Overview from the end of World War II (1945-1960); incisive political, economic, social, cultural and diplomatic analysis of the years 1960-1974. Topics covered include: the Black Revolution, Martin Luther King, Malcolm X and others; John F. Kennedy, the New Frontier, the Cuban Crisis, Berlin Wall, assassination; the Vietnam War; the Johnson administration; student protests, university take-overs and the commune movement; the Nixon administration, Watergate, the President's resignation; the oil crisis and the recession of 1974.

**HIS 301
COUNTER CULTURE/UTOPIAS****3, 3/0; Sp 90 (GEE)**

The idea of utopian societies; the utopian communities; leaders and followers; relation of idealism to economic, social, political, and religious conditions; the phenomenon of modern commune development in the United States; young people and counterculture.

**HIS 302
HISTORY OF WOMEN IN AMERICA****3, 3/0; F 89, 90 (GEE)**

The impact of women on American development from colonial time 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; our society's regard for women in an historical context; and the differences and/or similarities between women from various ethnic, racial, religious and socio-economic groups.

**HIS 303
THE CITY IN AMERICAN HISTORY****3, 3/0; Sp 90, 91 (GEE)**

Topics covered include: historical background; colonial period; formation of a new nation;

towns in westward expansion; industrialization; political machines; municipal reform; the city in American thought; twentieth century developments; the contemporary scene.

**HIS 304
EUROPE FROM NAPOLEON TO THE
FIRST WORLD WAR****3, 3/0; F 89 (GEE)**

Major influences in nineteenth-century Europe; nationalism, imperialism, Industrial Revolution, democracy, and socialism; causes of World War I.

**HIS 306
HISTORY OF AFRICA TO 1919****3, 3/0; F 90 (GEE)**

Prerequisite: HIS 115 or permission of instructor. Indigenous development and early empires of Africa; the impact of Islam; Western contact pean colonialisms; the partition of Africa and Colonial administrative policies of the European powers; the wanings of European power as a result of World War I.

**HIS 308
HISTORY OF CANADA****3, 3/0; Sp 90, 91**

The establishment of France and England in Canada; the impact of national developments in the United States and the status of Canada; the social, ethnic, cultural, economic, and political growth of Canada; the significance of French Quebec in Canadian development; Canada's unique experience with democracy and nationalism under the influence of England, France, and the United States.

**HIS 309
AMERICAN LEADERS****3, 3/0; Sp 90**

A study of 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. DuBois—contrasting Negro leaders; Lincoln Steffens and the muckrakers; Henry Ford and mass production.

**HIS 310
HISTORY OF THE FAR EAST: THE
TRADITIONAL ERA****3, 3/0; F 89, 90 (GEE)**

Prerequisite: Junior or senior. China, Korea, and Japan before the coming of the West; traditional cultures, geography, political and religious institutions; impact of western ideas and colonialism.

**HIS 311
AMERICAN IMMIGRATION AND
EMIGRATION****3, 3/0; offered based on staff availability**

From colonial times to the present; American immigration policies; the people who came and who left the U.S.; the process of assimilation; problems of immigration and emigration.

**HIS 312
HISTORY OF ITALY****3, 3/0**

Italy after the barbarian invasions; the Empire and the Papacy; formation of Italian city states; Renaissance society and cultures; problems of Italian unification; Italian parliamentary democracy; the Fascist experiment; Republican Italy.

**HIS 313/PSC 345
POLITICS AND HISTORY IN THE
MIDDLE EAST****3, 3/0; Sp 90, 91 offered based on staff availability (SS)**

Analysis of political culture and geographic settings; historical development since the French invasion of Egypt; the disintegration of the Ottoman Empire and the rise of Western colonialism; nationalist movements, independence, and turmoil; the post-World War II political evolution, diversity and problems; emphasis upon the region's key industries.

**HIS 314
MODERN LATIN AMERICA****3, 3/0; F 89, 90 (SS)**

Prerequisite: HIS 207 or permission of instructor. Movements for independence; early political apprenticeship; age of dictators; nationalism and national development; Hispanic-American interrelations; growth of inter-American system; Latin America in world politics; revolution of rising expectations, guerrilla movements, turmoil in Central America; contemporary problems.

**HIS 317
HISTORY OF RUSSIA TO 1917****3, 3/0; Sp 90 (GEE)**

Prerequisite: Junior or senior. Social, political, and economic history of Russia from the Varangians state to the October 1917 Revolution; effects of geographic location; the Mongol conquest; retarded reorientation toward the West in the eighteenth and nineteenth centuries; participation in world politics, expansion in Europe and the East, participation in World War I.

**HIS 318
HISTORY OF THE SOVIET UNION****3, 3/0; F 89, 90 (GEE)**

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, the educational system, and other cultural developments.

**HIS 319
COLONIAL HISTORY OF THE
AMERICAN PEOPLE****3, 3/0; Sp 90, 91 (GEE)**

Prerequisite: Junior or senior. Establishment and development of English, Spanish, French,

Dutch, and Swedish colonies in North America; American Revolutionary period, colonial influence on early culture and institutions of the United States; subsequent contributions to the American heritage.

**HIS 320
MODERN HISTORY OF JAPAN
AND KOREA****3, 3/0; F 90 (GEE)**

History of Japan and Korea in the twentieth century; the rise of Japan as a modern nation; the rise and fall of the Japanese empire; Japan under new democracy; Korea under Japanese control; the liberation and division of Korea; the problem of reunification of Korea.

**HIS 321
HISTORY OF THE MEDIEVAL EUROPE****3, 3/0; F 89, Sp 91 (GEE)**

Prerequisite: HIS 115 or permission of instructor. 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 syntheses; rise of monarchies, decline of Papacy; decline of Medieval civilization.

**HIS 322
AFRO-AMERICAN HISTORY****3, 3/0; 1989-91 (SS)**

Heritage of Black Americans; Afro-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; Afro-American leaders, institutions, ideas and their impact on modern America.

**HIS 324
AMERICAN PRESIDENTS****3, 3/0; Sp 90, 91**

Prerequisite: HIS 106 or HIS 107. A biographical approach to the study of the presidency from Washington to Reagan. An examination of the background to and evolution of that office, and the roles that the best and worst presidents played in shaping its powers.

**HIS 325
U.S. BUSINESS HISTORY****3, 3/0 (GEE)**

The history of U.S. business and its societal and cultural contexts. Businessmen within mercantilism; merchants and craftsmen in the early republic; business and governmental action in the North and South; industrialization; rise of corporations and anti-trust; business, government, and science; managerial style; advertising; the multinational; Rust Belt and Sun Belt; high tech society.

**HIS 330
U.S. ENVIRONMENTAL HISTORY****3, 3/0; F 89, 90 (GEE)**

The impact of Americans on their natural environment, and the influence of this natural and a developing social environment on Americans in the past. Aborigines and the earliest settlers; establishment of patterns and institutions; preservationists vs. conservationists, 1860-1940; the modern environmental movement, 1940-present.

**HIS 332
TECHNOLOGY AND U.S. HISTORY****3, 3/0; Sp 90, 91 (GEE)**

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, the government; post-industrial technology.

**HIS 335
HISTORY OF MEXICO****3, 3/0**

Prerequisite: Junior or senior. 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.

**HIS 340/GEG 340
GEOGRAPHY AND PLANNING
HISTORICAL-URBAN ANALYSIS OF
THE BUFFALO METROPOLITAN AREA****3, 3/0; offered based on availability of staff in coordination with Geography and Planning Department.**

An introductory course on the nature of the city, its growth and dynamics of urban development, the enduring impact of its historical past in relation to its geographical presence, a case study of Buffalo.

**HIS 341
AFRO-AMERICANS AND CIVIL RIGHTS****3, 3/0; Sp 90, 91 (GEE)**

A history of the landmark court decisions, laws, and governmental policies in the area of the civil rights of Afro-Americans. The course will examine some of the historic relationship between race, racism, law, and public policy in America. The course will also focus on resistance, protest, and the quest for equality in America.

**HIS 342
ENGLISH LEGAL HISTORY****3, 3/0; F 89, 90 (GEE)**

Prerequisite: HIS 116. Origins of English law to 1066; growth of medieval common law; common law and its rival in sixteenth and seventeenth centuries; consolidation and reform of law and courts; relation of law and

equity; criminal and civil jurisdiction and procedure; the legal profession; changing legal concepts and the modern state.

HIS 343 INTRODUCTION TO AMERICAN LEGAL HISTORY

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: HIS 342 or permission of instructor. Origins of ideas of law; English background of American law; colonial legal history — Puritanism, law and social goals, revolution; criminal and civil jurisdiction and procedure; 19th-century codification movements, legal profession, social changes and the law.

HIS 344 HISTORY OF AMERICAN CAPITALISM

3, 3/0; Sp 90 (GEE)

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 U.S. and the race for empire; and the role of America in World War I.

HIS 345 HISTORY OF THE UNITED STATES SINCE 1941

3, 3/0; F 89, 90 (GEE)

Prerequisite: HIS 101 or 107. 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 America; War and Peace in Southeast Asia; Watergate and the Travail of Liberalism.

HIS 350 LEFT AND RIGHT IN EUROPEAN HISTORY

3, 3/0; F 89, 90 (GEE)

Prerequisite: Junior standing. The evolution of Marxist, anarchist, state socialist and right radical ideologies in European thought and politics.

HIS 351 MODERN FRANCE

3, 3/0; Sp 91 (GEE)

Selected problems in French political, social, economic and diplomatic history emphasizing historiography and interpretation of such periods as the restored monarch, the revolutions of 1848, the Second Empire, the Third Republic and its successors.

HIS 354 THE SPANISH CARIBBEAN

3, 3/0

Prerequisite: HIS 207 or permission of instructor. 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; rise of Puerto Rican nationalism; Puerto Rico today.

HIS 360 GERMANY AND HITLER

3, 3/0; 1989-91 (GEE)

Political, cultural and social developments since the Reformation; Prussian kings and German emperors; nationalism and unification; Hitler's Austria; World War I; the challenge of democracy; the Nazi dictatorship; World War II; Germany after Hitler.

HIS 365 AMERICAN LABOR HISTORY

3, 3/0; 1989-91 (GEE)

Prerequisite: HIS 107. 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, contemporary labor problems.

HIS 370 AMERICAN DIPLOMATIC HISTORY TO 1898

3, 3/0; F 89, 90 (GEE)

Prerequisite: HIS 106. Independence from Britain and alliance with France; the constitution and the formation of foreign policies; neutral rights and war with Britain; rise of manifest destiny, commercial and territorial expansion, diplomacy of slavery and the Civil War; diplomacy and isolationism in the post-Civil War period.

HIS 371 AMERICAN DIPLOMATIC HISTORY SINCE 1898

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: HIS 101, 107 or permission of instructor. War with Spain and the rise to world power. Inter-American and Far Eastern relations; diplomacy of World War I; retreat to isolationism; road to World War II; global war and its aftermath; leadership in the United Nations and the Cold War; Inter-American and Far Eastern affairs.

HIS 375 HISTORY OF THE BYZANTINE EMPIRE

3, 3/0; F 90 (GEE)

Prerequisite: HIS 115 or permission of instructor. The history of the Byzantine Empire, its influence on intellectual and cultural progress in Western Europe and among the Eastern and Balkan Slavs with special emphasis on internal, social, economic, political, and cultural developments.

HIS 380 INTRODUCTION TO THE MUSEUM

3, 3/0; F 89, 90; offered based on staff availability

Prerequisite: Permission of instructor. History, theory, and practices of the historical agency or museum; extensive reading, illustrated lectures, and exercises in museum and historical agency problems; a series of field trips to area museums and agencies.

HIS 381 THE ROLE OF THE HISTORY MUSEUM

3, 3/0; Sp 90, 91; offered based on staff availability

Prerequisite: HIS 380 or permission of instructor. Theory and practice of historical investigation and publication; uses and procedures of research in historical museums and agencies; evaluation of source materials; preparation of historical essays and exhibits.

HIS 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.

HIS 400* SENIOR SEMINAR IN HISTORY

3, 3/0; 1989-91

Prerequisite: Senior. Readings, discussion and research on selected problems in history — American, European, Third World. Subject and area to be covered will be noted in the schedule. *Fulfills seminar requirement for history majors, social science majors, and secondary social studies majors.

HIS 401 TWENTIETH CENTURY EUROPEAN DIPLOMACY

3, 3/0

Topics covered include: 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; Gaullist and its consequences.

HIS 404 SECTIONALISM AND THE CIVIL WAR

3, 3/0; F 89, 90

Prerequisite: Junior or senior. The structure of the American south, sectional development and state rights; slavery; the development of anti-slavery agitation and reform; the rise of Lincoln and the division of political parties;

Civil War and the military; constitutional and diplomatic crises; economic and social impact of the war; reconstruction of the union.

HIS 405 THE RENAISSANCE AND REFORMATION

3, 3/0; Sp 90; offered based on staff availability

Prerequisite: Junior or senior. Impact of the Renaissance and Reformation on intellectual, artistic, economic, and political development of Europe; social and religious problems; humanism, secularism, classicism, individualism in Italy and Northern Europe; Protestant reform and reformers; Catholic Reformation.

HIS 406 THE FRENCH REVOLUTION AND NAPOLEON

3, 3/0; Sp 91

Prerequisite: Junior or senior. Political, social, economic, and intellectual fabric of the Old Regime; the Revolution; dictatorship of Napoleon and spread of revolutionary ideas; rise of modern nationalism.

HIS 408 AMERICAN INTELLECTUAL HISTORY

3, 3/0

Prerequisite: Junior or senior. Sources of major bodies of thought and ideas in American history; their impact upon American culture; the role ideas have played in producing a distinctive culture.

HIS 415 HISTORY AND GOVERNMENT OF NEW YORK STATE

3, 3/0; offered based on staff availability

Prerequisite: Junior or senior. 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; economic and social growth in the present time.

HIS 419 CURATORSHIP

3, 3/0; offered based on staff availability

Prerequisite: Junior or senior, HIS 380, or permission of instructor. An examination in detail of principles and techniques of collection and care of museum collection, the library, collections, audiovisual materials, archives, iconography, and historic sites; development of professional expertise in curatorship.

HIS 420 ADMINISTRATION OF THE HISTORICAL AGENCY OR ART MUSEUM

3, 3/0; offered based on staff availability

Prerequisite: Junior or senior, HIS 380, or permission of instructor. Principles and practice of administration of museums; problems of organization, collection, exhibition, public services, finance, public relations, and trustee relations; special experience in the area of interpretation.

HIS 422 TUDOR AND STUART ENGLAND

3, 3/0; Sp 91

Prerequisite: Junior or senior. Henry VII and the new dynasty; religion and politics under the early Tudors; the age of Elizabeth I; the Stuarts and the Puritan revolt; restoration and revolution; limiting the monarchy and establishing the empire.

HIS 430 UNITED STATES — THE NEW NATION

3, 3/0; F 90

Prerequisite: Junior or senior. The United States following the American Revolution through Andrew Jackson's administrations. 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 will be examined.

HIS 450 MUSEUM INTERNSHIP

6, 15/0; offered based on staff availability

Prerequisite: Junior or senior and permission of instructor. An intern program for students interested in gaining practical experience in museum work. Assignments to a particular museum will be made on the basis of the student's major related disciplines; students in areas such as history, anthropology, art history, education, and the natural sciences are eligible to participate.

HIS 468 READINGS IN AFRO-AMERICAN HISTORY

3, 3/0; F 89

Prerequisite: Junior or senior. An examination of the major historical writings on selected periods and topics in Afro-American history. The class activities will include readings, discussion, and writing book reviews and bibliographical essays.

HIS 469 BLACK PROTEST AND LEADERSHIP IN THE U.S. IN THE TWENTIETH CENTURY

3, 3/0; F 90 offered based on staff availability

Prerequisite: Junior or senior. An examination of the black protest movements and leaders in the 20th-century America.

HIS 495 PROJECT

See chairperson or pertinent staff.

HIS 499 INDEPENDENT STUDY

See chairperson or pertinent staff.

Home Economics Education

Offered by the Consumer Studies and Home Economics Department
DR. BETTY J. CAPPELLA, Chairperson
Caudell Hall 206

HEE 317 DIMENSIONS OF HOME ECONOMICS EDUCATION

6, 6/0; F 89, 90

Fundamentals of home economics education exploring the history, philosophy, and basic curriculum theory and career options. Observation and participation in selected school settings. Required for professional sequence of HEE majors.

HEE 460 METHODS AND MATERIALS FOR HOME ECONOMICS EDUCATION

3, 3/0; Sp 90, 91

Prerequisite: HEE 317. Methods for teaching home economics content, evaluation procedures, development of materials and resources needed for curricula implementation. Required of all home economics education majors.

HEE 461-462 STUDENT TEACHING

12; 0/30; Sp 90, 91

Prerequisite: HEE 317, EDU 303, Senior standing, minimum of 2.5 GPA. Student teaching experience in New York State home economics program; supervised experience in cooperating schools. Required of HEE majors; students must be prepared to accept assignments at any center. All technical courses must be completed satisfactorily prior to student teaching assignments.

HEE 488 INTERNSHIP

Variable credit; 1989-91

Prerequisite: Upper division standing and permission of instructor. Course provides an opportunity to integrate technical knowledge with practical experience in institutions, business and educational organizations, social and/or governmental agencies. Includes supervised field participation, meetings with instructor, 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 six credits.

**HEE 495
PROJECT**

1-3 cr; 1989-91

Prerequisite: Permission of instructor.

**Information
Systems
Management**

Offered by the Information Systems Management Department
LAWRENCE W. SCOTT, Chairperson
 Chase Hall 201

**ISM 101
COMPUTER FUNDAMENTALS**

3, 3/0; 1989-91 (AST)

A study of the characteristics, organization, and use of the computer. The function of the basic portions of the computer will be identified and explained. Minor emphasis is placed on computer programming fundamentals with the writing of several short programs. A broad survey of applications, as well as impact on society, will be discussed. *Course does not apply toward the fulfillment of ISM elective requirements for ISM majors.

**ISM 111
INTRODUCTION TO FORTRAN**

3, 3/0; 1989-91 (AST)

Prerequisite: ISM 101 or equivalent. Description of computers; concepts of languages and programming. FORTRAN language programming including a study of basic properties of computer languages such as branching, looping, table handling, subprograms and their application to the solution of a variety of problems. Enhancement of FORTRAN programming skills through actual use of the computer. Can be taken as an ISM elective by ISM majors.

**ISM 151
COMPUTER BASED INFORMATION
PROCESSING I**

3, 3/0; 1989-91

Prerequisite: ISM 101 or equivalent. Description of computers; concepts of languages and programming; study of basic properties of computer languages such as branching, looping, table handling, subprograms and their application to the solution of a wide variety of problems. Emphasis on structured language with enhancement of programming skills through actual use of the computer. *Required for majors. Prospective ISM majors must earn at least a C in this course.

**ISM 201
INTRODUCTION TO MICROCOMPUTER
APPLICATIONS**

3, 3/0; (GEE)

Prerequisite: ISM 101. Introduction to microcomputers and popular applications. Students will work with several current software packages used for business applications. ISM majors may not receive credit for this course.

**ISM 214
INTERACTIVE COMPUTING**

3, 3/0

Prerequisite: ISM 151 or permission of instructor. A thorough review of interactive computer systems and languages will be undertaken. Applications of interactive computer to the management information field as well as to a wide variety of other disciplines such as mathematics, social sciences, engineering and physical sciences will be described. Projects will be assigned enhancing the student's knowledge of the various languages such as APL and BASIC as well as the different interactive systems supporting these languages. (Formerly ISM 314)

**ISM 251
COMPUTER BASED INFORMATION
PROCESSING II**

3, 3/0; 1989-91

Prerequisite: ISM 151 or equivalent. Continuation of ISM 151. Description of computer units, data, memory, systems analysis and how data is processed. Emphasis on structured programming languages, such as Pascal, PL/1, ALGOL. *Required for majors.

**ISM 260
DATA STRUCTURES**

3, 3/0

Prerequisite: ISM 251. A study of properties of various techniques for representing relationships between data elements and between records. (Lists, trees, networks, stacks, etc.). Storage and processing implications. Programming assignments will be used to enhance classroom lectures.

**ISM 310
COBOL PROGRAMMING I**

3, 3/0

Prerequisite: ISM 111 or equivalent. The COBOL language and its commercial applications will be studied in depth. Various techniques and algorithms typical of this language will be covered. Projects will be assigned to enhance the concepts underlying various aspects of the language through actual use of the computer. *Not required for majors admitted after 9/85.

**ISM 311
OPERATIONS RESEARCH WITH
FORTRAN**

3, 3/0; 1989-91

Prerequisite: ISM 151 or ISM 111. Development of quantitative models that are used in solving management science problems. Computer programs will be used to solve typical problems in management science. *Required for majors.

**ISM 315
COMPUTER ORGANIZATION**

3, 3/0; 1989-91

Prerequisite: ISM 151. Description of the hardware aspects of computer systems. Familiarize the student with hardware design and structural organization of a computer system. *Required for majors.

**ISM 318
SIMULATION AND MODELING**

3, 3/0

Prerequisite: ISM 311, MAT 111. Models and the scientific methods. Characteristics of simulation models. Models of dynamic systems for machine implementation. Simulation languages. Model design. Experimental optimization. Application of computer modeling, using a simulation language, to specific areas such as queueing.

**ISM 350
ASSEMBLY LANGUAGE
PROGRAMMING**

3, 3/0; 1989-91

Prerequisite: ISM 315. One assembler-type language will be covered in depth. Programming assignments will be made to develop skills in utilizing a low level language. The student will gain understanding of basic features such as main storage, registers, and the actual instruction set. *Required for majors. (Formerly ISM 212)

**ISM 351
STRUCTURED PROGRAMMING**

3, 3/0

Prerequisite: ISM 251. Introduce the student to additional structured techniques or structured programming languages. Programs, assignments and examples will extend the student's knowledge of Data Structures and File Structures as well as illustrate language features.

**ISM 370
SYSTEMS ANALYSIS AND DESIGN**

3, 3/0; 1989-91

Prerequisite: ISM 151. To introduce the student to information analysis and system design. Topics include: the systems concept, defining a system, systems analysis, hardware elements, software elements, case studies. *Required for majors.

**ISM 380
MICROCOMPUTER APPLICATIONS**

3, 3/0

Prerequisite: ISM 370. Description of the microcomputer hardware and operating systems. Students will work with several current software packages used for business applications.

**ISM 390
COMPUTER GRAPHICS**

3, 3/0

Prerequisite: ISM 311, 370, Junior or senior standing. An introduction to the software, hardware, and aesthetics of computer graphics with emphasis on forms commonly used for business purposes. Coverage will include theory of computer graphics, purposes, principles and techniques of communication using graphic forms, practical graphics programming, and an introduction to software packages and hardware systems in current graphics technology. Hands-on programming exercises will permit students to create graphic forms representing constructs studied in the classroom. Interactive graphics in the form of CAD/CAM, games, and simulation will be considered.

**ISM 405
COMPREHENSIVE COBOL
PROGRAMMING**

3, 3/0; 1989-91

Prerequisite: ISM 251. An intensive study of the COBOL language and its use for commercial applications. Emphasis on COBOL fundamentals and advanced features, program design and style, and file handling. Programming projects will involve commercially-oriented applications programs in an IBM environment. *Required for majors.

**ISM 410
COMPUTER OPERATING SYSTEMS**

3, 3/0; 1989-91

Prerequisite: ISM 315, ISM 350 or concurrent reg. A study of computer operating systems, their functions and components. Scheduling and execution of jobs, task management and interrupts. Case studies of currently used operating systems. *Required for majors.

**ISM 411
DATABASE SYSTEMS**

3, 3/0; 1989-91

Prerequisite: ISM 370. A study of the basic concepts and uses of Database systems. Topics include organization, analysis, and function of database systems. Components of representative CODASYL, Hierarchic and Relational Databases will be presented. *Required for majors.

**ISM 414
COBOL PROGRAMMING II**

3, 3/0

Prerequisite: ISM 310. Further study of the COBOL language, programming techniques and applications. Advanced features of the

language will be presented. Emphasis on program design readability, modification, efficiency, and style. Techniques for organizing and managing the programming process will be discussed. Projects will involve commercially-oriented applications programs. *Not required for majors admitted after 9/85.

**ISM 420
DATA BASE MANAGEMENT SYSTEMS**

3, 3/0

Prerequisite: ISM 411. Advanced concepts of Database Management including Data Modeling, features and uses of Database Management Systems, Data and Data Base Administration, and Data Dictionary.

**ISM 422
MANAGEMENT INFORMATION
SYSTEMS**

3, 3/0

Prerequisite: ISM 411. An examination of the management information system (MIS) is an organization. The role of a MIS in organizational decision-making is explored. Emphasis on developing, planning, controlling and evaluating the MIS. *Not required for majors admitted after 9/85.

**ISM 425
COMPARATIVE COMPUTER
LANGUAGES**

3, 3/0

Prerequisite: ISM 405 or ISM 424. The structure and properties of several representative languages will be compared and evaluated. Programming projects will be assigned to illustrate various concepts.

**ISM 430
APPLIED COBOL**

3, 3/0

Prerequisite: ISM 405 or ISM 414. The use of COBOL in a variety of environments including batch, interactive and with a data base management system. Emphasis on file handling and design. Programming projects.

**ISM 435
COMPUTER SEMINAR**

3, 3/0; offered based on staff availability

Prerequisite: Permission of instructor. Topics will be selected from subjects not covered in formal courses.

**ISM 442
ADVANCED SYSTEMS APPLICATIONS**

3, 3/0; 1989-91

Prerequisite: ISM 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. *Required for majors. (Formerly ISM 312)

**ISM 450
ADVANCED ASSEMBLY LANGUAGE
PROGRAMMING**

3, 3/0

Prerequisite: ISM 350. IBM 360/370 assembler language will be covered in detail. Students will learn advanced features of the language and write several programs using the language.

**ISM 460
COMPUTER SECURITY AND CRIME**

3, 3/0

Prerequisite: ISM 410. A study of a variety of crimes committed using computers and against computers. Means of preventing and/or detecting such crimes will be discussed. Security measures such as data encryption schemes will be covered in detail. The problems in investigating and prosecuting these crimes will be discussed. *Not required for majors admitted after 9/85.

**ISM 470
DATA COMMUNICATIONS**

3, 3/0; 1989-91

Prerequisite: ISM 350. Survey of technical, regulatory, systems, and management aspects of computer data communications. Theory of communications, concepts of hardware implementing that theory, and protocols and conventions essential to efficient operation will be covered in detail. In addition LAN's, packet switching networks and other forms of organization will be treated along with communication integrity and regulatory issues central to data communications systems planning and implementation. *Required for majors.

**ISM 480
OFFICE INFORMATION SYSTEMS**

3, 3/0

Prerequisite: ISM 470 or senior standing. Study of the technology being brought into office information systems; local area networks, microcomputers, linking micros to mainframes, vendor selection, integrated system.

**ISM 488
INTERNSHIP**

3, 3/0; 1989-91

Prerequisite: Junior or senior standing and permission of instructor. Qualified students will be placed in functioning organizations to work as trainees, on special projects, studies, or in any relevant aspect of real-world data processing.

**ISM 495
PROJECT**

Offered based on staff availability.

**ISM 499
INDEPENDENT STUDY**

Offered based on staff availability.

Journalism, Broadcasting and Speech

Offered by the Journalism, Broadcasting and Speech Department
DR. W. RICHARD WHITAKER,
Chairperson
Bishop Hall 234

JBS 100 INTRODUCTION TO MASS COMMUNICATION

3, 3/0; 1989-91 (H)
Historical development, present patterns, potentialities of the media in a climate of freedom and responsibility. Standards of critical analysis, aesthetic discrimination, and intelligent selection in using media.

JBS 101 WRITING FOR THE PRINT MEDIA

3, 2/2; 1989-91
Prerequisite: ENG 101 & 102. Discussions and laboratory practice in organizing and writing various news and feature stories for the different print media. 25 w.p.m. typing speed required. *Required of all journalism majors.

JBS 102 INTRODUCTION TO BROADCASTING

3, 3/0; 1989-91
An examination of current programming, philosophies, social effects, and possible developments in radio and television broadcasting. *Required of all broadcasting majors.

JBS 103 INTRODUCTION TO HUMAN COMMUNICATION

3, 3/0; 1989-91 (H)
An investigation of the cultural bases of human communication. Emphasis on rhetorical forms available for the achievement and implementation of social power. Focus on the scientific study of communication, especially theory, constructs, abstractions, and logic.

JBS 201 BROADCAST COPYWRITING

3, 3/0; 1989-91
Prerequisite: ENG 101 & 102. Discussions and laboratory practice in organizing and writing various news and feature stories for the different media. *Required of all broadcasting majors.

JBS 203 WRITING FOR PUBLICATION

3, 2/2; 1989-91
Prerequisite: JBS 100, 101. Principles and practices of news reporting and writing with special emphasis on news gathering.

JBS 205 EXPERIENCES IN SPEECH

3, 3/0; 1989-91 (H)
A study of the total speech process through the introduction to speech physiology and the applied skills of public speaking, discussion, and oral interpretation. (Not to be taken after advanced speech courses.)

JBS 206 SPEECH TRAINING FOR THE COMMUNICATION PROFESSIONS

3, 3/0; Sp 90, 91
A course that teaches the principles of broadcast performance. Students learn the rudiments of voice and diction and the proper interpretation of broadcast copy. This course is recommended for those students interested in a TV or radio talent career.

JBS 222 PRINCIPLES OF BROADCASTING

3, 3/0; 1989-91
Prerequisite: JBS 100. An examination of current philosophies and developments in radio and TV broadcasting plus the legal and procedural knowledge necessary for the successful completion of studio production. *Required of all broadcasting majors.

JBS 301 PUBLIC RELATIONS/ADVERTISING

3, 3/0; 1989-91
Prerequisite: JBS 100, 101. Study of the principles and social responsibility of public relations and advertising. Fact-finding, planning, communication, and evaluation. Theories and uses of public relations and advertising in contemporary society.

JBS 302 INTERVIEWING

3, 3/0; 1989-91
Prerequisite: JBS 101 or JBS 205. The theory, research, forms, and techniques of interviewing for the mass media. Practicum experience in the classroom, the studio, and on the street. Offered in print and broadcast sections.

JBS 305 NEWS REPORTING

3, 2/2; 1989-91
Prerequisite: JBS 100, 101. Additional prerequisites: JBS 319 (may be taken concurrently). Principles and practices of the news gathering and writing processes. Emphasis on news recognition, reporting, and preparation. News beats, news sources, research, accuracy, comprehensiveness, and investigation through work with the Bengal News Service.

JBS 306 PUBLIC SPEAKING

3, 3/0; 1989-91 (GEE)
Prerequisite: JBS 205. Organization, delivery, and evaluation of public speeches in a variety of speaking situations.

JBS 307 COMMUNICATION AND GROUP PROCESSES

3, 3/0; 1989-91 (GEE)
Prerequisite: JBS 205. An interdisciplinary approach to discussion which examines the theoretical and practical dimensions of communication in small group decision making and problem solving communication.

JBS 308 PUBLIC RELATIONS WRITING

3, 2/2; 1989-91
Prerequisite: JBS 100, 101. A survey of all aspects of public relations writing and editing with practice in applying the techniques discussed.

JBS 309 PERSUASIVE SPEAKING

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: JBS 205. The format and procedure of argumentation with practice in preparation and delivery of persuasive speeches to diverse audiences.

JBS 310 INTERNATIONAL BROADCASTING SYSTEMS

3, 3/0; Sp 90, 91
Prerequisite: Upperclass standing. The history, programming patterns, control of international broadcast systems; includes a study of the cultural, linguistic, psychological, and political effects of international and direct satellite broadcasting.

JBS 317 BROADCAST SALES AND MANAGEMENT

3, 3/0; Sp 90, 91
Prerequisite: JBS 100, 222, upperclass standing. The structure, organization, procedures, and problems of radio and television systems management and sales; case studies relating to broadcasting management and sales including personnel, programming, sales development, station promotion, and special problem areas.

JBS 319 NEWS EDITING

3, 2/2; 1989-91
Prerequisite: JBS 100, 101, 203. Fundamentals of copy editing, headline writing, and makeup. Practice in the relevant skills. *Required of all journalism majors.

JBS 320 ORAL INTERPRETATION OF LITERATURE

3, 3/0
Oral reading of prose, poetry, and drama—selection and arrangement of material for formal and informal audiences.

JBS 322 LAYOUT AND GRAPHICS

3, 2/2; 1989-91
Prerequisite: JBS 301 or 319. The application of effective visual communication to newspaper layout, magazine layout, and other printed publications.

JBS 325 MAGAZINE ARTICLE WRITING

3, 3/0; Sp 90, 91
Prerequisite: JBS 101, or permission of instructor. Writing articles for magazines and professional journals and features for newspapers with the main emphasis on magazine article writing. Study of marketing requirements of various periodicals and newspapers plus freelancing methods and techniques.

JBS 326 EDITORIAL AND CRITICAL WRITING

3, 3/0; F 89, 90
Prerequisite: JBS 100, 101, or permission of instructor. Techniques, purposes, and current practices in writing and presenting the editorial, the critical review, and the individual column. Extensive writing practice in each area.

JBS 328 RADIO STUDIO OPERATIONS

3, 2/2; 1989-91
Prerequisite: JBS 100, 222, permission of instructor. This course is designed to provide a laboratory experience in the principles and techniques of the radio station. It is the corollary of JBS 329, Beginning Television Studio Operations. *Required of all broadcasting majors and journalism majors in the broadcast newswriting track (or JBS 329).

JBS 329 BEGINNING TELEVISION STUDIO OPERATIONS

3, 2/3; 1989-91
Prerequisite: JBS 100, 222, permission of instructor. An introduction to the fundamentals of television's broadcasting theory, aesthetics, and production techniques; predominantly involves lectures with some experimentation, field trips to local television stations, and lectures by local television personnel. *Required of all broadcasting majors and journalism majors in broadcast newswriting track (or JBS 328).

JBS 330 INTERMEDIATE TELEVISION STUDIO OPERATIONS

3, 0/6; 1989-91
Prerequisite: JBS 329, or permission of instructor. A practical program of training in the operation of television studio production techniques and equipment. The course provides students with experience in camera work, direction, production, and programming.

JBS 332 CONTEMPORARY ISSUES IN BROADCASTING

3, 3/0; 1989-91
Prerequisite: JBS 100, 222. A current problems approach to an understanding of and an appreciation for the development of the broadcasting industry. *Required of all broadcasting majors.

JBS 337 BROADCAST NEWS WRITING

3, 3/0; 1989-91
Prerequisite: JBS 101. Study and practice in the special application of news writing and editing to the broadcasting media. Uses of wire copy, tape recorders, and video cameras in producing newscasts. *Required of all journalism majors in broadcast news writing track.

JBS 400 LAW OF MASS COMMUNICATION

3, 3/0; 1989-91
Prerequisite: Upperclass standing. Study of the rights and constraints of the mass media under law: libel, privacy, contempt, copyright, free press-fair trial.

JBS 401 COMMUNICATION THEORY

3, 3/0; 1989-91
Prerequisite: Upperclass standing. A study of communication theory, research, and philosophy. Emphasis is upon applications of communication theory to the message design and source-receiver identification.

JBS 402 VISUAL AND ORAL COMMUNICATION

3, 3/0; 1989-91 (GEE)
Prerequisite: Upperclass standing. Practical applications of media to the solution of specific communications problems. Experience with a wide range of visual and oral communication media techniques.

JBS 407 ORGANIZATIONAL COMMUNICATION

3, 3/0; 1989-91
Prerequisite: JBS 205, 308, or permission of instructor. The structure, behavior, and message strategies in an organization, including practice in creating and exchanging effective verbal and nonverbal communication.

JBS 408 PUBLIC RELATIONS CASE STUDIES

3, 3/0
Prerequisite: JBS 205, 308. The application of communication principles, techniques, and programs to actual organization problems and opportunities.

JBS 410 HISTORY OF MASS COMMUNICATION

3, 3/0; F 89, 90
Prerequisite: Upperclass standing. Historical

survey of the technology and social evolution of journalism and the broadcasting industries, including an analysis of their roles in American society. HIS 106, 107 or equivalent recommended.

JBS 412 BROADCAST PROGRAMMING

3, 3/0; F 89, 90
Prerequisite: JBS 100, 222, Upperclass standing. An examination of the strategy of broadcast programming. The course analyzes both television and radio programming situations. Topics include network, local affiliate, and independent television programming along with AM and FM programming trends.

JBS 415 ADVANCED REPORTING

3, 2/2; 1989-91
Prerequisite: JBS 305. Techniques, problems, and trends in modern depth reporting. Practice in developing and writing stories on a wide variety of subject areas.

JBS 418 PRINCIPLES OF PUBLICITY/COPYWRITING

3, 3/0; 1989-91
Prerequisite: JBS 308 or permission of instructor. Writing techniques for publicity and advertising. Practice in purposive communication including news releases, pamphlets, publicity campaigns, advertising copy and layout, type selection, media selection.

JBS 422 MASS MEDIA CRITICISM

3, 3/0; F 89, 90
Prerequisite: Upperclass standing. An introductory course in the analysis and criticism of such mass media artifacts as advertisements, newscasts, political messages, docudramas, situation comedies, soap operas, and religious programming, aimed at providing students with an understanding of the persuasive impact of such communication.

JBS 429 ADVANCED TELEVISION AND STUDIO OPERATIONS

3, 4/0; 1989-91
Prerequisite: JBS 330, permission of instructor. A practical program with emphasis on individual training in specialized production techniques of television studio operation.

JBS 430 BROADCAST LAW AND REGULATION

3, 3/0; 1989-91
Prerequisite: Upperclass standing. The course examines such issues as why the First Amendment permits greater regulation of broadcasters than of the press. Regulation pertinent only to broadcasting will be examined in depth: the fairness doctrine and the equal time provisions. Also examined: speech which is not protected by the First Amendment, FCC regulation, and copyright problems.

**JBS 488
INTERNSHIP****3; 1989-91**

Prerequisite: Upper division standing and permission of faculty. Supervised field experiences in a professional setting for those students who have completed extensive academic preparation in the discipline. Fifty hours of field work in journalism, broadcasting, or public relations-advertising per credit.

**JBS 495
PROJECT****JBS 499
INDEPENDENT STUDY****Library**

Offered by the professional staff of Butler Library
Butler Library 133

**LIB 100
LIBRARY RESEARCH METHODS AND
BIBLIOGRAPHY****1, 1/0; 1989-91**

The course will examine the storage and retrieval of information with the emphasis on organization and reference tools. Students choose a research topic and, through a series of exercises demonstrating search strategy design and execution, prepare a bibliography. Research tools covered are the card catalog, periodical indexes and abstracts, audiovisual and microform resources, and computer searching in bibliographic databases. Open to all undergraduates. Recommended for freshmen and sophomores.

Mathematics

Offered by the Mathematics Department
JAMES E. WESTROPE, Chairperson
Bishop Hall 309

The mathematics department suggests the following guidelines in selecting mathematics courses: Students with three and a half to four years of high school mathematics who plan to major in a mathematics-related area should enroll in MAT 161. A student with credit for only three years of high-school mathematics may want to enroll in MAT 124 before electing MAT 161. A student who intends to major in mathematics should complete at least the required three-semester calculus sequence by the end of the sophomore year in order to fulfill the degree requirements within four years.

1. A declared mathematics major may not receive credit toward major requirements for any mathematics course numbered below 141.

2. A student may receive general elective credit only, for a course numbered below 141, provided the course was taken before the student declared mathematics as a major.

**MAT 099
BASIC MATHEMATICS I****0, 3/0; 1989-91**

Prerequisite: Must have failed Part 1 of Competency Test. A basic course in mathematics for students inadequately prepared for college mathematics.

**MAT 100
BASIC MATHEMATICS II****3, 3/0; 1989-91**

Prerequisite: Must have failed Part 2 of Competency Test. A course which provides the necessary mathematics background needed to pass the algebra section of the College Proficiency Examination in mathematics; covers polynomials, rational expressions, exponents and roots, solving equations and inequalities.

**MAT 103
INTRODUCTION TO CONTEMPORARY
MATHEMATICS****3, 3/0; 1989-91 (MS)**

Mathematics appreciation developed through such topics as: the nature and philosophy of mathematics, historical problems and personalities; mathematical systems; computers, statistics.

**MAT 105
MATHEMATICS OF FINANCE****3, 3/0; 1989-91 (GEE)**

Prerequisite: Satisfaction of basic mathematics requirement. Simple interest and bank discount; compound interest; installment loans and revolving charge accounts; ordinary annuities; amortization and sinking funds, bonds, stocks.

**MAT 107
CASINO GAMBLING****3, 3/0; Sp 90, 91 (MS)**

An intensive encounter with the phenomenon of chance and the theory of probability which governs it, through a critical examination of various casino gambling games including roulette, craps, and blackjack.

**MAT 110
INTERMEDIATE COLLEGE ALGEBRA
AND TRIGONOMETRY****3, 3/0; 1989-91 (MS)**

Prerequisite: Satisfaction of basic mathematics requirement. A course which provides concepts and skills in intermediate algebra and right triangle trigonometry.

**MAT 111
ELEMENTARY PROBABILITY AND
STATISTICS****3, 3/0; 1989-91 (MS)**

Prerequisite: MAT 110 or three years of high school math. Credit may not be earned for both MAT 111 and MAT 381 or equivalents. Empirical frequency distributions; measures of central tendency and dispersion; theory of probability of a finite sample space; application of statistical distributions.

**MAT 119
FINITE MATHEMATICS****3, 3/0; F 89, 90 (MS)**

Prerequisite: MAT 110 or three years of high school math. Logic, sets, partitions, probability, vectors, matrices; linear programming.

**MAT 121
MATHEMATICS FOR ELEMENTARY
TEACHERS I****3, 3/0; 1989-91 (GEE)**

Prerequisite: MAT 110 or three years of high school math. Natural numbers; logic, nature of deductive proof; elementary set theory; numeration systems; non-metric geometry; integers.

**MAT 122
MATHEMATICS FOR ELEMENTARY
TEACHERS II****3, 3/0; Sp 90, 91, (GEE)**

Prerequisite: MAT 121. Number theory, divisibility, division algorithm, Euclidean algorithm, fundamental theorem; rational numbers, real numbers; metric geometry, measure, finite mathematical systems.

**MAT 124
PRE-CALCULUS MATHEMATICS****3, 3/0; 1989-91 (GEE)**

Prerequisite: MAT 110 or three years of high school math. Numbers, inequalities, functions graphing, polynomials, rational functions, circular functions, trigonometric identities, induction, sequences. A pre-calculus course in algebra and trigonometry designed primarily for those who have had eleventh-year high school mathematics. No credit given to students who have completed a college calculus course.

**MAT 126
CALCULUS****3, 3/0; 1989-91 (MS)**

Prerequisite: MAT 110 or three years of high school math. Functions; limits; continuity; techniques for differentiations; applications; summations; anti-derivatives; definite integrals; fundamental theorem of calculus; techniques of integration applications. Credit may not be earned for both MAT 126 and MAT 161 or equivalents.

**MAT 127
CALCULUS OF SEVERAL VARIABLES****3, 3/0; 1989-91 (MS)**

Prerequisite: MAT 126. A study of the calculus of several variables with emphasis on applica-

tions to the physical and social sciences. The level of the course is like that of MAT 126. Vectors; conic sections, surface in 3-space; functions of several variables and their graphs; partial derivatives; lines and planes in 3-space; tangent planes and normal lines and their applications; the differential and its applications; the directional derivative and its applications; introduction to differential equations and application.

**MAT 304
GAMES AND LINEAR PROGRAMMING****3, 3/0; Sp 90, 91 (MS)**

Prerequisite: MAT 110 or three years of high school math. Elementary techniques for finding optimal choices among games 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 mathematics majors.

**MAT 306
PROBLEM-SOLVING IN BASIC****3, 3/0; 1989-91 (MS)**

Prerequisite: MAT 110 or three years of high school math. An introduction to the mathematical uses of computers in today's society. Background; typical uses; writing programs in BASIC; solution of problems in number theory, geometry, finance and algebra; mathematical games; sorting.

**MAT 320
MATHEMATICS FOR THE SOCIAL
SCIENCES****3, 3/0; Sp 90, 91**

Prerequisite: MAT 110 or three years of high school math. Consideration of applications of finite mathematics for non-math majors; linear algebra; graph theory; game theory; methods which are relevant to computer techniques; emphasis on the interests of commerce and behavioral sciences. Not open to mathematics majors.

Courses for mathematics majors, electives for all qualified students:

**MAT 141
COMPUTER MATHEMATICS I****3, 3/0; 1989-91**

Prerequisite: MAT 124 or four years of high school math, and ISM 101 or equivalent. 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, differential equations, etc. Course will use a computer language to apply to this and other mathematics classes. Required for all mathematics majors.

**MAT 161
CALCULUS I****3, 3/0; 1989-91 (MS)**

Prerequisite: MAT 124 or four years of high school math. Functions, limits continuity, differentiation of algebraic functions, applications of the derivative, and differentiation.

**MAT 162
CALCULUS II****3, 3/0; 1989-91 (MS)**

Prerequisite: MAT 161. The definite integral, the techniques of integration, logarithmic and exponential functions. Applications studied through algorithmic techniques and/or computer usage.

**MAT 270
DISCRETE MATHEMATICS****3, 3/0; 1989-91**

Prerequisite: One semester of calculus. Enumeration and graph theory. A wide variety of applications involving graphs and digraphs, trees, circuits, permutations and combinations, inclusion-exclusion principle, and recurrence relations.

**MAT 183
PROBLEM SOLVING
IN MATHEMATICS****3, 3/0; 1989-91 (GEE)**

Prerequisite: MAT 124 or four years of high school math. An introduction to the basic techniques of problem solving, creative problem solving, the methods of Polya, Wickelgren, and others, and applications to the areas of algebra, geometry, analysis, and recreational mathematics. The emphasis is on process rather than on content.

**MAT 202
INTRODUCTION TO LINEAR ALGEBRA****3, 3/0; 1989-91 (GEE)**

Prerequisite: One course of calculus. Vector and vector spaces; linear dependence, basis and dimension; matrices and determinants; linear systems; linear transformations; eigenvectors; and invariant subspaces.

**MAT 263
CALCULUS III****3, 3/0; 1989-91 (GEE)**

Prerequisite: MAT 162. Vectors, partial differentiation, multiple integrals, and infinite series. Applications studied through algorithmic techniques and/or computer usage.

**MAT 301
FUNDAMENTALS OF
ABSTRACT ALGEBRA****3, 3/0; Sp 90, 91 (GEE)**

Prerequisite: MAT 202 or MAT 270. An introduction to the fundamental concepts of abstract algebra, sets, mappings, binary operations, relations, and to algebraic structures of groups, rings, fields and applications.

**MAT 302
ALGEBRA II****3, 3/0; F 89, 90**

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, applications chosen from contemporary areas of coding theory, block designs, etc.

**MAT 315
DIFFERENTIAL EQUATIONS****3, 3/0; Sp 90, 91 (GEE)**

Prerequisite: MAT 263 or permission of instructor. Preliminary ideas on order, degree, and solutions; formation of differential equations; differential equations of first order linear equations with constant coefficients; special high order equations; simultaneous equations; linear equations of the second order, series solutions.

**MAT 316
INTERMEDIATE DIFFERENTIAL
EQUATIONS****3, 3/0; F 90, 91 (GEE)**

Prerequisite: MAT 315. Laplace transform; inverse Laplace transform and applications; partial differentiation equations: Fourier series; boundary value problems; transform methods application.

**MAT 322
MODERN GEOMETRY****3, 3/0; F 89, 90 (GEE)**

Prerequisite: MAT 202 or MAT 270. Euclidean constructions; theorems of Menelaus and Ceva; cross ratio; harmonic points; orthogonal circles; isometries and similarities in the plane; introduction of projective geometry.

**MAT 351
ELEMENTARY THEORY OF NUMBERS****3, 3/0; F 89, 90 (GEE)**

Prerequisite: MAT 124 or four years of high school math. Divisibility, Euclid's algorithm; numbers; prime factorization theorem; Euler's phi-function; Diophantine analysis; congruence; theorems of Fermat, Euler, and Wilson.

**MAT 366
COMPUTER MATHEMATICS II****3, 3/0; Sp 90, 91**

Prerequisite: MAT 141 and MAT 270. Structured programming, verification of program validity, data structures, combinatorial problems, flow network algorithms, random number generators, simulation of random and nonrandom processes.

**MAT 370
APPLIED NETWORKS****3, 3/0; Sp 90, 91**

Prerequisite: MAT 202 and MAT 270. Introduction to network and graph theoretic concepts. Considers properties with application in computational mathematics, social science decision making and physical science.

**MAT 381
PROBABILITY**

3, 3/0; F 89, 90 (GEE)
Prerequisite: MAT 270, MAT 127, or MAT 162. Probability models, discrete and continuous random variables, sampling distributions, estimation, tests of hypotheses and simply linear regression.

**MAT 382
TOPICS IN MATHEMATICAL
STATISTICS**

3, 3/0; Sp 90, 91
Prerequisite: MAT 381 and MAT 263. Sampling distributions, the central limit theorem; point and interval estimation; tests of hypotheses.

**MAT 401
INTRODUCTION TO TURING
MACHINES AND ABSTRACT
COMPUTABILITY**

3, 3/0
Prerequisite: MAT 301. An introduction to topics in finite automata and Turing machines; universal Turing machines; topics in abstract computability theory, and general unsolvability theory.

**MAT 404
APPLICATIONS OF LINEAR ALGEBRA**

3, 3/0; F 89, 90
Prerequisite: MAT 141 or permission of instructor, and MAT 202. Eigenvalue problems, diagonalizing matrices, Jordan Canonical form, Linear Programming, simplex method, game theory, applications in areas such as business, industry, economics, social sciences, and behavioral sciences.

**MAT 411
COMPLEX VARIABLES**

3, 3/0; Sp 90
Prerequisite: MAT 263. Topics selected from the theory of functions of a real and/or complex variable: axioms of real numbers, geometry of complex numbers, point set topology differentiation, analytic functions, Cauchy-Riemann equations, power series, integration, special functions, and the calculus of residues.

**MAT 417
INTRODUCTION TO REAL ANALYSIS I**

3, 3/0; F 89, 90
Prerequisite: MAT 263. A rigorous treatment of elementary real analysis including: topology and Cartesian spaces, Heine-Borel theorem, sequences of numbers, sequences of functions, continuous functions, limits of functions, differentiation, mean-value theorem, Weierstrass approximation theorem.

**MAT 418
INTRODUCTION TO REAL ANALYSIS II**

3, 3/0; Sp 90
Prerequisite: MAT 417 or equivalent. A con-

tinuation of MAT 417 with topics to be chosen from: Riemann-Stieltjes integration, improper integrals, infinite series, series of functions, partial differentiation, Jacobians, implicit function, multiple integrals, and Fubini's Theorem.

**MAT 461
NUMERICAL ANALYSIS**

3, 3/0; Sp 90, 91
Prerequisite: MAT 141, MAT 202, and MAT 263. Fundamentals; finite differences; difference tables; tabulation of polynomials; difference operators; linear interpolation; classical polynomial formulas; inverse interpolation; Lagrange's formula; numerical integration; Gauss' formula; difference equations.

**MAT 471
INTRODUCTION TO TOPOLOGY**

3, 3/0
Prerequisite: MAT 301 and MAT 417. Sets and functions; metric spaces; topological spaces, connectedness; compactness; separation.

**MAT 490
SEMINAR**

3, 3/0; Sp 90, 91
Prerequisite: Senior mathematics major or permission of instructor. Investigation of some topics of current interest to mathematicians, such as group theory, game theory, differential geometry, measure theory, sampling theory, etc., emphasis is on oral presentations by the students and discussion.

**MAT 495
PROJECT****MATH 499
INDEPENDENT STUDY****MED 397W
METHODS IN TEACHING SECONDARY
SCHOOL MATHEMATICS**

3, 3/0; 1989-91
Prerequisite: Admission to the secondary education bachelor of science in mathematics degree program; completion of SST 200 and a 2.5 GPA in mathematics, or Elementary Education Extension of Certification in Math status; completion of EDF 210 and at least one from EDF 350, 351, 353 with grades of 'C' or better. GPA of 2.5 in mathematics. An introduction to the theory and practice of classroom teaching for the prospective secondary mathematics teacher. Actual field experience in classroom discipline, planning for instructor, curricular issues, evaluation and testing, and special learning techniques. Includes lectures, field observation, peer presentation, construction and critique of lesson plans, use of media, and research of teaching strategies.

**MED 496
PROFESSIONAL SEMESTER EARLY
SECONDARY MATHEMATICS**

6, 30/0; 1989-91
Prerequisite: Elementary Education Extension of Certification in Math status; completion of MED 397 with a grade of 'C' or better; as many as possible of the required math courses with a minimum math GPA of 2.5; a minimum cumulative and previous semester average of 2.00; senior status. Secondary math majors see MED 497 prerequisite. *Required of elementary education majors seeking certification to teach junior high school math. *Required of secondary school math majors. Early secondary-school classroom laboratory experiences; goal of early secondary math. educ.; psychological influences; teaching models; testing and evaluation techniques; total involvement in early secondary school activities-practicum.

**MED 497
PROFESSIONAL SEMESTER**

7, 30/0; 1989-91
Prerequisite: A 2.5 GPA in required mathematics courses and a 2.5 GPA in the professional education component; minimum cumulative and previous semester average of 2.00; senior status. *Required of seniors majoring in secondary-school mathematics; elective for liberal-arts mathematics majors. Secondary-school classroom laboratory experiences; goals of secondary mathematics education; psychological influences; teaching models; testing and evaluation techniques of instruction; total involvement in secondary school activities-practicum.

Music

Offered by the Performing Arts Department
 MYRON H. NADEL, Chairperson
 Rockwell Hall 203

**MUS 112
APPLIED MUSIC**

1, 0/1/2; 1989-91 (GEE)
 Private lesson fee
Prerequisite: Previous performance with the instrument; repeatable; audition required.

**MUS 130
COMPREHENSIVE MUSICIANSHIP I**

4, 3/3; F 89, 90
 Introduction to sound, rhythm, melody, texture, and form through experiences in listening to music from a variety of cultures and historical periods, drilling on sight-singing and dictation, and composing and performing original music. Required for music majors, elective for others.

**MUS 131
COMPREHENSIVE MUSICIANSHIP II**

4, 3/3; Sp 90, 91
Prerequisite: MUS 130. Composing; listening and scholarship; vocal performing skills (e.g., sight-reading and dictation) based on concepts applicable to music of any time and place in the Western cultural tradition, emphasizing harmony as a structural principle in form.

**MUS 140
ETHNOMUSICOLOGY I**

3, 3/0; Sp 90, 91
 Lectures, reading, and recordings introducing the student to some principal music traditions in non-Western cultures, such as African, Indian, and Sinitic; also some consideration of the Afro-American tradition including jazz and rock.

**MUS 161-164
APPLIED MUSIC II**

1, 0/1; 1989-91 (GEE)
 Fee Possible
Prerequisite: Audition. Courses must be taken in sequence. Class instruction in instrument or voice, I-IV.

**MUS 165
KEYBOARD HARMONY I**

1, 1/0; Sp 90, 91 (GEE)
Prerequisite: Permission of instructor. Applied music; keyboard harmony. Class instruction in piano, emphasizing playing chords for songs used in elementary schools. Not for beginning pianists.

**MUS 171-172, 173-174, 271-272, 273-274,
371-372, 373-374, 471-472
APPLIED MUSIC**

1-2, 0/1/2-1; 1989-91 (GEE through MUS 374)
 Fee possible
 Individual lessons for students of voice or instrument. *Required for music majors; audition required.

**MUS 201
SYMPHONIC LITERATURE**

3, 0/3; 1989-91 (A)
 The understanding and enjoyment of the masterpieces written for symphony orchestra by Classic, Romantic, and Contemporary composers; attendance at selected concerts.

**MUS 203
CHAMBER-MUSIC LITERATURE**

3, 0/3; F 90 (A)
 Class instruction and listening experience in the principal literature of small instrumental combinations by Baroque, Classic, Romantic, and Contemporary composers. Attendance at selected concerts.

**MUS 204
DRAMATIC MUSIC**

3, 3/0; Sp 91 (A)
 Class instruction and listening experience in the principal literature of opera.

**MUS 205
AMERICAN POPULAR MUSIC IN THE
20TH CENTURY**

3, 3/0; 1989-91 (A)
 Starts with colonial period but emphasis is on the 20th century. Class instruction and listening experience in the principal literature of American popular music.

**MUS 206
JAZZ AND ROCK FOUNDATIONS**

3, 3/0; 1989-91 (A)
 Music and materials illustrating basic historical development of jazz, rhythm and blues, and rock.

**MUS 208
ORIENTAL ART MUSIC: CHINA,
JAPAN, KOREA**

3, 3/0; F 89 (A)
 Sources and development of the idioms, styles, and sound media of the Orient.

**MUS 210
RUDIMENTS OF TRADITIONAL MUSIC
NOTATION**

3, 3/0; 1989-91 (A)
 Musical notation and rudimentary sight reading; elementary harmony, chord structure, modulation; some listening and music appreciation.

**MUS 211
INTRODUCTION TO CONDUCTING**

1, 1/0; Sp 90, 91
Prerequisite: Permission of instructor. A course in group conducting such as might be helpful to the classroom teacher.

**MUS 212
CRITICISM**

3, 3/0;
 An open-ended discussion of critical thinking, with practice in writing criticism.

**MUS 213
MUSIC OF THE AFRICAN CONTINENT**

3, 3/0; offered based on staff availability
 Class instruction and listening experience in the idioms, styles, and sound media of African music.

**MUS 217
EXPERIENCES IN MUSIC FOR
BEGINNERS**

3, 3/0; 1989-91 (A)
 For students, other than education majors, who would like to experiment with making music, learn to play some simple instruments, receive guidance in listening to art music, begin to learn to read and understand music. Workshop approach.

**MUS 218
ESSENTIALS OF MUSIC READING**

3, 3/0; Sp 90
Prerequisite: MUS 210 or equivalent. A sight-singing and ear-training course for students with some experience in music and almost no previous formal training. This course may not be applied toward a music major.

**MUS 230
COMPREHENSIVE MUSICIANSHIP III**

4, 3/3; F 89, 90
Prerequisite: MUS 131, 131. Composing, listening and scholarship, and keyboard performing skills (e.g. improvisation, four-part harmony progressions) based on concepts applicable to music of the 17th and 18th centuries in Europe.

**MUS 231
COMPREHENSIVE MUSICIANSHIP IV**

4, 3/3; Sp 90, 91
Prerequisite: MUS 230. Composing, listening and scholarship, and keyboard performing skills (e.g., accompanying and transposition) based on concepts applicable to music in the 19th century in Europe.

**MUS 301
INTRODUCTION TO
MUSIC LITERATURE**

3, 3/0; 1989-91 (A)
Prerequisite: Junior or senior status. Introduction to music from antiquity to present; musical forms and styles; vocal and instrumental music.

**MUS 302
MUSIC HISTORY, ANTIQUITY
THROUGH BAROQUE**

3, 3/0; (GEE)
Prerequisite: A 200-level course in western Classical music or ability to read music. Emphasis on Medieval, Renaissance, and Baroque styles.

**MUS 303
MUSIC HISTORY, CLASSIC AND
ROMANTIC**

3, 3/0; (GEE)
Prerequisite: MUS 301 or permission of instructor. The 18th and 19th-century opera, oratorio, solo song, chamber music, symphony, and other forms.

**MUS 304
MUSIC HISTORY, 20TH CENTURY**

3, 3/0; (GEE)
Prerequisite: MUS 301 or permission of instructor. Sources and development of the idioms, style, and new sound media of music in the present century.

**MUS 305
MODERN JAZZ**

3, 3/0; 1989-91 (GEE)
Prerequisite: MUS 206 or 205. A study of the history and development of modern jazz from 1941 to the present.

MUS 306
URBAN BLUES AND ROCK

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: MUS 206 or 205. Sources and development of the idioms, style, and sound media of this music.

MUS 311
MUSIC THEORY I, MELODY AND TWO-PART TEXTURE

3, 3/0; (GEE)
Prerequisite: Music major or permission of instructor. Species counterpoint and contrapuntal forms.

MUS 312
MUSIC THEORY II, HARMONY AND SONORITY

3, 3/0; (GEE)
Prerequisite: MUS 311 and 171. Diatonic and chromatic harmony, harmonic structure, and harmonic rhythm.

MUS 313
ENSEMBLE I

1, 0/2; 1989-91 (GEE)
Prerequisite: permission of instructor; repeatable. Training and supervised performance in the literature for small music ensembles related to a student's musical interest. Percussion, guitar, saxophone, and various chamber instrumental or vocal ensembles are offered. Audition required.

MUS 314
CONCERT BAND

1, 0/2; 1989-91 (GEE)
Prerequisite: Permission of instructor; repeatable. Regular rehearsals and performances with the Buffalo State Concert Band. Audition required.

MUS 315
MUSIC THEORY III, COMPLEX TEXTURES IN TONAL MUSIC: HARMONY, COUNTERPOINT, AND FORM

3, 3/0
Prerequisite: MUS 311, 312, 318, 173. Intermediate level studies in tonal harmony and counterpoint in music forms. Emphasis on aural development and analysis.

MUS 316
MUSIC THEORY IV, RESOURCES USED IN COMPOSITION AND ANALYSIS OF 20TH-CENTURY MUSIC

3, 3/0
Prerequisite: MUS 311, 312, 315, 318, 271. Serialism, cell structure, sonorities, and other musical intervals used by selected 20th-century composers.

MUS 317
MUSIC FOR CHILDREN

3, 3/0; 1989-91
Prerequisite: Junior or senior standing. Demonstrations, workshop techniques, a varie-

ty of musical experiences to build skills, develop knowledge and basic music fundamentals and elementary education techniques. Emphasis on participation. *Required for 24-hour concentration.

MUS 318
SIGHT-SINGING AND EAR-TRAINING

3, 3/0; 1989-91 (GEE)
Prerequisite: Music major or permission of instructor. Sight-singing, musical dictation; scale patterns; interval, note and rest values; cadences and progressions; rhythms and meter.

MUS 319
AMERICAN FOLK MUSIC

3, 3/0; Sp 91 (GEE)
Prerequisite: MUS 206, or 205. Lectures, reading and listening experience in the various idioms of American folk music.

MUS 320
COUNTRY MUSIC, U.S.A.

3, 3/0; (GEE)
Prerequisite: MUS 206 or 205. A study of the history and development of country music in America.

MUS 321
ARRANGING VOCAL INSTRUMENTAL, POPULAR, AND JAZZ

3, 3/0; Sp 90, 91
Prerequisite: Permission of instructor. Class instruction and supervised training in arranging music for dance, stage, and popular song, with study of representative examples of the literature. Traditional arranging methods are stressed.

MUS 322
CONDUCTING

3, 3/0; F 89, 90
Prerequisite: MUS 331, upper-level music major or equivalent, or permission of instructor. Use of baton; reading and observation; attendance at selected concerts.

MUS 324
ACCOMPANYING

3, 3/0; Sp 91
Prerequisite: Permission of instructor. Class instruction and supervised performance in accompanying choral groups and instrumental and vocal performance with study of representative examples of literature.

MUS 326
JAZZ ENSEMBLE

1, 0/2 1989-91 (GEE)
Prerequisite: Permission of instructor; repeatable. Training and supervised performance in jazz and dance band combinations. Audition required.

MUS/PHI 327
AESTHETICS AND THE ARTS

3, 3/0; 1989-91 (GEE)
 Some major concepts and theories selected

from the philosophy of art applied to some major works of art selected each semester from some but not all of the following fields: architecture, dance, drama, film, music, painting, and sculpture.

MUS/ENG/328
WORDS AND MUSIC

3, 3/0; 1989-91 (GEE)
 Broadway musicals, songs, operas, and other works of art which combine words and music, analyzed in terms of the relations between musical structure and linguistic structure.

MUS 330
COMPREHENSIVE MUSICIANSHIP V

3, 2/2 F 89, 90
Prerequisite: MUS 231. Composing and listening and scholarship based on concepts applicable to music of the Middle Ages, the Renaissance, and the Baroque, with emphasis on counterpoint.

MUS 331
COMPREHENSIVE MUSICIANSHIP VI

3, 2/2; Sp 89, 90
Prerequisite: MUS 330. Composing, listening and scholarship based on concepts applicable to music of the 20th century.

MUS 335
BUFFALO STATE COLLEGE SINGERS

1, 0/2; 1989-91
Prerequisite: Permission of instructor; repeatable. Performance and rehearsal of choral arrangements of topical music, which includes jazz, pop, rhythm and blues, spirituals, and gospel music. Audition required.

MUS 336
CONCERT CHOIR

1, 0/2; 1989-91
Prerequisite: Permission of instructor; repeatable. Regular rehearsals and scheduled performances of traditional choral literature. Audition required.

MUS 404
CLASSROOM MUSIC SEMINAR

3, 3/0;
Prerequisite: MUS 317. Advanced study of classroom music activities in depth. Work with a class of school children by instructor and students at least once a week. Observations, projects, readings in a laboratory-workshop setting.

MUS 150-450
DIRECTED STUDY SEMINAR

3, 3/0; 1989-91 (GEE through MUS 350)
Prerequisite: Permission of instructor and department. Supervised projects in an area of music study not addressed by current offerings, such as, but not restricted to, composition and theory, sound recording, computer music, music autography, with all students reporting to a common seminar. (MUS 450 is an all-college elective.)

MUS 155-455
DIRECTED STUDY SEMINAR, THEORY

3, 3/0; 1989-91 (GEE through MUS 355)
Prerequisite: Performance ability on musical instrument, knowledge of major scales. Supervised projects in an area of musical theory not addressed by current offerings, with all students reporting to a common seminar. (MUS 455 is an all-college elective.)

MUS 457
STUDENT TEACHING MUSIC

6, 15/0; offered based on staff availability
Prerequisite: 24 hours in music and permission of the instructor; 2.0 cumulative average. Music teaching under supervision in the elementary schools.

MUS 495
PROJECT**MUS 499**
INDEPENDENT STUDY

Nutrition and Food Science

Offered by the Nutrition and Food Science Department
 DR. DENNIS K. PONTON, Chairperson
 Caudell Hall 106

Note: Courses required by department majors are indicated by the following symbols:
 D = Generalist dietetics major
 F = Food systems management major
 C = Coordinated undergraduate program major

NFS 101
INTRODUCTORY FOOD

3, 2/2; 1989-91 (AST)
Laboratory coat/apron required.
 An introduction to the study of foods with emphasis on the scientific principles involved in food preparation and conservation of nutrients. *Required of majors (D,F,C)

NFS 279
FOOD MANAGEMENT EXPERIENCE

4, 1/9; F 89, 90
Prerequisite: NFS 101. Introduction to the various positions and operational activities which exist in a food system; combines work experience in food management with theoretical principles in current literature and examines career paths. *Required of majors (F).

NFS 305
ADVANCED FOOD

3, 2/2; F 89, 90 (GEE)
Laboratory coat/apron required.
Prerequisite: NFS 101. Application of the principles of nutrition and quality food preparation as well as the principles of management and consumer economics to family food purchase, preparation, and service. *Required of majors (D).

NFS 306
FOOD DEMONSTRATION TECHNIQUES

3, 2/2; F 89
Laboratory coat/apron required.
Prerequisite: Six hours NFS courses and junior standing. Uses and values of the lecture/demonstration method for the presentation of foods. Theory and practice.

NFS 334
CONTEMPORARY NUTRITION

3, 3/0; 1989-91 (AST)
 An explanation of nutrition which covers the functions, requirements, food sources, and results of deficiency and excess for each nutrient, as well as a variety of topics of current interest, such as weight control. Food fads and government nutrition policies will also be evaluated. *Required of majors (F).

NFS 335
NUTRITIONAL NEEDS AND CONCERNS DURING THE LIFE SPAN

3, 3/0; F 89, F 90 (GEE)
Prerequisite: NFS 334. A study of special nutritional needs and concerns during the life cycle, factors influencing them, and means of meeting them through proper food choices and nutrition education.

NFS 337
HUMAN NUTRITION

3, 3/0; Sp 90, 91
Prerequisite: BIO 311, CHE 321. A study of the nutrients required by humans for normal physiological function, with emphasis on nutrient requirements, sources, digestion, absorption, metabolism, storage, and function. *Required of majors (D,C).

NFS 338
NUTRITION AND THE LIFE CYCLE

3, 3/0; F 89, 90
Prerequisite: NFS 337. The study of nutritional needs and concerns in the various physiological ages of mankind. Application of the principles of nutrition to pregnancy, lactation, infancy, the preschool and school-age years, adolescence, adulthood, and later maturity, with appropriate discussion of nutrition services and programs available to the different age groups. *Required for majors (D,C).

NFS 361
PRINCIPLES OF MANAGEMENT IN FOOD SERVICE

3, 3/0; Sp 90, 91
 The application of management principles in food service systems. *Required of majors (D,F,C).

NFS 363
QUANTITY FOOD PRODUCTION

3, 1/4; 1989-91
Prerequisite: NFS 101. Application of food preparation principles to quantity production, menu planning, use and care of institutional equipment, standardized recipes, costs and service to the public. *Required of majors (D,F).

NFS 364
DINING ROOM SERVICE

3, 2/2; F 89, 90
Laboratory coat/apron required.
Prerequisites: NFS 361 and NFS 363. A study of the techniques used in dining room activities; students will plan, prepare, and coordinate selected dining functions and will evaluate these events during the course. *Required of majors (F).

NFS 365
MENU PLANNING

3, 3/0; Sp 90
Prerequisite: NFS 364. An in-depth study of the principles underlying the menu planning process; role of menu in the relationship to a food operation's success.

NFS 366
PURCHASING AND COST CONTROL IN FOOD SYSTEMS

1, 1/0; F 89, 90
Prerequisite: NFS 361. An understanding of the technical operations involved in the procurement, receiving, and storage of food and how these relate to the principles of cost control in a food service operation. Required of majors (D).

NFS 367
PURCHASING AND FOOD COST ACCOUNTING

3, 3/0; Sp 90, 91
Prerequisites: NFS 364 and satisfaction of the college mathematics competency requirement. Standards for selection of food and equipment in food service operations and procedures for storage, receiving, and issuing of products with emphasis on purchasing and cost control. *Required on majors (F).

NFS 400
FOOD SCIENCE

4, 3/2; Sp 90, 91
Laboratory coat required.
Prerequisite: CHE 321; NFS 101. A study of the characterization, analysis, and identification of the components of food, the effect of processing on food and the inter-relationship of various aspects of food science to nutrition. *Required of majors (D,C).

**NFS 439
NUTRITIONAL BIOCHEMICAL
ANALYSIS**

1, 0/2; F 89, 90

Fee of \$5 per student may be incurred, depending on experiments.

Prerequisite: CHE 322, NFS 337. An introduction to some basic techniques used in the analysis of food, excreta, and blood in nutrition experiments. Experiments will be performed to determine the roles of nutrients as protein, glucose, cholesterol, or ascorbic acid in human and animal metabolism. *Required of majors (C).**NFS 440
ADVANCED HUMAN NUTRITION**

3, 3/0; F89, 90

Prerequisite: CHE 322, NFS 337. The role of nutrients at the cellular level, with emphasis on intermediary metabolism of carbohydrate, protein, and lipid. Nutritional assessment including dietary, biochemical, and clinical evaluation. *Required of majors (D,C).**NFS 441
DIETARY MODIFICATIONS IN DISEASE**

4, 4/0; F 89, 90

Prerequisite: NFS 440. Physiological basis for diet modification, with special emphasis on normal metabolism of nutrients and deviations from normal metabolism in disease. *Required of majors (D).**NFS 442
NUTRITION AND DISEASE I**

3, 3/0; Sp 90, 91

Prerequisite: NFS 440; **corequisite:** NFS 446. Consideration of selected parameters requiring dietary modification in disease conditions affecting gastrointestinal tract, liver, gall bladder, and endocrine glands. *Required of majors (C).**NFS 443
NUTRITION AND DISEASE II**

3, 3/0; F 89, 90

Prerequisite: NFS 442; **corequisite:** NFS 447. Consideration of selected parameters requiring dietary modification in surgical conditions, cardiovascular disease, selected inborn errors of metabolism, and renal disease. *Required of majors (C).**NFS 444
COMMUNITY NUTRITION**

3, 2/2; Sp 90, 91

Prerequisite: NFS 443; **corequisite:** NFS 448. Nutrition as a component of health care is viewed and discussed through the various nutrition services provided for individuals and groups throughout life cycle within a community. *Required for majors (C).**NFS 445
NUTRITIONAL CARE A**

2, 0/4; F 89, 90

Clinical dress required.**Prerequisite:** NFS 337; **corequisite:** NFS 338. Application of basic nutritional principles related to maternal, infant, and child health in hospitals and community settings. Development of interviewing skills and use of appropriate tools for dietary evaluation. *Required of majors (C).**NFS 446
NUTRITIONAL CARE B**

3, 0/6; Sp 90, 91

Clinical dress required.**Prerequisite:** NFS 445; **corequisite:** NFS 442. Application of nutrition and behavioral knowledge associated with acute and chronic diseases in hospital settings. The use of problem-solving approach and application of management principles. *Required of majors (C).**NFS 447
NUTRITIONAL CARE C**

4, 0/8; F 89, 90

Prerequisite: NFS 446; **corequisite:** NFS 443. Application of knowledge and skills in providing nutritional care for individuals with acute and chronic disease. Opportunities to participate with multidisciplinary health team in providing care in an institutional setting. *Required of majors (C).**NFS 448
NUTRITIONAL CARE D**

5, 0/10; Sp 90, 91

Clinical dress required.**Prerequisite:** NFS 447; **corequisite:** NFS 444. Opportunity to provide care to groups of patients in hospitals. Participation in promoting continuity of care through discharge planning, patient and family teaching, and utilization of community resources. Involvement with health and social agencies in the community. *Required of majors (C).**NFS 449
NUTRITIONAL CARE E**

2, 0/4; Sp 90, 91

Clinical dress required.**Prerequisite:** NFS 447. Provides a basic understanding of long-term care as a health delivery system. Students participate in providing nutritional care to chronically ill patients in a long term care facility. *Required of majors (C).**NFS 450
SENIOR PRACTICUM IN DIETETICS**

4, 0/12; Sp 90, 91

Prerequisite: NFS 447 and approval of clinical faculty. The student, under guidance, plans, implements, and evaluates professional practice goals in a selected area of dietetic practice such as acute-care specialty practice, long-term care, nutrition education, or community serv-

ice programs. Ability to function under minimal supervision is required. *Required of majors (C).

**NFS 463
MANAGEMENT SYSTEMS FOR DIETETICS**

3, 3/0; Sp 90, 91

Prerequisites: NFS 363, 366. Concepts of quantitative methods of management science applied to decision making concerning policies, design, and procedures for control and evaluation of food service operations. Emphasis on management of human resources and systems concept. *Required of majors (D).**NFS 466
FOOD MANAGER AND PERSONNEL
PERSPECTIVE**

3, 3/0; Sp 89, 90

Prerequisite: NFS 364. An exploration of forces exerted on the food service manager; methods to create a more effective work environment in the food service industry via manager development and interactions with personnel. *Required of majors (F).**NFS 468
OPERATIONAL SYSTEMS IN
MANAGEMENT**

3, 3/0; F 89, 90

Prerequisite: NFS 362. Concepts of quantitative methods of management science applied to decision-making concerning policies, design, and procedures for control and evaluation of food service operations. Emphasis on management of human resources, and systems concept. *Required of majors.**NFS 469
INSTITUTIONAL FOOD SERVICE
SYSTEMS**

3, 3/0; F 89, 90

Prerequisite: NFS 364. A study of food service organizational systems with emphasis on the institutional area. *Required of majors (F).**NFS 470
LEGAL ASPECTS OF FOOD SYSTEMS
MANAGEMENT**

3, 3/0; Sp 90, 91

Prerequisite: NFS 364. An analysis and appraisal of the laws which affect a food systems operation. *Required of majors (F).**NFS 479
FOOD MANAGEMENT PRACTICUM**

2, 2/0; 1989-91

Prerequisites: NFS 466, 469, and 470 and senior standing and completion of the college's writing competency requirement. **Corequisite:** NFS 486. A course designed to permit students to apply management skills through case studies, problem solving activities, and group/individual projects in food service; instructor will arrange these to be representative of food service industry and to emphasize writing skills in responses. *Required to majors (F).**NFS 485
SEMINAR IN DIETETICS**

1, 0/2; Sp 91

Prerequisite: NFS 400; seniors only. A consideration of contemporary topics of interest in dietetics via seminar format. Each student will be required to give a formal, oral presentation after reviewing current literature on a specific topic in the field. *Majors only.**NFS 486
FOOD SYSTEMS MANAGEMENT
SEMINAR**

1, 1/0; 1989-91

Prerequisites: NFS 466, 469, and 470 and senior standing and completion of college writing competency requirement. **Corequisite:** NFS 479. An investigation of contemporary topics of interest in the food systems management hospitality field. Students will be responsible for a seminar presentation. *Required of majors (F).**NFS 495
PROJECT**

Variable credit; 1989-91

Prerequisite: Registration with permission of instructor and chairman, using department forms available in Caudell 106A. *Required of majors (C).**NFS 499
INDEPENDENT STUDY**

Variable credit; 1989-91

Prerequisite: Registration with permission of instructor and chairman, using department forms available in Caudell 106A.

Performing Arts

Offered by the Performing Arts Department
MYRON H. NADEL, Chairperson
Rockwell Hall 203**PAR 100
THE LIVELY ARTS**

3, 3/0; 1989-91

Through lectures, reading, and live and recorded performances, the student is introduced to the world of the performing arts.

**PAR 325
THE BUSINESS OF PERFORMING ARTS**

3, 3/0; Sp 90, 91 (GEE)

A comprehensive overview of the numerous aspects of business relating to the performing arts of drama, dance, and music.

Philosophy and Religious Studies

Offered by the Philosophy and Religious Studies Department
DR. GEORGE T. HOLE, Chairperson
Bishop Hall 217**PHI 101
INTRODUCTION TO PHILOSOPHY**

3, 3/0; 1989-91 (H)

An introduction to the literature and problems of philosophy.

**PHI 102
INTRODUCTION TO MORAL AND
SOCIAL PHILOSOPHY**

3, 3/0; 1989-91 (H)

An examination of various views about how we ought to live and how society should be organized. These views will be considered in the context of discussions about the good life and the good society. Sample questions are: Does virtue lead to happiness? Under what conditions can punishment be justified?

**PHI 103
INTRODUCTION TO LOGIC**

3, 3/0; 1989-91 (H)

An introduction to practical reasoning and argument relevant to everyday life. Among the subjects covered are uses of language, informal fallacies, elementary deductive arguments, and the nature of scientific thinking.

**PHI 104
INTRODUCTION TO RELIGIOUS
STUDIES**

3, 3/0; 1989-91 (H)

This course introduces the student to the rational study of religion. The religious view of humankind will be studied and those concepts basic to religious experience will be examined.

**PHI 105
INTRODUCTION TO CHRISTIAN
THOUGHT**

3, 3/0; 1989-91 (GEE)

A study of Christianity, the historical Jesus, his teachings, life and action; primary sources such as the gospels, epistles, as well as excerpts from the Christian Fathers, the Monastics, Mystics, and Reformists will be used to trace the development of this thought to present society.

**PHI 121
INTRODUCTION TO JEWISH THOUGHT**

3, 3/0; F 89, 90 (GEE)

A study of the major divisions of Jewish thought and practice; the epistemological basis of Jewish sectarianism; God and the problems

of knowledge; God and revelation; the good life; Israel and the nations; Jewish practices, laws, and institutions; the world to come; Judaism and Christianity; Judaism and Islam.

**PHI 201
PHILOSOPHIES OF CAPITALISM,
SOCIALISM, AND DEMOCRACY**

3, 3/0; F 89, 91 (H)

An examination of various philosophical theories and moral justifications of democracy. Also, a moral evaluation of the values of capitalism and socialism centering upon their implications for democracy.

**PHI 204
PHILOSOPHY OF RELIGION**

3, 3/0; Sp 90, 91 (H)

A critical analysis of certain ideas relevant to philosophy of religion. The course will focus on classroom discussion of religious ideas and on the philosophical problems confronting certain of these ideas.

**PHI 206
INTRODUCTION TO THE NEW
TESTAMENT**

3, 3/0; F 90 (GEE)

An introduction to the study of the New Testament with emphasis on the literary content, the societies from which it emerged, the structures and varieties of the literatures contemporaneous with it, and the tools necessary for understanding it.

**PHI 207
PHILOSOPHY IN LITERATURE**

3, 3/0; F 89, 90 (H)

This course has as its goal the examination of the relation between philosophy and literature, specifically by examining certain structural devices held in common, such as metaphors, analysis, parables, and paradoxes; and by examining the interrelation between form and content as these relate to philosophical issues.

**PHI 210
EXISTENTIALISM**

3, 3/0; Sp 90, 91 (GEE)

A consideration of the problem of the meaning and value of life in a context of various philosophical and literary works of religious and nonreligious existentialists, including Kierkegaard, Nietzsche, Heidegger, and Sartre.

**PHI 300
PROBLEMS OF PHILOSOPHY**

3, 3/0 (GEE)

An analysis of selected problems in epistemology, metaphysics, ethics, and certain movements in contemporary philosophy.

**PHI 301
SOCIAL AND POLITICAL PHILOSOPHY**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. An examination of political authority, including its origins, its ends and objectives, its limits, and its justifications.

**PHI 302
PHILOSOPHY OF ART AND BEAUTY**

3, 3/0; 1989-91 (H)
Prerequisite: Junior or senior or one course in philosophy. An analysis of the basic concepts presupposed in any critical examination of the arts, including painting, literature, and music.

**PHI 304
PHILOSOPHY OF LAW**

3, 3/0; 1989-91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. A general inquiry into the nature and justification of legal institutions, with special emphasis on the problem of legal punishment and on the legal enforcement of morality.

**PHI 305
PHILOSOPHY OF LANGUAGE I**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. Analyticity, meaning, and referring. Propositions and truth. Speech acts, the philosophical relevance of transformational grammar.

**PHI 306
WRITINGS OF JOHN**

3, 3/0; F 89, Sp 91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. The historical and literary backgrounds of St. John's Gospel, the letter of John, and the Book of Revelation will be studied. Emphasis will be placed on the content of the Gospel itself, its major theological themes, and its distinctive contributions to Christian thought.

**PHI 307
BEGINNING SYMBOLIC LOGIC**

3, 3/0; 1989-91 (H)
Prerequisite: Junior or senior or one course in philosophy. An introduction to symbolic logic and the traditional logic of categorical sentences.

**PHI 308
PHILOSOPHY OF LOVE AND SEX**

3, 3/0; 1989-91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. An examination of classic and contemporary philosophic theories of the nature, value, and purpose of human love and sexuality. Certain moral arguments found in such areas as abortion and pre-marital intercourse will also be considered.

**PHI 309
PHILOSOPHY OF SCIENCE**

3, 3/0; Sp 91 (GEE)
Prerequisite: Junior or senior. Functional analysis of the central concepts of the general logic of scientific activity. An attempt to describe the general logic of science through the literature in philosophy of science.

**PHI 312
METAPHYSICS**

3, 3/0
Prerequisite: Junior or senior or one course in philosophy. Is metaphysics possible? Personal identity, substance and attributes, universals and particulars, freedom of the will, mind and body.

**PHI 315
EARLY MODERN PHILOSOPHY**

3, 3/0; Sp 90 (GEE)
Prerequisite: Junior or senior or one course in philosophy. Philosophy systems of 14th, 15th, and 16th centuries are brought to bear upon emergence of 20th century technology, society, and science. The shift from metaphysical perspectives of qualitative world to natural science perspectives based upon quantitative analysis of nature and reality.

**PHI 317
THE HISTORY OF PHILOSOPHY I**

3, 3/0; F 89, 90 (H)
Prerequisite: Junior or senior or one course in philosophy. Readings in selected original texts of the leading philosophers of ancient Greece and Rome, including such thinkers as Heraclitus, Parmenides, Plato, Socrates, and Aristotle. Three or four works will be read from a list composed of such works as Aristotle's "Metaphysics" and "Nicomachean Ethics" and Plato's "Republic," "Thaetetus," and "Parmenides."

**PHI 318
THE HISTORY OF PHILOSOPHY II**

3, 3/0; Sp 90, 91 (H)
Prerequisite: Junior or senior or one course in philosophy. Readings in selected original texts from Hobbes, Locke, Berkeley, Hume, Descartes, Spinoza, Leibniz, Kant, and Hegel. Three or four works will be read from a list composed of such works as Descartes' "Meditations," Hume's "Enquiry Concerning the Human Understanding," and Kant's "Prolegomena to Any Future Metaphysics."

**PHI 319
FIGURES IN EARLY CHRISTIAN PHILOSOPHY**

3, 3/0; F 89 (GEE)
Prerequisite: Junior or senior or one course in philosophy. This course is the study of the philosophical movements and themes which were an influence on and which were developed by early Christian fathers of the church. Special emphasis will be given to an examina-

tion of the original writings of such figures as Augustine, Boethius, John Scotus Erigena, Anselm, Abelard, Bonaventure, Albertus Magnus, Thomas Aquinas, Duns Scotus, and Ockham.

**PHI 321
WORLD RELIGIONS**

3, 3/0; 1989-91 (H)
Prerequisite: Junior or senior or one course in philosophy. A general introduction to world religions: the religious life of mankind, including the major western and eastern religions.

**PHI 323
MORAL ISSUES**

3, 3/0; 1989-91 (H)
Prerequisite: Junior or senior or one course in philosophy. An examination of the possibility of justifying our moral beliefs. Several moral theories will be examined on both a theoretical and a practical level. Contemporary issues such as the morality of abortion and the equality of rights will be considered.

**PHI 324
CHINESE AND JAPANESE PHILOSOPHY**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. A close examination of the various philosophical traditions of China and Japan. Particular attention will be given to the major schools of Confucianism, Taoism, and Zen.

**PHI 325
PHILOSOPHY OF FUTURE MAN**

3, 3/0; 1989-91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. This course will attempt to help students anticipate change by developing future-oriented attitudes. The course will explore ideas, images, and models of the human future and allow students to integrate their studies from other departments.

**PHI 327
AESTHETICS AND THE ARTS**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. Some major concepts and theories selected from the philosophy of art applied to some major works of art selected each semester from some but not all of the following fields: architecture, dance, drama, film, music, painting, and sculpture.

**PHI 328
BUSINESS AND ETHICS**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. An examination of moral problems many business people face in their working experience. Several moral theories will be analyzed in order to provide a theoretical foundation for examining specific moral problems. Moral problems related to advertising, ecology and pollution, the pricing of goods and services, bribery, etc., will be examined.

**PHI 329
CONTEMPORARY CHRISTIAN THOUGHT**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. An examination of worship, ministry, and theology of various Christian traditions in the context in which they developed from the 16th to the 20th centuries. The course will also consider some contemporary challenges to Christianity.

**PHI 331
RELIGION AND MEDIA**

3, 3/0; Sp 90 (GEE)
Prerequisite: Junior or senior or one course in philosophy. Religious issues and events will be discussed from the viewpoint of print journalism and broadcast media. Sectarian newswriting and media presentations as well as techniques and sources for interviews will be analyzed.

**PHI 332
MYSTICISM**

3, 3/0; Sp 91 (GEE)
Prerequisite: Junior or senior or one course in philosophy. This course offers an in-depth introduction to the philosophy of mystical experience. The major ascetical disciplines of the world and their underlying philosophies will be covered. Topics will range from Yoga and Zen to Carlos Castaneda and "2001 — A Space Odyssey."

**PHI 350
HOLOCAUST**

3, 3/0; Sp 90 (GEE)
Prerequisite: Junior or senior or one course in philosophy. This course will examine the facts of the Holocaust (Europe 1933-45) against the background of Jewish religious thought and religious thought in general, with special attention to how the Holocaust has affected present religious and philosophical thinking.

**PHI 401
PROBLEM SEMINAR**

3, 3/0
Prerequisite: Junior or senior or one course in philosophy. Intensive analysis of selected topics in philosophy.

**PHI 402
SEMINAR IN PHILOSOPHY**

3, 3/0; 1989-91
Prerequisite: Junior or senior or one course in philosophy. Intensive study of figures and periods in the history of western and eastern philosophy.

**PHI 488
INTERNSHIP**

1-3, Sp 91
Prerequisites: Junior or senior standing, 2.5 GPA or higher, with at least one-third of the

philosophy major or religious studies minor completed. Internship programs provide students with supervised field experiences (experiential learning). An internship shall consist of supervised on-site activities for qualified students and an academic component consisting of training sessions, seminars, and reports.

**PHI 495
PROJECT****PHI 499
INDEPENDENT STUDY**

Physics

Offered by the Physics Department
 DR. JAMES WELLS, Chairperson
 Science Building 271B

The Physics Department offers courses of general interest such as PHY 100, PHY 103, and PHY 200, as well as technical courses for students who plan to major in all sciences.

**PHY 100
PHYSICS FOR NON-SCIENCE MAJORS**

3, 3/0; 1989-91 (MS)
 A one-semester, non-mathematical consideration of some world views in physics and their relevance to society. May not be substituted for PHY 101, 102, 111, 112. *Not open to majors.

**PHY 101
GENERAL PHYSICS**

3, 2/2; 1989-91 (MS)
Prerequisite: PHY 101. Light, electricity and magnetism, atomic physics; selection of laboratory experiences based on the student's curricular program. *Not open to majors.

**PHY 102
GENERAL PHYSICS**

3, 2/2; 1989-91 (MS)
Prerequisite: PHY 101. Light, electricity and magnetism, atomic physics; selection of laboratory experiences based on the student's curricular program. *Not open to majors.

**PHY 103
UNDERSTANDING SOUND**

3, 3/0; 1989-91 (MS)
 A one-semester, non-mathematical consideration of sound and noise. Discussion of musical sounds, noise pollution, fidelity of sound reproduction, and other topics related to the quality of the audible environment. *Designed for non-science majors. May not be substituted for PHY 101, 102, 111, 112. *Not open to majors.

**PHY 107
APPLIED PHYSICS**

3, 2/2; 1989-91 (GEE)
 An introduction to selected principles and laboratory measurements basic to technology. Topics include mechanics, fluid properties, thermodynamics, electric and magnetic fields, circuits, and optics. *Not open to physics majors, and may not be substituted for 101, 102, 111, 112.

**PHY 111
UNIVERSITY PHYSICS I**

4, 3/2; 1989-91 (MS)
 A calculus-based treatment for science majors of particle mechanics and dynamics with an introduction to gravitation and oscillations. Includes laboratory. *Required for majors.

**PHY 112
UNIVERSITY PHYSICS II**

4, 3/2; 1989-91 (MS)
Prerequisite: PHY 111 or equivalent. A continuation of PHY 111; a calculus-based introduction to heat, electricity, magnetism, and optics. Includes laboratory. *Required for majors.

**PHY 200
CREATORS OF THE ATOMIC AGE**

3, 3/0; S 89, 90, 91 (GEE)
 Conceptual analysis of ideas and contributions of the physicists related to the development of nuclear energy and weapons. The what, how, and why of both military and civilian applications. Designed for non-science majors and includes multimedia presentations.

**PHY 213
UNIVERSITY PHYSICS III**

3, 3/0; F 89, 90, 91
Prerequisite: PHY 112 or equivalent. A continuation of PHY 111 and 112; a calculus-based introduction to physical optics, kinetic theory, classical wave motion, and interference phenomena; introduction to relativity. *Required for B.S. program.

**PHY 303
HEAT AND THE THERMODYNAMICS**

3, 3/0; F 89, 90, 91
Prerequisite: PHY 111-112 or equivalent, and calculus. Transfer, emission, absorption, reflection of heat; thermodynamics; isothermal and adiabatic processes; heat engines and particle distribution functions. *Required for B.S. program.

**PHY 305
MODERN ATOMIC PHYSICS**

4, 4/0; Sp 89, 90, 91
Prerequisite: PHY 111-112 or equivalent, and calculus. The electron and its properties as shown by experiments; the Bohr-Rutherford theory and atomic spectra; qualitative concepts of the quantum theory; selected topics from nuclear physics; atomic and solid state physics. *Required for all majors.

**PHY 308
OPTICS**

3, 3/0; Sp 89, 90, 91

Prerequisite: PHY 111-112 or equivalent, and calculus. Fundamentals of geometrical and physical optics, the nature and propagation of light; experience with interference diffraction, polarization; and double refraction. *Required for B.S. program.

**PHY 310
INTERMEDIATE LABORATORY**

2, 0/4; F 89, 90, 91

Prerequisite: PHY 111-112. **Corequisite:** PHY 213. Theory of data presentation in laboratory, including error propagation, statistics, and graphing techniques applied to experiments in mechanics, thermodynamics, optics, and electricity and magnetism.

**PHY 320
INTRODUCTION TO
THEORETICAL PHYSICS**

4, 4/0; Sp 89, 90, 91

Prerequisite: PHY 111-112 plus MAT 263. Introduction to the mathematics of physics and its applications; ordinary and partial differential equations, complex numbers, special functions, boundary value problems, vectors, matrices, and transform techniques. *Required of all majors.

**PHY 325
ELECTRONICS**

3, 0/6; F 89, 90, 91

Prerequisite: PHY 320, and junior standing. Electronic principles of filters and resonant circuits. Semiconductors, digital and analog instrumentation. *Required for B.S. program.

**PHY 403
X-RAYS**

3, 3/0; Sp 89, 91

Prerequisite: PHY 111-112 or equivalent. Production and measurement of X-rays; absorption and wave properties; Bragg's Law and crystal lattices; emission and absorption spectra; scattering.

**PHY 406
INTRODUCTION TO
QUANTUM PHYSICS**

3, 3/0; Sp 89, 90, 91

Prerequisite: PHY 305, PHY 320, or equivalent. Introduction to the postulates of quantum mechanics with selected examples from one-dimensional problems, atomic systems, angular momentum, and spin. *Required for B.S., B.A. programs.

**PHY 408
NUCLEAR PHYSICS**

3, 3/0; Sp 90

Prerequisite: PHY 320 or equivalent. The basic properties of nucleons and nuclei, radioactivity, nuclear methods, the interaction of nuclear radiation with matter, nuclear reactions, the operation of particle accelerators, and an introduction to high-energy physics.

**PHY 410
ADVANCED PHYSICS LABORATORY**

2, 0/4; 1989-91

Prerequisite: PHY 305 or equivalent. Selected classical experiments chosen from the area of mechanics, heat, sound, light, electricity and magnetism, and modern physics. B.S., B.A. majors must take this course twice. *Required of all majors.

**PHY 411
INTRODUCTION TO SOLID STATE
PHYSICS**

3, 3/0; Sp 89, 91

Prerequisite: PHY 320 or equivalent. Theory of the structure of solids; thermal, magnetic, and dielectric properties of matter in the solid state; specific heats, band theory, superconductivity.

**PHY 412
PHYSICS SEMINAR**

1, 1/0; 1989-91

Prerequisite: 15 semester hours credit in Physics and MAT 162 or the equivalent. Readings, reports and discussion of current problems and research in Physics or the teaching of Physics. *This course may be taken three times.

**PHY 425
CLASSICAL MECHANICS**

4, 4/0; F 89, 90, 91

Prerequisite: PHY 320 or equivalent. Vectorial particle mechanics in one, two, and three dimensions; rigid body motions in three dimensions; motion in central force fields; moving reference frames, forced harmonic oscillators and introduction to mechanics in Lagrangian formulation. *Required for all majors.

**PHY 430
ELECTRICITY AND MAGNETISM I**

3, 3/0; F 89, 90, 91

Prerequisite: PHY 320, MAT 263 or equivalent. The interactions of electric charges and currents in electric and magnetic phenomena. The fundamental theory and application to physical systems will be considered with an introduction to Maxwell's equations. *Required of all majors.

**PHY 431
ELECTRICITY AND MAGNETISM II**

3, 3/0; Sp 89, 90, 91

Prerequisite: PHY 430. This course is a continuation of PHY 430. It covers wave propagation in media, the special theory of relativity as applied to fields and radiation problems.

**PHY 450
SUPERVISED PHYSICS LABORATORY
TEACHING**

1-2, 0/2-4; 1989-91

Prerequisite: Junior or senior standing in Physics, 3.25 GPA in major, 3.0 GPA overall. **Approval of Physics faculty based on academic performance, maturity, and potential.** A super-

vised in classroom introduction to college laboratory teaching techniques and procedures for selected, qualified upper division physics majors.

**PHY 495
PROJECT**

1-3, 0/2-6; 1989-91

Prerequisite: Approval of a faculty sponsor must be secured prior to registration. Physics and physics-related areas.

**PHY 499
INDEPENDENT STUDY**

3-6, 0/6-12; 1989-91

Prerequisite: Approval of a faculty sponsor must be secured prior to registration. Physics and physics-related areas.

Planning

Offered by the Geography and Planning Department
ELBRIDGE A. RENNING JR., Chairperson
Classroom Building A213

**PLN 315
INTRODUCTION TO COMMUNITY
PLANNING**

3, 3/0; 1989-91 (GEE)

Introduction to various aspects of community planning, historical survey, origin and growth of city planning movement; role of the various levels of government in community planning; and factors currently involved in community planning theory and practice. *Required of urban-regional analysis and planning majors.

**PLN 412
COMMUNITY PLANNING AGENCIES &
ISSUES**

3, 3/0; F 89, 90

Prerequisite: PLN 315. The role of the professional planner in a range of government and private agencies; introduction to the tools needed by the professional planner; discussion of planning techniques and issues. Emphasis is on professional ethics and the functions of staff in a variety of planning agencies. *Required of urban-regional analysis and planning majors.

**PLN 415
SEMINAR IN PLANNING**

3, 3/0; Sp 90, 91

Prerequisite: Permission of instructor. Investigation, discussion and research on topics of current interest in planning or economic development. Techniques and methods of analysis used in the planning process. Topics will vary from semester to semester.

**PLN 488
INTERNSHIP**

Hours vary with credit.

Prerequisite: Junior or senior and PLN 315. Internships provide students with guided and supervised field experience which complement the academic program. Students must have at least a 2.5 GPA and a background of courses or experiences within the area of interest. Approval of the placement must be obtained from the student's adviser and the department chair.
PLN 495
PROJECT

**PLN 499
INDEPENDENT STUDY**

Political Science

Offered by the Political Science Department
DR. LAWRENCE G. FLOOD, Chairperson
Classroom Building 218

**PSC 101
INTRODUCTION TO GOVERNMENT
AND POLITICS**

3, 3/0; 1989-91 (SS)

Survey of the nature and the scope of political science; ideological foundations of politics; comparative study of the governments of constitutional, totalitarian and developing systems; the dynamics of politics and functions of political institutions.

**PSC 102
AMERICAN POLITICAL INSTITUTIONS
AND PROBLEMS**

3, 3/0; 1989-91 (SS)

The Constitution and its principles; functions and roles of the federal executive, legislative and judicial branches; citizen participation; problems of individual liberty and governmental authority; problems of national security, economic regulation and social welfare. *PSC 102 required to Secondary Social Studies majors.

**PSC 103
GREAT POLITICAL ISSUES**

3, 3/0; 1989-91 (SS)

Examination of some of the great political issues such as ideology, freedom, equality, political obligation, civil disobedience, law and morality.

**PSC 210
THE AMERICAN PRESIDENCY**

3, 3/0; F 89, 90 (GEE)

Examination of 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 in the last decade of the 20th century.

**PSC 215
URBAN GOVERNMENT**

3, 3/0; Sp 90, 91 (SS)

An introduction to the political economy of urban areas in U.S. Focus on explanation of current urban public policies through study of such topics as public vs. private political power, bureaucracy; citizen organization.

**PSC 220
THE DEVELOPMENT OF AMERICAN
CONSTITUTIONAL LAW**

3, 3/0; F 89, Sp 90 (GEE)

Foundations of American constitutionalism; judicial review and its use through history; the Supreme Court in interaction with Congress, president and states; evolving concepts of federalism; development of civil rights and liberties policies.

**PSC 225
WOMEN AND AMERICAN POLITICS**

3, 3/0; F 89 (SS)

Defines influences on female participation in the American political system; analyzes the political behavior of American women; and examines the implications of these influences and behaviors.

**PSC 230
PRINCIPLES AND PROBLEMS OF
INTERNATIONAL RELATIONS**

3, 3/0; F 89, 90 (SS)

Elements of national power, religion and global balance of power and collective security systems, instruments of international politics-diplomacy, propaganda and war, forces of nationalism.

**PSC 240
EUROPEAN POLITICAL SYSTEMS**

3, 3/0; F 89, 90 (SS)

Examination of the structure and dynamics of politics in the major European countries with emphasis on political behavior and political processes of decision making.

**PSC 300
POLITICAL ANALYSIS**

3, 3/0; 1989-91 (GEE)

Systematic study of the design, execution, and interpretation of research in the several fields of political science; emergence and development of the discipline; common assumptions and controversies. *Required of all political science majors.

**PSC 306
POLITICS OF ENERGY**

3, 3/0; F 89, 90 (GEE)

Study of the energy situation in both the U.S. and the international community from political viewpoints; analyze the U.S. energy policy and

process and strategies within their economic, physical, and political settings; and examine the issues of conflict and cooperation among nations over the rational utilization of energy resources.

**PSC 307
POLITICAL ALIENATION**

3, 3/0; F 89 (GEE)

Deals with political disillusionment and alienation as the combination of several distinct factors; distrust of government and politicians, a sense of the meaninglessness of electoral politics and political choices or personal powerlessness to influence the course of politics. The students are encouraged to sort out these feelings, to comprehend their extent and to locate the sources and probable effects.

**PSC 309
POLITICS OF INTERNATIONAL
BUSINESS**

3, 3/0; Sp 90, 91

A study of the multi-national corporation as viewed from the political science perspective. Emphasis is placed on political process in both national and host political system. Also, it focuses on how politics shapes the structure and organizational behavior of the multi-national corporation.

**PSC 310
AMERICAN POLITICS
AND POLITICAL PARTIES**

3, 3/0; F 89, 90 (GEE)

The American two-party system; suffrage rules and the electoral process; shifting patterns of organization, nomination, and finance; the role of party in government; and parties in the future of American politics.

**PSC 311
PRESSURE POLITICS**

3, 3/0; F 89, 90 (GEE)

Introduces to students theories and insights helpful in understanding the political process as practiced in democratic systems; to acquaint the student with the methods and operations of various interest groups; and to encourage in the student an appreciation of the political roles played by various citizen groups in the lobbying process.

**PSC 312
LEGISLATIVE PROCESS**

3, 3/0; Sp 90, 91 (GEE)

An examination of the state and national legislatures with emphasis on the determinants of legislative decision-making, the committee system, and the policy outputs of the legislative branch.

**PSC 315
STATE AND LOCAL GOVERNMENT
POLITICS**

3, 3/0; 1989-91 (GEE)

Functions of state and local governments; constitutional and governmental structures; inter-

governmental relations; decision-making, effects of metropolitanization; contemporary issues and problems; future trends and prospects.

PSC 316 **URBAN ETHNIC POLITICS**

3, 3/0; F 89, 90 (GEE)
Study of the political life of ethnic groups in urban areas of the United States. Includes consideration of a number of both white immigrant and "third world" groups including Irish, Italian, Polish, Black, and Native American. Emphasis on contemporary patterns of organization, leadership, strategy and participation, and on relations among ethnic groups, and between ethnic groups and both local and national government.

PSC 320/CRJ 317 **U.S. CONSTITUTION AND CIVIL LIBERTIES**

3, 3/0; F 90 (GEE)
In-depth study of the 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 over the years. The Bill of Rights and "due process" clause of the United States Constitution will be the focal point of this course. *Alternate course selection to PSC 420, Contemporary Issues in American Constitutional Law.

PSC 325 **POLITICS OF WELFARE**

3, 3/0; Sp 90, 91 (GEE)
To provide the student with knowledge and insight into America's mixed system of capitalism and socialism; to introduce the student to many of our major welfare programs including social security, veterans benefits, tax expenditures, food stamps, subsidized education, military retired pay, etc.; to analyze the costs and benefits of America's welfare system.

PSC 326 **POLITICS AND MEDIA**

3, 3/0; 1989-91 (GEE)
Examines the relationship between the mass media and contemporary American politics. It analyzes the impact of the media on voting behavior and focuses on the role of the media in the presidential and congressional elections.

PSC 327 **PRACTICAL POLITICS**

3, 3/0; 1989-91
A non-classroom structured activity which allows students to receive college credit while participating in a meaningful way in politics. Activities include participation in quasi-political organizing as well as in campaigns and elections. Students who register for this course should first get the permission of the instructor.

PSC 330 **AMERICAN FOREIGN POLICY**

3, 3/0; Sp 90, 91 (GEE)
Analysis of basic ideas that shape American foreign policy; isolationism, overinvolvement and neo-isolationism; domestic and international pressures; cold war, peaceful coexistence and detente; major area problems.

PSC 335 **INTERNATIONAL RELATIONS OF THE MIDDLE EAST**

3, 3/0; F 89, 90 (GEE)
Study of the patterns of interaction within the Middle East and with other states; problems of security and peace in the region; ideology, nationalism, and economic interests as factors influencing the behavior of the states.

PSC 340 **POLITICS OF DEVELOPING COUNTRIES**

3, 3/0; Sp 91 (SS)
Comparative analysis of the major problems of the developing countries; political process and its relation to societal transformation; patterns of political process; the role of the army and bureaucracy in political development; problems of nation-building and democracy in developing countries.

PSC 345/HIS 313 **POLITICS AND HISTORY OF THE MIDDLE EAST**

3, 3/0; Sp 90, 91 (SS)
Analysis of the geographic, cultural, and political settings; historical development since the 19th century, the disintegration of the Ottoman Empire and western colonialism; nationalism, independence and turmoil, Arab-Israeli question, oil, its impact and problems; great power and inter-area politics.

PSC 348 **GOVERNMENT AND POLITICS OF THE FAR EAST**

3, 3/0; offered based on staff availability (SS)
An introductory survey of the governmental institutions and political processes of contemporary China and Japan. Major emphasis is placed on Japanese democratic reform since World War II and Chinese communist revolution, as well as the governmental structures, party systems, and foreign policies of the countries concerned.

PSC 350 **INTRODUCTION TO LEGAL THOUGHT**

3, 3/0; F 89, 90 (GEE)
An examination of the main concepts, theories, and issues that constitute the framework of legal thought (such as the nature of law, the nature of legal reasoning, the limits of law, and the justification of punishment).

PSC 351 **HISTORY OF POLITICAL THEORY I**

3, 3/0; Sp 90 (GEE)
An exposition and critical analysis of the main

problems of political theory by an examination of the writings of major political thinkers from Plato to Aquinas.

PSC 352 **HISTORY OF POLITICAL THEORY II**

3, 3/0; Sp 91 (GEE)
An exposition and critical analysis of the main problems of political theory by an examination of the writings of major political thinkers from Machiavelli to Marx.

PSC 355 **AMERICAN POLITICAL THOUGHT**

3, 3/0; Sp 90, 91 (GEE)
This is a survey of American political thought from colonial to contemporary time. The main emphasis will be on: (1) the development of political values and beliefs that have persisted, (2) how interpretations and applications of these values and beliefs have changed through different periods, and (3) the roots of contemporary American political culture and ideology.

PSC 360 **PUBLIC ADMINISTRATION**

3, 3/0; F 89, 90 (GEE)
Introduction to the study of public administration; analysis of the relations of government administration to its social, economic, and political settings; the role of public administration in formulating public policy; organization and management in public service; personnel and financial advantages.

PSC 364 **AMERICAN PUBLIC POLICY**

3, 3/0; Sp 90, 91 (GEE)
An examination of governmental policy with emphasis on the sources of policy, the policy-making process in national-level political institutions, and the social impact of policy choices.

PSC 368 **COMPARATIVE PUBLIC ADMINISTRATION**

3, 3/0; Sp 90, 91 (SS)
An introduction to the cross-cultural, cross-national or cross-institutional study of public administration institutions and practices. Particular emphasis is given to the administrative systems of European countries and to the processes of administrative change in developing countries. The evolution of bureaucracy is also explored.

PSC 370 **CANADIAN PUBLIC ADMINISTRATION**

3, 3/0; F 89, 90
A survey of Canadian public administration institutions and processes and the development of public policy. Particular emphasis is placed on the federal level with secondary attention to provincial and local administration and policy. Similarities and differences with other administrative systems — particularly the U.S. — are explored.

PSC 389 **TOPICS IN POLITICAL SCIENCE**

3, 3/0; offered based on staff availability
In-depth study of current issues of substantial political significance. Several sections may be offered each semester. The nature of the topics will vary from semester to semester. Recent examples: politics of tax revolt, politics of terror, sexual politics. Student should consult current course listings for specific offering.

PSC 410/SOC 440 **POLITICAL BEHAVIOR AND PUBLIC OPINION**

3, 3/0; offered based on staff availability
Conditions of democratic political behavior; opinion formulation in democratic systems; voting behavior and party affiliation in the United States; political behavior in governmental institutions; political behavior in selected western European societies.

PSC 420 **CONTEMPORARY ISSUES IN AMERICAN CONSTITUTIONAL LAW**

3, 3/0; Sp 91
Examination of recent developments in American constitutional law; comparison of the Warren and Burger Courts; focus upon First Amendment liberties and rights; the rights of the accused and criminal due process; equal protection and black Americans; reapportionment and representation; the president and national security.

PSC 450 **CONTEMPORARY POLITICAL THOUGHT**

3, 3/0; F 89, 90
An exposition and critical analysis of the central problems of political philosophy (such as equality, freedom, justice, and political obligation) as discussed by contemporary philosophers.

PSC 470 **HONORS SEMINAR IN POLITICAL SCIENCE**

3, 3/0; offered based on staff availability
Prerequisite: Junior or senior with 3.00 average. Selected topics in political science will be examined and analyzed in depth.

PSC 495 **PROJECT**

PSC 497 **WASHINGTON SEMESTER**

(Daily) 3, 3/0; 1989-91
Each semester two students from this college are chosen to participate in the State University of New York's Washington Semester Program. The program involves a full-time internship in Washington, D.C. Selection is based on college-wide competition. Interested students should contact the department chairman for information and appropriate application forms.

PSC 499 **INDEPENDENT STUDY**

Psychology

Offered by the Psychology Department
DR. JERRY CATALDO, Chairperson
Classroom Building C312

The Psychology Department offers B.A. and B.S. degrees. Psychology 101 is a prerequisite for all other psychology courses.

PSY 101 **INTRODUCTION TO PSYCHOLOGY**

3, 3/0; 1989-91 (SS)
The objective of this course is to introduce students to the scientific study of psychology. Topics covered include: research methodology, genetic and environmental influences on the development of behavior, perception, learning, motivation and emotion, personality, social processes, and psychopathology.

PSY 205 **INDEPENDENT READING**

1, 1/0; 1989-91
Prerequisite: PSY 101 and permission of the instructor. Supervised readings project on a specific topic in psychology to be chosen by mutual agreement of student and faculty supervisor at the time of registration.

PSY 304 **PSYCHOLOGY OF LEARNING**

3, 2/2; 1989-91 (SS)
Prerequisite: PSY 101. Major emphasis in this course will be on the scientific analysis of learning rather than on the application of learning principles. Topics covered include: psychological correlates of learning and memory, empirical laws of learning derived from research on humans and animals, and theoretical explanations of the learning process.

PSY 306 **STATISTICS IN PSYCHOLOGICAL RESEARCH**

3, 2/2; 1989-91 (GEE)
Prerequisite: PSY 101. Intensive study of the major descriptive and inferential statistics used in psychological research. Practice in the use of statistical tests of significance. Topics covered include: graphic and tabular presentation of data, measures of central tendency and dispersion, probability theory, t-tests, analysis of variance, chi-square, correlation techniques, and experimental design. *Required for psychology majors.

PSY 308 **BASIC CONCEPTS OF PERCEPTION**

3, 3/0; 1989-91 (SS)
Prerequisite: PSY 101. This course covers the major facets of perceptual functioning from sensory processes to complex perceptual integrative processes. Emphasis on basic con-

cepts such as physiological correlates of perception, empirical laws and principles, theoretical explanations of perceptual processes and their determinants.

PSY 310 **BEHAVIOR MODIFICATION I**

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: PSY 101. This course covers major learning principles as applied in behavior-modification techniques. The premises, ethics, and assessment of behavioral methods of behavior control are studied. Topics covered include: reinforcement, extinction, punishment, modeling, and cognitive change as methods of changing human behavior.

PSY 311 **PERSONALITY: THEORY AND RESEARCH**

3, 3/0; 1989-91 (SS)
Prerequisite: PSY 101. This course will examine and evaluate major theories and related research on personality development and functioning. The focus is on normal personality. Topics covered include: problems of theory development and evaluation, major theoretical approaches, and personality determinants. Empirical research will be discussed.

PSY 321 **COMPARATIVE ANIMAL BEHAVIOR**

3, 3/0; Sp 90 (GEE)
Prerequisite: PSY 101. The study of animal behavior as viewed from a psychological perspective. Emphasis is placed on current theoretical models of animal behavior. Topics covered include: the evolution and adaptive functions of sexuality, predator-prey interactions, evolution of social organization, territoriality, dominance, aggression, learning, and instinct.

PSY 325 **SOCIAL BEHAVIOR**

3, 3/0; 1989-91 (SS)
Prerequisite: PSY 101. A theoretical and empirical examination of the role of social factors in the individual's behavior. Topics covered include: theory and research on attitude formation and change, affiliation, attribution process, interpersonal attraction, small group dynamics, aggression, conformity, leadership, and competition.

PSY 327 **ADULT DEVELOPMENT AND AGING I**

3, 3/0; 1989-91 (GEE)
Prerequisite: PSY 101. An introduction to how humans develop and change throughout young adulthood, middle adulthood and old age. Current psychological theory and empirical evidence concerning patterns of aging, problems of aging, and benefits of aging will be considered. Topics covered include: social, psychological, and biological determinants of adult development, cognitive change, personality change, family relations, life satisfaction, and the stigma of old age.

PSY 340
COGNITIVE PSYCHOLOGY

3, 3/0; 1989-91 (GEE)

Prerequisite: PSY 101. A basic introduction and survey of the research and theoretical issues in cognitive psychology. Topics covered include: history of memory and thought, acquisition of information, attention, short-term and long-term memory, pattern recognition, speech perception, space perception, and higher-order mental processes.

PSY 355
LIFE-SPAN DEVELOPMENTAL PSYCHOLOGY

3, 3/0; 1989-91 (SS)

Prerequisite: PSY 101. Examines the psychological, biological and social factors that affect psychological development throughout the lifespan from the prenatal infant to the elderly adult. Topics covered include: cognitive development, language acquisition, formation of sex roles, development of personality, emotion, morality, and the stages of the life-span.

PSY 365
INDUSTRIAL PSYCHOLOGY

3, 3/0; 1989-91 (GEE)

Prerequisite: PSY 101. A study of the theoretical and social functions of industrial psychology emphasizing personnel selection, classification, placement, training, merit review, and development. Work motivation, job satisfaction, factors which influence productivity, leadership, and organizational theory are also considered.

PSY 367
BEHAVIOR IN ORGANIZATIONS

3, 3/0; 1989-91 (SS)

Prerequisite: PSY 101. The course examines organizational behavior from a psychological perspective. Emphasis is placed on theories and methods of organizational behavior and relevant research. Topics covered include: issues related to behavioral research in the organizational setting, motivation, leadership, group dynamics, communication, and organization analysis and development.

PSY 370
ENVIRONMENTAL PSYCHOLOGY I

3, 3/0; 1989-91 (GEE)

Prerequisite: PSY 101. An introduction to the study of environment psychology. The course examines major features of the role of physical environment on behavior. Topics covered include: theories of physical environment-behavior relations, research methods, territoriality, privacy, crowding, environmental perception and attitudes, pollution and behavior, buildings and behavior.

PSY 382
PSYCHOLOGY OF THE CONSUMER

3, 3/0; Sp 91 (GEE)

Prerequisite: PSY 101 plus 42 additional col-

lege credits. An introduction to the field of consumer behavior from a psychological point of view. This course will emphasize psychological theory and measurement techniques as tools for understanding consumer behavior. Relevant material from learning, perception, attitude formation, personality, and motivation as they describe consumer decision-making will be presented.

PSY 383
PSYCHOLOGY OF HUMAN SEXUAL BEHAVIOR

3, 3/0; 1989-91 (GEE)

Prerequisite: PSY 101 plus 42 additional college credits. Understanding human sexual behavior is an important aspect of psychology. This course will focus on the psychosexual aspects of human sexuality. Topics covered include: historical views of human sexuality, sex research, physiology of sex, gender identity and role, 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, and future trends of sexuality.

PSY 385
PSYCHOLOGY OF PERSONAL ADJUSTMENT

3, 3/0; Sp 90 (GEE)

Prerequisite: PSY 101. This course examines personal growth and adjustment. Topics covered include: theories of adjustment, characteristics of the healthy personality, interpersonal relations and adjustment, role of work in adjustment, and strategies for adjustment.

PSY 386
PSYCHOLOGY OF STRESS, COPING AND HEALTH

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: PSY 101 plus 42 additional college credits. This course will introduce theory and empirical research in the psychology of stress, coping, and health. Topics covered include: introduction to health psychology, major physiological systems, components of stress, relationship of stress to health, physical and psychological consequences of stress, social support systems, coping with life crises, relaxation techniques, psychological intervention and treatment, and the holistic health model.

PSY 387
PSYCHOLOGY OF WOMEN

3, 3/0; F 90 (GEE)

Prerequisite: PSY 101 plus 42 additional college credits. This course focuses on the empirical and theoretical issues related to the psychology of women. Topics covered include: the biological bases of sex differences, the effects of body states on the psyche, gender identity, women's adult development, female personality, women and interpersonal power and self-esteem.

PSY 388
PSYCHOLOGY OF DEATH AND DYING

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: PSY 101 plus 42 additional college credits. This course will provide students with an objective coverage of the relevant issues pertaining to death and dying. Topics covered include: the stages of dying, counseling the dying person, attitudes of and reactions to death, psychological needs served by funeral and burial rituals, suicide, euthanasia, the right to die, grief and bereavement.

PSY 411
ABNORMAL PSYCHOLOGY

3, 3/0; 1989-91

Prerequisite: PSY 311. This course will examine the dimensions, theories, and empirical findings in psychopathology. Topics covered include: the concept of abnormality, problems and schemes of classification, theories of neurosis and psychosis, etiology, classification, and treatment of selected neurotic and psychotic disorders.

PSY 412
COMMUNITY PSYCHOLOGY

3, 3/0; Sp 90

Prerequisite: PSY 101 and six additional hours of psychology; PSY 411 is recommended. This course provides a systematic coverage of the theoretical and empirical literature regarding community mental health. Topics covered include: historical perspectives on the community mental health movement, assessment of psychological dysfunction, levels of evaluating institutional change, consultation, and program evaluation.

PSY 415
COMPETENT INFANT

3, 3/0; F 89

Prerequisite: PSY 355. An examination of the psychological world of the normal human infant. Topics covered include: biological processes of development, prenatal development, birth, physical and psychological characteristics of the neonate, research methods with newborns, infant speech and language, cognition and learning in infancy, infant interactions and socialization, sex differences in behavior, and theoretical models of early development.

PSY 416
ABNORMAL CHILD PSYCHOLOGY

3, 3/0; Sp 90

Prerequisite: Nine hours of psychology, including PSY 355; PSY 411 recommended. This course will focus on the significant issues and problems related to child psychopathology. Topics covered include: the taxonomy of childhood behavior disorders, role of the family, assessment of psychopathology in children, mental retardation, aggressive behavior, poverty and psychopathology, learning disorders, neurosis in children, childhood psychosis, developmental disorders, and therapeutic approaches.

PSY 417
THE ATYPICAL INFANT

3, 3/0; F 90

Prerequisite: PSY 355. An introduction to the psychological effects of developmental delay in infants. Screening, assessment and intervention of high-risk infants will be surveyed. Topics covered include: definition of at-risk and high-risk infants, biological traumas and defects, prenatal traumas, birth and perinatal traumas, psychological crises in infancy, psychological assessment of developmental delay in newborns and infants, psychoeducational treatment of high-risk infants and their families, psychological issues of parenting the high-risk infant. Students will be required to complete a two-week practicum in a community program serving high-risk infants.

PSY 421
PHYSIOLOGICAL PSYCHOLOGY

3, 2/2; F 89, 90

Prerequisite: PSY 101 and 12 additional hours of psychology and/or biology. This course describes the brain, nervous system, and endocrine system and their relationship to animal and human behavior. Topics covered include: psychosurgery, and the physiological basis of language, intelligence, emotion, motivation, learning, sexuality, abnormal behavior, perception, and motor behavior.

PSY 427
ADULT DEVELOPMENT AND AGING II

3, 3/0; F 89, 90

Prerequisite: PSY 327; PSY 304 recommended. This course is a continuation of PSY 327 and will critically review and evaluate the methodology and theory in the psychology of adult development and aging. An in-depth analysis of the empirical literature pertaining to adult and elderly intelligence, learning, memory, personality, and social functioning will be provided.

PSY 430
PSYCHOLINGUISTICS: LANGUAGE STRUCTURES AND PROCESSES

3, 3/0; Sp 91

Prerequisite: PSY 101 and six additional hours of psychology; PSY 340 recommended. This course is a systematic coverage of the theoretical and empirical literature regarding human language processes. Topics covered include: animal versus human communication, language acquisition, grammar, sentence production and comprehension, and the relationship between language and cognition. This course will integrate language processes into the general framework of cognitive psychology.

PSY 432
HUMAN MOTIVATION AND EMOTION

3, 3/0; Sp 90

Prerequisite: Nine hours of psychology including PSY 304. This course examines the concept of motivation and considers the fun-

damental and empirical and logical basis for its postulation and its use in psychological explanations of animal and human behavior. Emphasis is placed on what determines motives and how motivational processes interact with other psychological processes.

PSY 441
INTRODUCTION TO NEUROPSYCHOLOGY

3, 3/0; F 89

Prerequisite: PSY 101 and six additional hours of psychology. Human neuropsychology concerns itself with the study of relationships between human brain function and behavior. Students will be introduced to the functional anatomy of the brain and to the experimental and clinical techniques employed by the neuropsychologist to uncover brain-behavior relationships. Students will be shown how observation of individuals with abnormal or injured brains provide understanding of normal human behavior.

PSY 445
HISTORY AND SYSTEMS OF PSYCHOLOGY

3, 3/0; Sp 90, 91

Prerequisite: Nine hours of psychology or six hours of psychology and PHI 309. This course provides a survey of the history of the emergence of modern psychology from pre-Socratic thought to the present day. An emphasis is placed upon a systematic examination of psychology's historical roots as expressed in contemporary theories and models.

PSY 450
EXPERIMENTAL PSYCHOLOGY I: INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY

3, 2/2; 1989-91

Prerequisite: Nine hours of psychology including PSY 306. An introduction to laboratory investigation in the behavioral sciences. Topics covered include: higher order correlational and parametric statistics, various approaches to research, and the interpretation and communication of research findings. Laboratory experiences are included to illustrate course content. Students will be required to complete at least five laboratory exercises and reports. *Required for psychology majors.

PSY 453
EXPERIMENTAL PSYCHOLOGY II: METHODS IN SOCIAL PSYCHOLOGY

3, 2/2; Sp 90, 91

Prerequisite: PSY 450; PSY 325 recommended. This course is a continuation of PSY 450 and focuses on the research methods used in social psychology. Topics covered include: artifacts in social psychological research, the rights of subjects and the responsibilities of experimenters, and the problem of generalizing results to the "real" world. Students will be required to complete at least four research exercises and reports, including formulation of at

least one original experimental design. *May be used to meet the Experimental Psychology II requirement for psychology majors.

PSY 454
EXPERIMENTAL PSYCHOLOGY II: METHODS IN PHYSIOLOGICAL AND COMPARATIVE PSYCHOLOGY

3, 2/2; F 89

Prerequisite: PSY 450; PSY 321 or PSY 421 recommended. This course is a continuation of PSY 450 and focuses on the research methods used in comparative and physiological psychology. Topics covered include: principles of behavioral observations, quantification of behavior, methods employed in the investigation of the nervous system, surgical and histological techniques and the application of physiological methods in the understanding of behavior. Students will be required to complete at least four research exercises and reports, including the formulation of at least one original experimental design. *May be used to meet the experimental Psychology II requirement for psychology majors.

PSY 455
EXPERIMENTAL PSYCHOLOGY II: METHODS IN COGNITION

3, 2/2; F 90

Prerequisite: PSY 450; PSY 340 recommended. This course is a continuation of PSY 450 and focuses on the research methods used in studying cognitive processes. Topics covered include: short and long-term memory, language, concept formation, and attention and thinking. Students will be required to complete at least four research exercises and reports, including the formulation of at least one original experimental design. *May be used to meet the Experimental Psychology II requirement for psychology majors.

PSY 456
EXPERIMENTAL PSYCHOLOGY II: METHODS IN SENSATION AND PERCEPTION

3, 2/2; F 90

Prerequisite: PSY 450; PSY 308 recommended. This course is a continuation of PSY 450 and focuses on the research methods used in sensation and perception. Topics covered include: classic psycho-physical methods as well as recent advances in methodology. Emphasis will be placed on the visual modality. Students will be required to complete at least four research exercises and reports, including the formulation of at least one original experimental design. *May be used to meet the Experimental Psychology II requirement for psychology majors.

PSY 457
EXPERIMENTAL PSYCHOLOGY II: METHODS IN CLINICAL PSYCHOLOGY

3, 2/2; Sp 90, 91

Prerequisite: PSY 450; PSY 411 recommended. This course is a continuation of PSY 450 and focuses on methods and analyses of data used

in clinical research. Topics covered include: history of clinical psychology, ethical issues, special problems in clinical measurement and research, statistical procedures, the use of tests, case study and group designs, analogues, social interaction measures, and genetics. Students will be required to complete at least four research exercises and reports, including the formulation of at least one original experimental design. *May be used to meet the Experimental Psychology II requirement for psychology majors.

**PSY 458
EXPERIMENTAL PSYCHOLOGY II:
METHODS IN DEVELOPMENTAL
PSYCHOLOGY**

3, 2/2; F 89

Prerequisite: PSY 450; PSY 355 recommended. This course is a continuation of PSY 450 and focuses on the research methods used in studying developmental psychology. Topics covered include: methods used in studying life-span development in the areas of perception, learning, personality, cognition, and attention. Students will be required to complete at least four research exercises and reports, including the formulation of at least one original experimental design. *May be used to meet the Experimental Psychology II requirement for psychology majors.

**PSY 466
PERSONNEL PSYCHOLOGY**

3, 3/0; F 89, 90

Prerequisite: PSY 365 or PSY 367 and a total of 42 college credits. This course will provide students with basic coverage of problems, tools, and strategies involved in applying psychological principles to personnel selection, placement, training, and assessment of organizations. Topics covered include: the roles of personnel psychologists, job analysis, developing performance criteria for jobs, performance appraisal, interviewing, the uses of employment testing, predicting job success, training programs, and social and ethical issues in personnel psychology.

**PSY 470
ENVIRONMENTAL PSYCHOLOGY II**

3, 3/0; Sp 90

Prerequisite: PSY 370 and permission of instructor; BIO 315 and SCI 321 recommended. This course is a continuation of PSY 370, but at a considerably advanced level. Topics covered include: theory building in the area of physical-environmental behavior relations, innovative and unobtrusive measures, individual human needs in the physical environment, and basic processes and their relationship to the physical environment.

**PSY 472
SEMINAR ON PSYCHOLOGY**

3, 3/0; 1989-91

Prerequisite: Experimental Psychology II or 15 hours of psychology and permission of the instructor. The specific area of psychology

selected for study varies from one seminar course to another. Topical areas for each course are announced prior to student enrollment. Coursework involves the study of basic theoretical principles and empirical laws of different content areas. Students are expected to make individual presentations on relevant topics. *Required of psychology majors.

**PSY 480
PSYCHOTHERAPY: THEORY,
RESEARCH AND PROCEDURES**

3, 3/0; F 90

Prerequisite: Nine hours of psychology including PSY 311; PSY 411 is recommended. This course will examine a variety of issues pertaining to psychotherapy. Emphasis will be placed upon integrating theory, research, and clinical applications. Topics covered include: history of psychotherapy, relationship of psychotherapy to the scientist-professional model in clinical psychology, major parameters of the therapeutic enterprise, ethical considerations in psychotherapy, and systems of individual, group, family, and marital psychotherapy.

**PSY 481
PSYCHOLOGICAL TESTS AND
MEASUREMENTS**

3, 2/2; Sp 90, 91

Prerequisite: Nine hours of psychology including PSY 306. This course will discuss many of the issues and problems surrounding psychological testing. Topics covered include: test reliability, validity, construction, administration, norms, and interpretation. Students will examine the most commonly used intelligence, personality, and other psychological tests. Limited practicum experiences are also provided.

**PSY 488
INTERNSHIP**

Credit varies, 1989-91

Prerequisite: Approval of the faculty supervisor must be obtained prior to registration.

**PSY 495
PROJECT**

Credit varies, 1989-91

Prerequisite: Approval of the faculty supervisor must be obtained prior to registration.

**PSY 496
HONORS THESIS I**

3, 0/3; 1989-91

Prerequisite: PSY 450, 72 additional hours of college credit and permission of instructor prior to registration. The honors psychology student will initiate the research that will later be formally presented in thesis form. Students will complete extensive library research in their areas of interest, and will present a formal research proposal (oral and written) to their supervisor and honors thesis committee. Any necessary research will also be carried out. *Required of students in the department honors program.

**PSY 498
HONORS THESIS II**

3, 0/3; 1989-91

Prerequisite: PSY 496 with a minimum grade of B and permission of instructor prior to registration. The honors psychology student will carry out the research proposed in PSY 496 and submit a formal thesis in written form. The student will also orally defend his work before his faculty supervisor, thesis committee, and interested faculty members. *Required of students in the department honors program.

**PSY 499
INDEPENDENT STUDY**

Credit varies, 1989-91

Prerequisite: Approval of the faculty supervisor must be obtained prior to registration.

Recreation

Offered by the Health, Physical Education & Recreation Department
DR. DONALD E. BARR, Chairperson
Houston Gym 204

Also see Health, Physical Education, and Recreation listings.

**REC 204
PRINCIPLES AND PRACTICES OF
RECREATION LEADERSHIP**

3, 3/0; offered based on staff availability

Problems and practices in organization and leadership of school and/or community recreation programs; history; principles; conducting specific activities; area and facilities; programming; modern trends.

**REC 306
ORGANIZATION AND
ADMINISTRATION OF INTRAMURAL
SPORTS**

3, 3/0; F 89-90

Prerequisite: Sophomore. A critical analysis of organization and administration of intramural sports program.

**REC 495
PROJECT**

REC 499

INDEPENDENT STUDY

Science Education (formerly Interdisciplinary Sciences)

Offered by the Earth Sciences and Science Education Department
DR. ROBERT E. HORVAT, Chairperson
Science Building 271

These interdisciplinary science courses cut across and integrate scientific knowledge from a wide variety of disciplines. They are designed to improve the liberal education and scientific awareness of non-science majors and place emphasis on scientific literacy and scientific process as well as scientific understanding. Also included here are science courses for prospective science teachers, and courses in the environmental sciences minor.

**SCI 100
CONTEMPORARY SCIENCE**

3, 3/0; 1989-91 (MS)

Problems to be studied will deal with life-centered, contemporary issues in relation to their scientific implications, and background.

**SCI 101
PHYSICAL SCIENCE FOR ELEMENTARY
SCHOOL TEACHERS**

3, 3/0; F 89, Sp 91 (GEE)

An activity-oriented course for elementary preservice teachers. In addition to practical demonstrations of appropriate physical science concepts, student will "do" physical science activities of elementary school age children. *Option in el. ed., science concentration.

**SCI 103
EARTH SCIENCE FOR ELEMENTARY
SCHOOL TEACHERS**

3, 3/0; Sp 90 (GEE)

Activity-oriented course for students interested in elementary school teaching. Practical demonstrations of concepts in astronomy, geology, and meteorology. Students will "do" earth science activities of elementary school age children. *Option in el. ed., science concentration.

**SCI 105
PHYSICAL SCIENCE FOR NON-SCIENCE
STUDENTS**

3, 3/0; (MS)

An activity-centered approach to the physical sciences. Extensive use of materials designed for students not intent on careers in science but interested in a non-technical analysis of the procedures of science.

**SCI 231
POLLUTION, ENVIRONMENT AND
SOCIETY**

3, 2-3/0-2; (MS)

From ecology to eco-action, population to

pesticides, a survey of the scientific and societal implications of present-day environmental problems. The causes, effects and possible solutions of environmental problems with implications from conservation, chemistry, health and sociology. *Option in env. sci. minor.

**SCI 232
ENERGY, ENVIRONMENT AND
SOCIETY**

3, 2-3/0-2 (MS)

An examination of energy use and abuse in our society. Includes environmental, economic, individual and societal perspectives. Major energy choices facing our society will be discussed.

**SCI 302
DEVELOPMENT OF LIFE IN GEOLOGIC
TIME**

3, 3/0; (GEE)

Evidences of organic evolution in the fossil record. Fossil Man; evolution of landscape.

**SED 308
METHODS AND MATERIALS IN
TEACHING SECONDARY SCIENCE**

3, 2/2; 1989-91

Prerequisite: EDF 303, EDF 403, EDU 416, SST 200; (may be concurrent). Cumulative 2.0 or higher average; approval by Earth Sciences and Science Education chairperson. Components of the teaching-learning situation in a science classroom. Construction of components for an effective teaching-learning situation. Also, the interrelationships of secondary science programs. *Required in all secondary science (7-12) programs, and the elementary education extension in science program (7-9).

**SCI 312
LIFE SCIENCE FOR ELEMENTARY
SCHOOL TEACHERS**

3, 3/0

Prerequisite: A college-level biology course. An activity-oriented course for elementary preservice teachers. Reviews science content from State Elementary Science Syllabus. Also includes curriculum and pedagogy as related to the life sciences. *Option in el. ed., science concentration.

**SCI 323
SCIENCE AS INQUIRY**

3, 3/0; (GEE)

The procedure of science as a search for knowledge of natural phenomena; comparison with other methods of inquiry; implications for non-scientists. *Option in el. ed. science concentration.

**SCI 327
THE DEVELOPMENT AND IMPACT OF
ATOMIC SCIENCE**

3, 3/0; 1989-91 (MS)

Prerequisite: 3 hrs. of science. Man's understanding of the atom placed in its proper

context as a science contributing to the long development of man's other sciences and his social and moral fabric. The societal and political implications of atomic science. The hardware and morality of atomic warfare.

**SCI 335
OUTDOOR SCIENCE EDUCATION**

2/2 (GEE)

Prerequisite: An introductory environmental science course. An interdisciplinary approach to outdoor science education. Basic concepts of natural history in classroom and field, including meteorology, geology, astronomy, environmental problems and relationships, and mapping as they apply in outdoor settings. Includes three-day field trip at college camp. *Option in environmental science minor.

**GES 337/SCI 337
ASTRONOMY AND THE
ASTRONOMERS TO 1650**

3, 3/0; F89, 90 (GEE)

Prerequisite: GES 131 or equivalent. The saga of man's developing understanding of his universe, from prehistoric efforts to predict celestial events, to the heliocentric revolution sparked by Copernicus and supported by Galileo.

**GES 338/SCI 338
ASTRONOMY AND THE
ASTRONOMERS, FROM 1650 TO THE
PRESENT**

3, 3/0; Sp 90, 91 (GEE)

Prerequisite: GES 131 or equivalent. An examination of the men and women, the ideas and the forces which brought us from the heliocentric mechanical universe of Copernicus and Newton to an immense expanding universe of galaxies, quasars, and black holes.

**SCI 340
SCIENTIFIC STUDIES IN
ENVIRONMENTAL POLLUTION**

3, 2/2 (GEE)

Prerequisite: An intro. environmental sciences course. A scientific in-depth examination of selected environmental problems drawn from current areas of concern. Includes societal perspectives, a major field trip, and discussions of environmental classics, such as *Silent Spring*. *Option in env. sci. minor.

**SED 408
PRACTICE TEACHING SCIENCE IN THE
SECONDARY SCHOOL**

12, 0/36; 1989-91

Prerequisite: SED 308 with 'C' or better; cumulative and previous semester average at least 2.0; in major field over 2.0 average; successful completion of English and mathematics basic skills competency; if referred, satisfactory completion, or exemption from EXE 100, Student Speech Clinic; passed National Teachers Examination sections on General Knowledge and Communication Skills; approval by Earth Sciences and Science Education chairperson. Teaching under supervision

at least five days a week for two eight-week periods (6 credits each); individual and group instruction; planning unit teaching; classroom management and routine procedure; audio-visual aids; evaluation procedures; participation in total school program. *Required for upperclassmen in all secondary science programs, and the elementary education science (7-9) extension.

ENS 410 SEMINAR IN ENVIRONMENTAL STUDIES

3, 2/2; Sp 90

Prerequisite: Completion of all other environmental science minor courses (may be concurrent) or instructor consent. Preparation of an environmental impact statement for a local project. *Required final course in environmental science minor.

SCI 410 SCIENCE IN THE ELEMENTARY SCHOOL CURRICULUM

3, 3/0;

Prerequisite: Junior. Purposes and scope of science in the elementary school; selection of teaching objectives, analysis of the objectives and presentation of teaching-learning activities that are favorable to achieving the objectives. *Option in el. ed. science concentration.

SCI 495 PROJECT

1-3, 0/2-6; 1989-91

Prerequisite: Approval of faculty sponsor must be secured prior to registration. Environmental, energy, science/society, and science education related areas.

SCI 499 INDEPENDENT STUDY

3-6, 0/6-12; 1989-91

Prerequisite: Approval of faculty sponsor must be secured prior to registration. Environmental, energy, science/society and science education related areas.

Social Studies Education

Offered by the History and Social Studies Education Department
DR. MONROE FORDHAM, Chairperson
Classroom Building C205

SST 102 PROBLEM-SOLVING IN THE SOCIAL STUDIES

3, 3/0; 1989-91 (SS)

The methods of interdisciplinary problem-solving and emphasis upon the application of

the method to selected contemporary problems.

SST 199/GEG 199/SOC 199 SOCIAL SCIENCE COMPUTER APPLICATIONS

3, 3/0; offered based on staff availability

Prerequisite: ISM 101 or equivalent or permission of instructor. A hands-on introduction to the application of computers to applied social research problems including a review of past practices, current uses, and future trends. Students will become involved in the computer analysis of data for the purpose of developing insights into the ways people can use computers to perform needed social improvements in society.

SST 200 FIELD EXPERIENCE IN SECONDARY SOCIAL STUDIES

3, 3/0; 1989-91

Provides classroom and field experience designed to help the student make a better informed decision if he is contemplating a career in secondary social studies education. For the general student the course provides important background for his role as both a citizen and parent. *Required for social studies education majors.

SST 303 SECONDARY SOCIAL STUDIES SEMINAR

3, 3/0; 1989-91

Prerequisite: Six (6) hours in professional educational courses. Attention focuses on the problems of the teacher, methods of analyzing classroom behavior, techniques of teaching and self-evaluation of teaching practices. To be taken concurrently with SSE 409, Social Studies Teaching Practicum.

SSE 309 TEACHING SECONDARY SOCIAL STUDIES

3, 3/0; F 89, 90

Prerequisite: EDU 303, 353; cumulative average of 2.5 or higher; approval by the coordinator of Social Studies Education. Selecting, organizing, and presenting curriculum materials; teacher-pupil relationships; evaluating pupil progress; introduction to classroom teaching. *Required of juniors and seniors majoring in secondary social studies.

SST 355 SOCIAL STUDIES SEMINAR IN CONFLICT RESOLUTION

3, 3/0; offered based on staff availability

There are now many more strategies for resolving conflicts than are generally used. These strategies will be reviewed with particular emphasis upon international and interpersonal problems. Coursework will be drawn from political science, law, sociology, and social psychology.

SSE 404 SEMINAR IN ELEMENTARY SOCIAL STUDIES

3, 3/0; offered based on staff availability

Prerequisite: EDU 210 and EDU 352. To help the student to utilize more efficiently his social science preparation for the purpose of early secondary and elementary social studies instruction. The student will make decisions concerning his tentative positions, the purpose of social studies and the available alternatives to teachers in the areas of methodology and curriculum.

SSE 409 PRACTICUM IN THE TEACHING OF SOCIAL STUDIES IN THE SECONDARY SCHOOL

12, 30/0; 1989-91

Prerequisite: SSE 309; grade of 'C' or higher; a better than 'C' average (higher than 2.4) in the academic area of major study is a prerequisite for student teaching and also for graduation; passing grade in ENG 101-102, or equivalent; if referred, satisfactory completion or exemption from EXE 100, Student Speech Clinic; approval by the coordinator of Social Studies. Teaching under supervision five days per week; individual and group instruction; daily and long-view planning; unit teaching; classroom management and routine procedures; audio-visual aids; community resources; record keeping, evaluation procedures; participation of total school program. *Required of juniors or seniors majoring in social studies.

SSE 450 SEMINAR IN INTERDISCIPLINARY SOCIAL STUDIES METHODS

3, 3/0

Prerequisite: 9 credits in the social sciences. A study of the nature of interdisciplinary research, the design, fielding, and analysis of social surveys.

SST 495 PROJECT

See coordinator or pertinent staff.

SST 499 INDEPENDENT STUDY

See coordinator or pertinent staff.

Social Work

Offered by the Social Work Department
ELLEN KENNEDY, Chairperson
Classroom Building C-115

SWK 105 INTERPERSONAL RELATIONS

3, 3/0; 1989-91 (GEE)

This course examines the process by which individuals attempt to reconcile their needs with

the needs and demands of significant others in various settings. *Required for all social work majors.

SWK 220 INTRODUCTION TO SOCIAL WORK

3, 3/0; 1989-91 (AST)

A survey of the profession of social work and settings in which social workers work. This course is designed to provide students with a basis for reaching career decisions regarding interest in a social work career. The course is an introduction to the social work program, a professional social work education program preparing students for beginning professional social work practice. Volunteer work required. *Required for all social work majors.

SWK 307 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT I

3, 3/0; 1989-91

A study of life span development in preparation for learning the skills of case assessment and case planning. The course establishes for the social work student the requisite knowledge of working with individuals as clients. *Required for all social work majors. Junior status required.

SWK 308 HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II

3, 3/0; 1989-91

Prerequisite: SWK 307. The requisite knowledge for social work students in preparation for learning the skills of case assessment and case planning is presented. The family, small group, organization and community as the potential social work client are the subjects of the course. *Required for all social work majors; junior status required.

SWK 310 SEXUALITY IN HUMAN DEVELOPMENT

3, 3/0; Sp 90, 91 (GEE)

A course for future human service professionals which examines and analyzes human sexuality as part of human development. *For juniors and seniors only.

SWK 317 RESEARCH IN SOCIAL WORK

3, 3/0; 1989-91

Prerequisite: SWK 308, 422; concurrent with field. The application of research methodologies and evaluative techniques to the field of social work. *Required of social work majors.

SWK 319 SOCIAL DYNAMICS OF POVERTY

3, 3/0; 1989-91 (AST)

An analysis of the effects of poverty upon individual, family, and community development reflected in various cultural groupings including American Indian, Appalachian White,

Blacks, Migrant Workers, and Puerto Ricans. This course is designed for students working or planning to work with people in poverty. *Required for social work majors. Junior or senior standing.

SWK 320 ORGANIZATION OF COMMUNITY SERVICES

3, 3/0; 1989-91 (GEE)

A survey of the growing, changing, and complex network of community social service agencies established to help people solve their problems and reach personal goals. This course is designed primarily for social work, urban studies, criminal justice, and other students seeking an understanding of social service agencies, their mandates, purpose, structure, functions, and funding. *Required for social work majors.

SWK 337 SOCIAL WORK WITH GROUPS

3, 3/0; Sp 90, 91

Prerequisite: SWK 105 or equivalent. A survey of group work in a variety of social work settings. The course will broaden the students' theoretical knowledge of group dynamics and group leadership. The focus is on the application of intervention strategies and skills necessary for leading groups. Students will be exposed to a variety of types of groups utilized by social workers including community action groups, work groups, activity groups, discussion groups, committees, work teams, educational groups, and therapy groups.

SWK 345 CHILD WELFARE SERVICES

3, 3/0; Sp 90, 91

This course will present child welfare as a field of practice in social work. It will give the student a broad view of the field including an understanding of the historical and philosophical bases; an awareness of the impact of culture, ethnicity, and race on practice, and specific knowledge about the current delivery of services and the skills needed to practice in the field. Upper division status.

SWK 346 CHILD ABUSE AND NEGLECT

3, 3/0; F 89

A survey of the major issues in child abuse and neglect from a social work viewpoint. In addition to presenting the nature of abuse and neglect, the actual incidence, and the workings of the current child protection system, the course will address intervention and treatment issues, as well as the role of other disciplines and the larger society.

SWK 419 SOCIAL WELFARE POLICY

3, 3/0; 1989-91

Prerequisite: SWK 220, 320. Consideration of the institutional response of American social welfare to individual and societal issues, problems, through a study of current issues,

policies, and programs viewed in their historic and philosophic context, with emphasis on analysis of alternative policy choices affecting individuals, families, and communities. *For senior social work majors; by permission of instructor for non-majors.

SWK 422 INTERVENTIVE METHODS I

3, 3/0; Sp 90, 91

Prerequisite: SWK 105, 220, 307. A course for students preparing for careers in community/-social services, covering principles, concepts, and methods of generalist practice of social work and community mental health and their application in communities, agencies, and institutions. *Required for social work majors. Restricted to social work majors.

SWK 423 INTERVENTIVE METHODS II

3, 3/0; F 89, 90

Prerequisite: SWK 308, 422. A course designed for students to develop skills based on the theory and application of intervention methods utilized by social service and mental health professions. Emphasis will be placed on application of selected approaches with reference to specific problems and client systems, including individuals, groups and communities. *Restricted to social work majors.

SWK 440 PSYCHOPATHOLOGY IN PARENT-CHILD RELATIONS

3, 3/0; Sp 90, 91

Prerequisite: SWK 307, 308, or permission of instructor. A study of impairments in parent-child relationships, including a representative survey of maladapted reactions to family stress. Review of relevant ameliorative techniques and community mental health resources. Strong emphasis will be placed on theoretical and empirical findings.

SWK 485 SENIOR SEMINAR

3, 3/0; 1989-91

Intensive analysis of selected topics in SWK. *Restricted to majors in the final semester or special permission of the chairperson.

SWK 493-494 FIELD INSTRUCTION

12, 3/14; 1989-91

Prerequisite: SWK 422 for SWK 493; SWK 493 for SWK 494. Supervised field experience in social services and mental health agencies in Buffalo and environs which meet standards of preparation for professional practice. Courses taken two consecutive semesters. On campus integrative seminar. *Restricted to social work majors.

SWK 495 PROJECT

SWK 499 INDEPENDENT STUDY

Sociology

Offered by the Sociology Department
DR. ROSALYN A. LINDNER,
Acting Chairperson
Classroom Building B307

SOC 100 INTRODUCTION TO SOCIOLOGY

3, 3/0; 1989-91 (SS)
An introduction to the study of human society, its culture, institutions, processes, and change, including an examination of socialization, relationships between and among individuals and groups in society. *This course is equivalent to a prerequisite for all other undergraduate courses in sociology and is required of all sociology majors. Formerly SOC 101.

SOC 210 INTRODUCTION TO WOMEN'S STUDIES

3, 3/0; F 89, 90 (SS)
An interdisciplinary analysis of women in society. Students will be exposed to women's issues in relation to the social sciences, biology, psychology, and the arts, and will be encouraged to examine critically the development of modern societies in light of the emergence of women's issues. Formerly SOC 209.

SOC 240 ANALYZING SOCIAL PROBLEMS

3, 3/0; F 89, 90 (SS)
Prerequisite: SOC 100. The analysis of several major social problems will be selected according to faculty and student needs and interests. A variety of approaches, techniques, and theories will be used in an analysis of selected social problems. Formerly SOC 202.

SOC 300 METHODS IN SOCIAL RESEARCH

3, 3/0; 1989-91
Prerequisite: SOC 100 and six additional hours of sociology. The nature of scientific evidence; induction and deduction; the application of the 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 the social materials from journals and books as illustrative material. *Required of all sociology and urban-regional analysis and planning majors. Formerly SOC 305.

SOC 301 SOCIAL STATISTICS

4, 4/0; Sp 90, 91
Prerequisite: SOC 100 and SOC 300. Statistical methods and reasoning will be used to analyze and clarify sociological information. *Required for sociology majors (Mathematical Statistics may be substituted with prior departmental approval). Formerly SOC 306.

SOC 310 SOCIOLOGY OF SEX ROLES

3, 3/0; 1989-91 (SS)
Prerequisite: SOC 100. A critical examination of the roles women and men play in various societies, with particular emphasis on changes in contemporary America. Social statuses of women and men will be analyzed historically, and biologically, with particular attention given to the sociological implications of sexual inequality in the economy and political systems, as well as in marriage and family relationships. Formerly SOC 314.

SOC 320 SOCIOLOGY OF THE FAMILY

3, 3/0; 1989-91 (SS)
Prerequisite: SOC 100. Family as a social institution; its historical development, function, and structure; cross-cultural comparison; sub-cultural analysis of the contemporary American family system. Discussion of alternatives to living in families and of sex roles and sex role change. Formerly SOC 316.

SOC 321/AAS 332 THE BLACK FAMILY IN AMERICA

3, 3/0; 1989-91 (GEE)
Prerequisite: SOC 100. May be used for Sociology or Afro-American Studies at the choice of the student. An exploratory study of the effects of the American social institution upon Black American family life, with emphasis on inter-familial relations. Formerly SOC 332.

SOC 322 SOCIOLOGY OF CHILDHOOD AND YOUTH

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. An analysis of the socialization of children and adolescents as they emerge into adulthood. The impact of the family, the school, peer groups and mass media, subcultural differences are examined. Intergenerational conflict and other social problems of childhood and youth are analyzed. Formerly SOC 313.

SOC 323 SOCIOLOGY OF EDUCATION

3, 3/0; F 89, 90 (GEE)
Prerequisite: SOC 100. An examination of the social organization of education in the U.S. and elsewhere with emphasis on the role of education in preserving and changing our culture; the school as a social system; non-school factors that influence educational aspirations and achievement; the role of the teachers, student sub-cultures, and administrative behavior patterns on student performance in school; changing and alternative educational forms; and changing relationships in colleges and universities. Formerly SOC 307.

SOC 324/HPR 319 SOCIOLOGY OF SPORT

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. The primary purpose of this course is to attempt a coherent and integrated application of the sociological perspective(s) to sport. Focus is on the social organization of sports-related activities and implies an interest in formal and informal organizational networks of social statuses, norms, goals, and values. Sport and related phenomena, will be studied using theoretical frameworks and empirical tools of the social sciences. Formerly SOC 319.

SOC 330 SOCIAL PSYCHOLOGY

3, 3/0; 1989-91 (SS)
Prerequisite: SOC 100. Motivation and nature of attitudes; attitude change and stability; interpersonal perception and behavior; role prescriptions and role conflict; prejudice; conflict resolution. Formerly SOC 303.

SOC 331 SOCIOLOGY OF GROUP DYNAMICS

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. An examination of the social structure and social dynamics of social groups including such essential features as the division of labor, types of leadership, communication and authority structures, social conflict, and social control mechanisms. Special attention will be given to 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. Formerly SOC 308.

SOC 333 SOCIAL MOVEMENTS

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. The analysis of various social movements. Relationships between individual discontent and social movements. Functional and dysfunctional aspects of different types of social movements. Formerly SOC 311.

SOC 340 SOCIOLOGY OF THE CITY

3, 3/0; F 89, 90 (GEE)
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; life styles 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. Formerly SOC 402.

SOC 341 SOCIOLOGY OF HUMAN ECOLOGY

3, 3/0; Sp 91 (GEE)

Prerequisite: SOC 100. The study of interaction of man and his environment and the effect of his interaction on the quality of living, especially upon such social problems as poverty, crime, physical and mental illness, and various types of pollution. Formerly SOC 310.

SOC 350 POWER, CLASS, AND INEQUALITY

3, 3/0; F 89, 90 (GEE)
Prerequisite: SOC 100. Historical and contemporary social inequality in the U.S. Survey of research areas as income distribution, social structure in consciousness, inequality and the state, and race and gender inequality. Contrasting theoretical interpretations of the origins and significance of social inequality. Analysis of current trends.

SOC 351 SOCIOLOGY OF RACE AND ETHNICITY

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. The analysis of the status of racial and ethnic groups in American and other societies; forms, causes, and effects of prejudice, and ethnic conflicts and the changing relationships of these groups to the larger society. Formerly SOC 317.

SOC 352 THE AGED IN URBAN SOCIETY

3, 3/0; F 89, 90 (GEE)
Prerequisite: SOC 100. The changing status of the aged in urban society with emphasis on the U.S. Differing status roles of aged women and men. The aged in different cultures and sub-cultures. The problems of the aged including poverty, physical decline and socio-psychological difficulties. Prejudice and discrimination against the aged. Public and private services to the aged. Aging in different living environments including retirement communities and nursing homes. Formerly SOC 365.

SOC 360 SOCIOLOGY OF WORK

3, 3/0; 1989-91 (SS)
Prerequisite: SOC 100. Developments in work and workers' movements in modern America. Changes in the labor process. Discussion of such contemporary problems as occupational health and safety, deskilling, the disappearance of occupational cultures, and the upheaval caused by capital flight and plant closings.

SOC 361 INDUSTRIAL SOCIOLOGY

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. The modern factory, with emphasis on the workers' point of view. The social relations of industrial work: co-workers, supervision, union, and management. The social and philosophical origins of modern industrial organization in the work of Taylor. Contemporary developments such as quality of work life programs, the "Japanese model," and the team concept.

SOC 362 SOCIOLOGY OF ORGANIZATIONS

3, 3/0; F 89, 90 (GEE)
Prerequisite: SOC 100. The primary purpose of this course is to analyze organizations. This analysis should contribute to our understanding of the world around us, not only in regard to the operation of organizations and their members, but also in terms of the impact of organizations on their environments and the environment's impact on organizations. *Elective for juniors and seniors. Formerly SOC 318.

SOC 380 SOCIOLOGY OF CRIME

3, 3/0; 1989-91 (SS)
Prerequisite: SOC 100. Crime; controversies concerning its nature, variation, causation, and means of prevention, reeducation and the treatment of offenders. Covers theoretical perspectives in social and historical content. Some sections also present data regarding the extent of crime. Formerly SOC 309.

SOC 381 THE SOCIOLOGY OF VIOLENCE

3, 3/0; Sp 91 (GEE)
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 wives, rape, violence in schools, and collective violence. Some insights shall be provided as to various programs which deal with violence. Formerly SOC 320.

SOC 382 SOCIOLOGY OF LAW

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. A study of the structure and function of law in the American culture, with particular reference to the legal profession and the situations in which the law arises and has an effect on the social system. *Elective for juniors and seniors. Formerly SOC 413.

SOC 383 SOCIOLOGY OF PUNISHMENT AND CORRECTIONS

3, 3/0; Sp 90, 91 (GEE)
Prerequisite: SOC 100. An inventory and assessment of recent theories and research findings regarding correctional practice. Review of the nature and forms of treatment; obstacles to treatment, and offender typologies.

SOC 384 SOCIOLOGY OF MASS MURDER

3, 3/0; Sp 90, 91
Prerequisite: SOC 100. A summary and assessment of sociological findings and theory concerning mass murder (genocide, serial killing, and simultaneous killing). Included are sociological profiles of mass murderers and discussion and analysis of social factors conducive to mass murders.

SOC 390 JUVENILE DELINQUENCY

3, 3/0; 1989-91 (GEE)
Prerequisite: SOC 100. The nature of delinquency; delinquency and normal behavior of youth; the search for causes and the state of sociological research in the area; the role of treatment agencies, the children's court, training schools; methods of prevention; use of case histories and field trips. Formerly SOC 401.

SOC 391 SOCIOLOGY OF ADDICTION

3, 3/0; 1989-91 (GEE)
Prerequisite: SOC 100. Narcotic addiction as a social problem and a sociological phenomenon. The nature of narcotic addiction, the situations in which this behavior occurs, the characteristics of addicts. Legal, medical, and other efforts made to influence addicts. Formerly SOC 414.

SOC 392 SOCIOLOGY OF SEXUAL BEHAVIOR

3, 3/0; 1989-91 (GEE)
Prerequisite: SOC 100. A summary and assessment of recent sociological findings concerning sexual behavior as a social process. Review of the nature of various sexual practices, such as homosexuality, sado-masochism, etc., in the light of sociological theory. Examination of the sociological literature concerning sexual behavior with special emphasis on the interactionist approach and the labeling process with reference to sexual conduct. Formerly SOC 370.

SOC 393 SOCIOLOGY OF MENTAL ILLNESS

3, 3/0; Sp 91 (GEE)
Prerequisite: SOC 100. An extensive examination of sociological perspectives on mental health and illness, including their social histories. Evaluation of social factors and processes involved in modern approaches to the causes and treatment of mental illness with special attention to problems of definition and diagnosis. Review of research findings in areas of epidemiology, institutional care and control of mentally ill, the career of mental patients, and social issues. Formerly SOC 371.

SOC 400 FOUNDATIONS OF SOCIOLOGICAL THOUGHT

3, 3/0; F 89, 90
Prerequisite: SOC 100 and six additional hours in sociology. A study of selected ideas developed over the past century by major sociologists such as: Thomas Malthus, Karl Marx, Herbert Spencer, Charles Cooley, Thorstein Veblen, Max Weber, Emile Durkheim. Optional (with SOC 408). *Requirement for sociology majors. Formerly SOC 405.

**SOC 408W
CONTEMPORARY SOCIOLOGICAL
THEORY****3, 3/0; Sp 90, 91**

Prerequisite: SOC 100 and six additional hours of sociology. The significance and uses of sociological theory. The major current approaches to understanding society and social life, such as contemporary Marxism, conflict theory, functionalism, and other order theories, and the interpretive sociologies. The construction and testing of sociological theories. Optional (with SOC 400). *Required for sociology majors. Formerly SOC 403.

**SOC 415
POPULATION ANALYSIS****3, 3/0; 1989-91**

Prerequisite: SOC 100. A course in applied formal, social, and economic demography. Includes treatment of birth, death, and migration; the social and economic structure of populations, especially in the United States; methods of population measurement and projection; and sources of demographic data. Students will receive hands-on experience in computer analysis of population data using general statistical packages and/or programs customized for use in population analysis.

**SOC 420
SOCIOLOGY OF RELIGION****3, 3/0; Sp 91**

Prerequisite: SOC 100. Theories in sociology of religion will be examined. Emphasis upon religion and social change; religion in society; church and sect; social class and religion; the role of the minister, priest and rabbi. Formerly SOC 404.

**SOC 440/PSC 410
POLITICAL BEHAVIOR
AND PUBLIC OPINION****3, 3/0; Sp 91**

Prerequisite: SOC 100. Conditions of democratic political behavior; opinion formation in democratic systems; voting behavior and party affiliation in the United States; political behavior in selected Western European societies. *May be used for sociology or political science at the choice of the student. Formerly SOC 410.

**SOC 460
SOCIOLOGY OF OCCUPATIONS AND
PROFESSIONS****3, 3/0; F 90**

Prerequisite: SOC 100. The social structure of American occupations and professions. Careers and career lines examined from the point of view of careerists. The effects of race, social class, and education on career changes. The career viewed as a life process involving changes in cultural values and personal orientation. Mental stress examined as an accompaniment of occupational mobility and shifting role requirements. Emphasis is placed on managerial and professional careers. Formerly SOC 407.

**SOC 488
INTERNSHIP IN SOCIOLOGY****1-15; 1989-91**

Prerequisite: Permission of faculty intern supervisor.

**SOC 490
SEMINAR IN SOCIOLOGY****3, 3/0; Sp 90, 91**

Prerequisite: SOC 100 and SOC 300. Research in selected area(s) of sociology. *Required for sociology majors with senior standing (2nd semester seniors will be given first preference). Formerly SOC 409.

**SOC 491
TOPICAL SEMINAR IN SOCIOLOGY****3, 3/0**

Prerequisite: SOC 100 and six hours of sociology in a related field. Consent of instructor. This course is intended to permit students and faculty to explore in some depth special problems in sociology. Students wishing such a course should contact a member of the sociology faculty. The faculty member, if he wishes to undertake the course, will secure approval from the Sociology Department. The course will then be listed in the Masters Schedule with a subtitle indicating the area of special concentration. Formerly SOC 418.

**SOC 495
PROJECT****SOC 499
INDEPENDENT STUDY****Speech Language
Pathology
and Audiology**

Offered by Speech Language Pathology and Audiology Department
DR. DOLORES E. BATTLE, Chairperson
Ketchum Hall 208

**SLA 100
STUDENT SPEECH CLINIC**

Offered based on need.

Speech therapy for students with speech language or voice disorders. Open to all students. Hours by arrangement.

**SLA 206
LANGUAGE DEVELOPMENT****3, 3/0; F 89, 90 (AST)**

Analysis of language, its development; understanding how children learn language, speech sounds, words, sentence structure, meaning; factors that influence language development. Majors in speech language pathology and audiology by advisement only.

**SLA 220
INTRODUCTION TO
COMMUNICATION DISORDERS****3, 3/0; Sp 90, 91 (AST)**

Classification and cause of speech language and hearing disorders in children and adults. Methods of treatment for minor disorders as well as suggestions for prevention; basic information on normal and abnormal speech, language and hearing development; observation of individuals presenting various communication disorders. Majors in speech language pathology and audiology by advisement only.

**SLA 303
LANGUAGE ACQUISITION****3, 3/0; Sp 90, 91**

Prerequisite: SLA 305. Analysis of child's acquisition of phonology, morphology, syntax, semantics and pragmatics, identifying structure, function of language of normal children at different levels of development; theories of language acquisition compared and contrasted. Required of speech language pathology and audiology majors.

**SLA 304
ANATOMY & PHYSIOLOGY OF SPEECH
AND HEARING MECHANISMS****3, 3/0; 1989-91**

Anatomy, physiology of normal speech, hearing mechanisms, introduction to possible deviations; embryonic development, neurology, production and reception of oral language. Required of speech language pathology and audiology majors.

**SLA 305
PHONETICS****3, 3/0; F 89, 90**

Production, acoustic analysis, representation of English (American) speech sounds; application of phonetics to deviation in speech. *Required of speech language pathology and audiology majors.

**SLA 306
SPEECH PATHOLOGY I****3, 3/0; 1989-91**

Prerequisite: SLA 305. Introduction to disorders of speech; etiology, diagnosis and remedial procedures for treatment of articulation disorders. *Required of speech language pathology and audiology majors.

**SLA 307
SPEECH PATHOLOGY II****3, 3/0; 1989-91**

Prerequisite: SLA 304, 306. Etiology, diagnosis and remediation of organic speech language problems. *Required of speech language pathology and audiology majors.

**SLA 312
SPEECH ACOUSTICS AND PERCEPTION****3, 3/0; Sp 90, 91**

Prerequisite: SLA 305. A study of the scientific

principles underlying the physiology, acoustics and perception of normal speech production as a basis for subsequent understanding of disordered speech. Topics include basic concepts of sound, motor and acoustic theories of speech production, speech perception, instrumentation used to measure speech processes and application to speech pathology. *Required of speech language pathology and audiology majors.

**SLA 325
CLINICAL PRACTICUM IN
COMMUNICATION DISORDERS****3, 1/4; 1989-91**

Prerequisite: SLA 306, 307. An introduction to the clinical procedures and techniques used in therapeutic intervention for communication disorders. Includes practicum assignment in the Speech-Language-Hearing Clinic supervised by program faculty, coordinated with discussion of the clinical relationship, techniques, selection of instructional aids and materials, and evaluation of clinical skills.

**SLA 405
PRACTICUM IN
SPEECH AND HEARING****6, 0/25 (½ semester); 1989-91**

Prerequisite: Thirty hours in speech-language pathology. Cumulative average of 2.5 or higher in all college courses and in major sequence; grade of C or better in SLA 325. Clinical practice in schools under supervision of a teacher of the speech and hearing handicapped. *Required of all seniors in speech language pathology and audiology.

**SLA 411
LANGUAGE DIAGNOSIS AND
REMEDICATION****3, 3/0; 1989-91**

Prerequisite: SLA 303. Introduction to diagnosis, therapy methods, and children who have language problems; formal, informal testing procedures reviewed, evaluated. Therapy programs analyzed, designed to fit needs of children. *Required of speech language pathology and audiology majors.

**SLA 414
AUDIOLOGY****3, 3/0; 1989-91**

Prerequisite: SLA 304. Hearing and hearing disorders for speech-language pathologists. Anatomy and physiology of the ear and pathologies of the auditory mechanism, decibel notation, and pure tone audiometry and tympanometry. Clinical practicum hours required. *Required of speech language pathology and audiology majors.

**SLA 415
AURAL REHABILITATION****3, 3/0; 1989-91**

Prerequisite: SLA 414. Aural rehabilitation for speech language pathologists. Identification, referral, habitation techniques for hearing-

impaired. Emphasis on auditory training, speech reading. Clinical practicum hours required. *Required of speech language pathology and audiology majors.

**SLA 416
STUTTERING****3, 3/0; 1989-91**

Prerequisite: SLA 306, 307. Therapeutic procedures for treatment of stuttering, tests for diagnosis and evaluation of individual with fluency problems. Observations of stuttering clinic. *Required of speech language pathology and audiology majors.

**SLA 424
ORGANIZATION & ADMINISTRATION
OF SCHOOL SPEECH AND LANGUAGE
PROGRAMS****3, 3/0; 1989-91**

Prerequisite: Thirty hours in communication disorders. Study of organization of school speech language programs, including laws and regulations, case selection, caseload, scheduling, records, facilities. *Required of speech language pathology and audiology majors.

**SLA 425
DIAGNOSIS OF
COMMUNICATION DISORDERS****3, 2/8 (½ semester); 1989-91**

Prerequisite: SLA 325, 307, 411. The study and practice of diagnosis of communication disorders. Included is discussion of interviewing, report writing, methods and materials in performing diagnosis, and clinical practice of diagnostic skills. *Required of speech language pathology and audiology majors.

**SLA 429
CLINICAL ACTIVITY****1, 0/3; 1989-91**

Observation and participation in clinical activities. Appropriate section should be selected with advisement. May be repeated for a total of 6 credits.

**SLA 495
PROJECT****SLA 499
INDEPENDENT STUDY****Technology**

DR. CHARLES A. BEASLEY, Chairperson
Upton Hall 315

**ENGINEERING TECHNOLOGY
INDUSTRIAL TECHNOLOGY
SAFETY STUDIES
TECHNOLOGY EDUCATION
VOCATIONAL TECHNICAL EDUCATION****ENGINEERING TECHNOLOGY**

Offered by the Technology Department
DR. CHARLES A. BEASLEY, Chairperson
Upton 315

DR. PETER S. PAWLIK, Coordinator
Upton Hall 314

**ENT 300
ANALYTICAL METHODS FOR
TECHNOLOGISTS****3, 3/0; 1989-91**

Prerequisite: MAT 126. Application of calculus and analytic geometry to problems in technology. Introduction to the ordinary differential equations used to analyze mechanical and electrical quantities used in technology. *Required for engineering technology majors.

**ENT 301
MECHANICS I****3, 3/2; 1989-91**

Prerequisite: PHY 111. A study of the basic principles and applications of statics and strength of materials. Topics include equilibrium of rigid bodies, friction, centroids, properties of areas, trusses, frames, tension/compression stresses in bars, and beam bending stress. *Required of all engineering technology majors.

**ENT 302
MECHANICS II****3, 3/2; 1989-91**

Prerequisite: ENT 300, ENT 301. A study of the principles and applications of dynamics. Topics include principles of dynamics, translation, rotation, dynamic equilibrium, work-energy methods, and impulse-momentum methods. *Required of all engineering technology majors.

**ENT 303
KINEMATICS****3, 3/2; Sp 90, 91**

Prerequisite: ENT 302. A study of the relative motions of machine parts. Both graphical and analytical techniques are presented for position, velocity, and acceleration analysis of linkages, chains, rolling bodies, gears, and miscellaneous mechanisms. *Required of mechanical engineering technology majors.

**ENT 311
THERMODYNAMICS****3, 3/2; F 89, 90**

Prerequisite: ENT 300, PHY 111. An introduction to the principles of classical thermodynamics. Technical applications of heat-power-systems, refrigeration systems, and fluid machinery. *Required of mechanical and electrical (power machines option) engineering technology majors.

**ENT 312
FLUID MECHANICS****3, 3/2; Sp 90, 91**

Prerequisite: ENT 311. Application of fluid mechanics to analysis of fluid circuits, channel flows, and fluid machines. Analysis, design

and operation of instrumentation for measuring pressure and flow. Theory of dimensionless groups for models and prototypes. Hydraulic flow controllers and pressure controllers. *Required of mechanical and electrical (power/machines option) majors.

ENT 313 COMPUTER METHODS FOR TECHNOLOGISTS

3, 3/0; 1989-91

Prerequisite: ENT 300, ISM 111. The application of computers and numerical methods to problems in engineering technology. Numerical algorithms will be implemented in Fortran IV and then used to solve typical mechanical, electrical, and electro-mechanical design and analysis problems. Emphasis will be on actual student use of the computer. *Required of all engineering technology majors.

ENT 331 ELECTRICAL CIRCUITS AND DEVICES I

3, 3/2; 1989-91

PHY 112. Study of the basic concepts of electrical circuits and systems both DC and AC. Includes loop and node analysis, superposition, maximum power transfer, alternating current analysis, phasors, inductors, capacitors, resonance, transformers. *Required of all engineering technology majors.

ENT 332 ELECTRICAL CIRCUITS AND DEVICES II

3, 3/2; 1989-91

Prerequisite: ENT 300, ENT 331. Study of magnetic fields and the magnetic circuit. The ideal transformer. Realistic power transformers. Direct current machinery-three phase generator. The rotating magnetic field and alternating current machinery. Single phase and polyphase motors. Synchronous motors and generators. *Required of all engineering technology majors.

ENT 341 ELECTRONICS

3, 3/2; F 90

Prerequisite: ENT 300, ENT 331. Introductory analysis of electronic circuits, with emphasis on semiconductor devices. *Required of electrical engineering technology majors.

ENT 342 NETWORKS

3, 3/0; 1989-91

Prerequisite: ENT 300, ENT 331. Network analysis methods, generalized waveform analysis, electrical circuit parameters, equivalent circuits, initial circuit conditions, steady state and transient solutions. Laplace transform methods and applications to network analysis, transform methods in linear system analysis, transfer function concepts and sinusoidal steady state analysis. *Required of electrical engineering technology majors.

ENT 351 ELECTRONIC CIRCUIT ANALYSIS AND DESIGN I

3, 3/2; 1989-91

Fee: \$10

Prerequisite: ENT 341, ENT 342. Analysis and design of electronic circuits, discrete and integrated, with emphasis on linear analog applications. *Required of electrical engineering technology majors (electronics option).

ENT 352 ELECTRONIC CIRCUIT ANALYSIS AND DESIGN II

3, 3/2; 1989-91

Prerequisite: ENT 351. Analysis and design of electronic circuits, discrete and integrated, with emphasis on non-linear analog applications. *Required of electrical engineering technology majors (electronics option).

ENT 371 ELECTROMECHANICAL MACHINES

3, 3/2; F 89

Prerequisite: ENT 332. DC machines, AC machinery and transformers, as an integral part of electric power systems. Study of three-phase synchronous machines and induction motors, fractional horsepower AC motors, electrical machines in control systems. *Required of electrical engineering technology (power/machines option) majors.

ENT 401 STRESS ANALYSIS

3, 3/2; F 89, 90

Prerequisite: ENT 301, ENT 313, ENT 331, INT 311. An advanced course in strength of materials which focuses on the analytical, numerical, and experimental methods of stress analysis as applied to structures and machine elements. Topics covered included axial stresses and deformation, bending and torsion of beams and shafts, plane stress, plane strain, elastic stability, yield criteria, combined stresses, and energy methods. *Required of mechanical engineering technology majors.

ENT 402 SHOCK AND VIBRATION ANALYSIS

3, 3/2; Sp 90, 91

Fee: \$5

Prerequisite: ENT 302, ENT 401. A study of the theoretical, analytical, and experimental method used in the analysis of shock and vibration in machine elements and structures. Topics covered include free and forced vibration of one-and multi-degree of freedom systems with an introduction to lumped parameter systems and continuous systems. The laboratory will stress familiarization with the instrumentation and experimental techniques used in vibration analysis. *Required of mechanical engineering technology majors.

ENT 411 HEAT TRANSFER

3, 3/2; F 89, 90

Prerequisite: ENT 312. A study of the process

of heat transfer and its application to the fields of processing technology, energy conversion, and machine design. Topics covered include conduction, convection, radiation, heat exchanger design, combined modes of heat transfer, and application to machine design. *Required of mechanical engineering technology majors.

ENT 421 MACHINE DESIGN I

3, 3/2; F 89, 90

Prerequisite: ENT 303. A study of the techniques used to design and specify machine elements, i.e., shafts, springs, fasteners, belts, clutches, brakes, chains, bearings, gears, cams, etc. *Required of mechanical engineering technology majors.

ENT 422 MACHINE DESIGN II

3, 2/3; Sp 90, 91

Prerequisite: ENT 421, ENT 401. Advanced topics in machine design including numerical control. Each student will be required to complete a major design project which includes preliminary analyses, working drawings, fabrication and testing of a prototype. *Required of mechanical engineering technology majors.

ENT 431 DIGITAL SYSTEMS I

3, 3/2; F 89, 90

Prerequisite: ENT 341. This course is an introduction to digital systems and includes analysis, design, and laboratory work to gain familiarity with performance and configuration of digital components. The course includes Boolean algebra, combinational circuit analysis and design, gates, sequential circuits, flip-flops, counters, logic types and interfacing, A/D converters, encoders/decoders, mux/demux, and memory devices. The experiments are designed to develop facility in analyzing, testing, troubleshooting and designing digital circuits. *Required of electrical engineering technology majors.

ENT 432 DIGITAL SYSTEMS II

3, 2/3; 1989-91

Prerequisite: ENT 431. Theory and application of microprocessors and microcomputers, composition, programming, interfacing, prototype and troubleshooting. *Required of electrical engineering technology majors.

ENT 441 ELECTROMAGNETIC FIELDS AND WAVES

3, 3/2; F 89, 90

Prerequisite: ENT 332, ENT 300. Description of traveling waves on transmission lines and waveguides. Introduction to RF and microwave technology for measurement of frequency, wavelength, power and impedance — Use of Smith Chart for circuit analysis. Characteristics of sources and amplifiers used

in RF and microwave systems. *Required of electrical engineering technology (electronics option) majors.

ENT 442 MICROWAVE TECHNIQUES

3, 3/2; Sp 90, 91

Prerequisite: ENT 441. Continues the study of RF and microwave technology. Topics include receivers, noise, antennas, modulation and demodulation, and propagation. Systems and applications are emphasized. *Required of electrical engineering (electronics option) majors.

ENT 461 CONTROL TECHNOLOGY I

3, 3/2; F 89, 90

Prerequisite: ENT 342. Introduction to control systems and components, control system analysis, transient and steady-state evaluation, transfer functions, block diagram algebra, stability analysis, system classification, use of laboratory simulation techniques, experimental testing of type O and type I servo systems. *Required of electrical engineering technology majors.

ENT 462 CONTROL TECHNOLOGY II

3, 2/3; So 90, 91

Prerequisite: ENT 461. The analysis and design of feedback control systems, objectives and methods, frequency response plots, feedback control system performance based on frequency response analysis, stabilization techniques, control system design using Bode and Nichol's chart design methods, digital control systems and digital interfacing techniques. Experimental investigation of d.c. servo stabilization using rate feedback of network compensation, experimental evaluation of a.c. servo systems. *Required of electrical engineering technology majors.

ENT 471 ELECTRICAL POWER SYSTEMS I

3, 3/2; F 89

Prerequisite: ENT 342. Operating strategies and control of single phase and polyphase electric power systems. Integration of electrical machinery including transformers, synchronous machines and induction motors in the power system. Both single phase and polyphase machines are considered. *Required of electrical engineering technology (power/machines option) majors.

ENT 472 ELECTRICAL POWER SYSTEMS II

3, 3/2; Sp 90

Prerequisite: ENT 471. A systems approach to electrical power systems analysis, control of power frequency; control of voltage and reactive power, load flow analysis, fault analysis and unbalanced operation, over-voltage and insulation requirements. Underground cable transmission systems. *Required of electrical engineering technology (power/machines option) majors.

INDUSTRIAL TECHNOLOGY

Offered by the Technology Department
DR. CHARLES A. BEASLEY, Chairperson
Upton Hall 315

DEBORAH C. RINDFUSS, Coordinator
Upton Hall 314

See Technology courses for description of courses listed in the Industrial Technology major.

SAFETY STUDIES

Offered by the Technology Department
DR. CHARLES A. BEASLEY, Chairperson
Upton Hall 315

DEBORAH C. RINDFUSS, Coordinator
Industrial Technology Program
Upton Hall 314

The safety studies area provides an opportunity for students from the various specialized degree programs to also acquire a safety minor, teacher preparation in driver education, and a variety of elective courses of a general as well as specialized nature to satisfy personal interest or career goals.

SAF 300 THE HIGHWAY TRANSPORTATION SYSTEM

3, 3/0; offered based on staff availability

Prerequisite: N.Y. State driver's license. An introduction to and an analysis of the highway transportation system, with emphasis placed on the vehicle operator task for the purpose of facilitating improved operator performance. The lab phase of the course conducted in automobiles.

SAF 305 FUNDAMENTALS OF SAFETY

3, 3/0; 1989-91 (AST)

An analysis of the fundamentals of accident prevention as they apply to the numerous areas of living, with consideration given to the human and environmental factors, legal aspects and home and fire safety. *Required of safety minor. **Required to teach high school driver education.

SAF 310 PERSONAL SAFETY AND FIRST AID

3, 3/0; F 89, 90

Personal accident-prevention skills and techniques that can reduce potential threats to life, with emphasis on activities involving recreational, occupational, industrial, and daily life routines. Basic instruction in emergency medical care of the sick and injured. A standard first aid and personal safety certificate will be awarded upon successful completion of the course.

SAF 320 PRODUCT SAFETY

3, 3/0; Sp 90, 91 (GEE)

A study of product safety; agencies that control the manufacture and distribution of dangerous products; product safety laws and

legal liability; product injury data; evaluative criteria; product testing; determining standards for safety.

SAF 333 OCCUPATIONAL SAFETY

3, 3/0; Sp 90, 91

An analysis of hazards in the work place, with emphasis on various accident-prevention methods and techniques that can be utilized by both the employee and management to reduce the accident toll. The Occupational Safety and Health Act of 1970 will be discussed in detail. *Required for safety minor.

SAF 340 COMMUNITY SAFETY

3, 3/0; F 89, 90 (GEE)

A study of human and environmental factors affecting community safety; accident prevention and control principles; agencies and organization; safety laws and ordinances; standards and codes; legal liability and insurance; disaster and emergency medical care; safety in places of public assembly; recreational facilities; transportation systems. *Required for safety minors.

SAF 360 INDUSTRIAL HYGIENE

3, 3/0; F 89, 90

An introduction to the profession of industrial hygiene. Includes the detection, recognition, evaluation and control of those factors emanating from the working place which may impair health, cause discomfort, illness, disease and reduce efficiency among workers and the community as a whole.

SAF 431 ORGANIZATION, ADMINISTRATION, AND SUPERVISION OF INDUSTRIAL ACCIDENT PREVENTION PROGRAMS

3, 3/0; offered based on staff availability

Prerequisite: SAF 430. A study of the practical application of methods and techniques of efficient industrial accident prevention programs. Emphasis will be placed upon corporate responsibility, employee responsibility and the complex psychological relationships that affect the typical program.

SAF 450 MOTOR FLEET SAFETY MANAGEMENT

3, 3/0; offered based on staff availability

A study of the various fleet management techniques and their application. Includes the scope and function of the motor fleet safety supervisor; federal, state, and local laws and regulations; selection and maintenance of equipment; customs and public relations.

TECHNOLOGY COURSES

Offered by the Technology Department
DR. CHARLES A. BEASLEY, Chairperson
Upton Hall 315

DEBORAH C. RINDFUSS, Coordinator
Upton Hall 314

**TEC 101
TECHNICAL DRAWING**

3, 2/3; 1989-91
Survey of projection theory; multiview projection; special relationships and visualization of points, lines, planes and solids; size and shape description through sketching and instrument drawing; industrial applications, standards and conventions, auxiliary views, revolutions, developments and intersections. *Required of TEC and TED majors.

**TEC 123
PRINCIPLES OF MANUFACTURING**

3, 3/0; 1989-91; offered on staff availability (AST)
A study of the operative principles common to the majority of manufacturing industries. In-depth classroom discussion including presentations by leading industrialists. Consideration will be given to research and development, manufacturing, organization and management, industrial relations, engineering, production, labor, financial control, marketing, quality control.

**TEC 150
THE SHAPE OF THINGS**

3, 3/0; 1989-91; offered on staff availability (AST)
A study of mechanics and design; concepts of strength of materials; the influence of shape, size, and choice of materials on the strength and rigidity of structures; presentation of the elements of mechanism.

**TEC 201
MATERIALS PROCESSING**

3, 2/3; 1989-91
Prerequisite: TEC 101. A study of the processes and problems associated with the conversion of materials into useful forms and goods. Practical experience is acquired through laboratory activities exemplifying the major processes studied. *Required of TEC and TED majors.

**TEC 202
PRODUCTION DRAWING**

3, 2/3; 1989-91; offered on staff availability
Prerequisite: TEC 101. Idea development, sketching, design concepts, working drawings, reproductions, manufacturing processes and operations, illustrations, and drafting-room procedures.

**TEC 260
DEVELOPMENT OF TECHNOLOGY**

3, 3/0; 1989-91; offered on staff availability (AST)
A chronological study of the development of man's technology; emphasis on prevailing ideas, known physical materials and processes, and pressures of his natural and social surroundings; consideration of man's technological future based on his historical development.

**TEC 301
MATERIALS PROCESSING II**

3, 2/3; 1989-91; offered on staff availability
Prerequisite: TEC 101 and 201. A continuation of the conceptual patterns introduced in TEC 201. Emphasis is placed upon numerical controlled and computerized numerical controlled materials processing. Practical experience is acquired through laboratory activities to enhance understanding of the processes studied.

**TEC 303
PLASTICS**

3, 2/3; 1989-91; offered on staff availability
Fundamentals of injection, compression, transfer, rubber, and blow molding; heat sealing; vacuum forming; casting and spraying of form welding of plastics; properties of polymers and elastomers; mold construction.

**TEC 305
CREATIVE ARTS FOR INDIVIDUALS
WITH SPECIAL NEEDS**

3, 2/3; 1989-91; offered on staff availability
Experiences in creative arts and crafts and elementary industrial arts for children who present exceptional problems of learning; techniques in preparing handicapped children for occupations through activities in Tech. Ed.; job analyses and occupational guidance related to the education of exceptional children. *Elective for EXE Majors.

**TEC 311
MATERIALS SCIENCE AND TESTING**

3, 2/3; 1989-91
Prerequisite: Junior or senior standing. A study of the origin of composition of a representative gamut of industrial materials including metals and their alloys, woods, fuels, lubricants, cutting fluids, solvents, protective compounds or coatings, inks, adhesives, plastics, and ceramics; application of testing procedures for identification and to determine physical and chemical properties suitable for specific industrial uses. *Required of TEC and TED majors.

**TEC 312
PRODUCTION PLANNING AND
CONTROL**

3, 2/3; 1989-91
Prerequisite: Junior or senior, and TEC 201. Provides working knowledge of the production planning and control function in industry, basic coverage of the techniques and pro-

cedures of production planning, scheduling, dispatching and control. *Required of TEC and TED majors.

**TEC 313
STATISTICAL QUALITY CONTROL**

3, 3/0; 1989-91
Prerequisite: Junior or senior standing. Fundamentals of probability; sample space, events, probability; probability distributions; binomial, poisson and normal. Application of probability in quality control; Shewhart Control Charts, process capability studies, acceptance sampling, standard tables for sampling plans. *Required of TEC majors.

**TEC 314
ELECTRO-MECHANICS**

3, 2/3; 1989-91 (AST)
Fundamental laws of electric circuits, analysis of D.C. and A.C. circuits, application to electric power systems and electronics industry. Fundamentals of electrical machinery and introduction to three phase systems. Laboratory experiments on electrical circuit and devices. *Required of TEC and TED majors.

**TEC 318
METAL-FORMING**

3, 3/2; 1989-91; offered on staff availability
Prerequisite: TEC 201. Advanced study of metal working processes exemplified by casting, shaping, welding, forging, and finishing techniques; emphasis on individual experiences in contemporary metal working technology.

**TEC 319
TECHNOLOGY AND VALUES**

3, 3/0; 1989-91; (AST)
Offered on staff availability
Prerequisite: Junior standing. Investigation of the social and ethical impacts of technology to enable increased understanding of the often conflicting roles of the historical and current creators and users of technology, and to enable more informed future assessment and control. Examination of selected current technical-ethical issues of societal importance.

**TEC 325
DEVELOPMENT OF AMERICAN
INDUSTRIES**

3, 3/0; 1989-91; offered on staff availability
Study of America's technological society. The relationship of man and machine in the increasingly complex world of work. Understanding industry as a basis of culture.

**TEC 326
OCCUPATION IN AMERICAN
INDUSTRY**

3, 3/0; 1989-91; offered on staff availability
Overview and analysis of the wide range of occupations in the major industries with emphasis on the role of federal, state, and local agencies, their services and available reference material.

**TEC 327
SURVEY OF INDUSTRIAL POLLUTION
CONTROL PROBLEMS**

3, 3/0; 1989-91 (AST)
Offered on staff availability
Overview and analysis of problems pertaining to pollution generation and abatement by industry during procurement, product development, production, distribution and utilization.

**TEC 350
GRAPHIC COMMUNICATIONS**

3, 2/3; 1989-91
Prerequisite: Junior or senior. An introduction to the major principles of technical graphic communications; a study of industrialized systems information conveyance in a contemporary civilization; application of modern industrial reproduction processes to the solution of graphic problems. *Required of TEC and TED majors.

**TEC 351
ENERGY SYSTEMS**

3, 2/3; 1989-91
A study of energy and power from sources through conversion systems and mechanisms to the application of power for manufacturing. *Required of TEC and TED majors.

**TEC 352
FOREST PRODUCTS**

3, 2/2; 1989-91
Offered on staff availability
Study and experience in the use of solid and composition wood processes through activities of the production and construction. Special emphasis upon wood identification, utilization, and finishing.

**TEC 360
PRODUCTION DRAWING I**

3, 3/3; 1989-91; offered on staff availability
Prerequisite: TEC 101. Application of the fundamental principles of orthographic projection and the further development of drawing skills required in the preparation of selected types of working drawings; increased emphasis on technical sketching skills and dimensioning practices; tolerancing standards; sectional views; basic design concepts; materials and processes in manufacturing surface finishing standards; fundamentals of threads and fasteners; preparation of welding, stamping and piping drawings.

**TEC 370
PRODUCTION DRAWING II**

3, 3/3; 1989-91; offered on staff availability
Prerequisite: TEC 360. Graphic description as applied to the management of industrial production with concentration on working drawings and illustrations.

**TEC 400
MARKETING**

3, 3/0; 1989-91 (GEE)
Prerequisite: Junior or senior. The establishment of conceptual framework for marketing; the movement of goods and services through channels from source to consumer; consideration of product formulation, market research, prudent pricing, distribution channels, and promotion systems. *Required of TEC and TED majors.

**TEC 401
MANAGEMENT SCIENCE**

3, 3/0; 1989-91 (GEE)
Prerequisite: Junior or senior. An investigation of the conceptual framework of management science leading to a detailed study of the major managerial functions of planning, organizing, actuating, and controlling. An introduction to the tools of modern management relating to forecasting, organizational concepts, motivation, quantitative decision making, measurement and evaluation of performance, and the several concepts of control; consideration of the economic environment; use of the cases study method. *Required of TEC and TED majors.

**TEC 402
ERGONOMICS**

3, 3/0; 1989-91
The interaction of man and machines; development and use of human factors information including sensory, cognitive, and psychomotor processes as these influence the design of displays, controls, and work spaces; environment and safety consideration necessary to achieve desired machine outputs. *Required of TEC and TED majors.

**TEC 403
SYSTEMS ANALYSIS**

3, 3/0; 1989-91
Prerequisite: TEC 401. A study of fundamental concepts and analytical techniques of systems analysis; stress will be placed on the quantitative methods and their use in decision-making in practical situations involving industrial, managerial, and technological settings; trends will be treated as related to modeling, and computer technology, feedback and information systems. *Required of TEC majors.

**TEC 405
MANUFACTURING TECHNOLOGY**

3, 2/4; 1989-91
Prerequisite: TEC 312 and last semester senior standing. A senior project course that provides a hands-on experience in the total manufacturing cycle of a product from the ideal inception stage through planning, product design, processing studies, actual and simulation of large-scale production, and experience in setting time standard and taking time studies. *Required of TEC and TED majors.

**TEC 406
INVESTIGATION OF FOREST
MATERIALS AND PRODUCTS**

3, 2/3; 1989-91
Offered on staff availability
Prerequisite: TEC 352. Study of wood structure and properties through laboratory investigation and testing. Experimentation with advanced processes and evaluation of forest products. Identification of the field of forest product technology and wood technology.

**TEC 407
GRAPHIC REPRODUCTION PROCESSES**

3, 2/3; 1989-91
Offered on staff availability
Prerequisite: TEC 350. The photomechanical processes as related to offset lithography, screen process printing and gravure printing.

**TEC 408
ELECTRONICS COMMUNICATION**

3, 2/3; 1989-91
Offered on staff availability
Prerequisite: TEC 314. Advanced study of general electricity with emphasis on alternating current theory; electronic test equipment; service repair and construction of complex A.C. devices and projects; service repair and construction of radio receivers and electronic equipment.

**TEC 409
INTRODUCTION TO
THE CERAMIC INDUSTRIES**

3, 2/3; 1989-91; offered on staff availability
Introduction to the major ceramic industries that utilize earthy, inorganic, nonmetallic materials which are usually heat treated at high temperatures. Laboratory experiences to achieve breadth understandings of major manufacturing industries; ceramic raw materials, stone refractories and kilns, gypsum, lime. Portland cement and concrete, clay (structural products and whitewares), glaze, porcelain enamels, glass, abrasives, carbon and graphite, and electronic ceramics.

**TEC 411
ARCHITECTURAL DRAWING**

3, 2/3; 1989-91
Offered on staff availability
Prerequisite: Permission of instructor. Locations, restrictions, building codes, facilities, floor plans, elevations, and specifications of structures; materials, equipment, and methods of construction.

**TEC 417
DESCRIPTIVE GEOMETRY**

3, 2/3; 1989-91
Offered on staff availability
Prerequisite: TEC 101. Solutions of space problems involving points, lines, and planes. Surface developments and intersections, conic section, vector geometry, and practical applications.

**TEC 421
OCCUPATIONAL AND PRACTICAL
ARTS EDUCATION FOR INDIVIDUALS
WITH SPECIAL NEEDS**

3, 2/3; 1989-91

Offered on staff availability

Primary emphasis placed on providing a wide range of guided exploratory experiences which relate to planning, delivering, coordinating and evaluating manipulative activity specifically designed for occupational and practical arts education programs, classrooms, laboratories, activity centers, sheltered workshops, nursing homes, hospitals, vocational rehabilitation centers, and summer camp activity programs; development of methods and techniques for teaching and assessing the activity potential of individuals with special needs. *Advanced technical credit.

**TEC 428
MANUFACTURING TECHNICAL
SEMESTER**

3-6 cr. - days in industry by arrangement; offered on staff availability.

Prerequisite: Junior or senior status/permission of instructor. Technical courses and/or in-plant participation in manufacturing; emphasis on production planning, technology of industry, and technology in industry; conceptual approach and practical experience in the organization, planning, production, and evaluation of the industrial manufacturing enterprise.

**TEC 430
INTRODUCTION TO COMPUTER-AIDED
DRAFTING (CAD)**

3, 2/3; 1989-91

Prerequisite: TEC 101 or permission of instructor. An introduction to computer-aided drafting. A study of the principles and concepts of microcomputers as utilized in the preparation of working drawings. Utilize various devices for data entry; perform basic editing; storage and retrieval tasks; perform selected file management tasks; operate CAD output hardware.

**TEC 465
SAFETY MANAGEMENT**

3, 3/0; 1989-91

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. *Required of TEC majors.

TECHNOLOGY EDUCATION

Offered by the Technology Department
DR. CHARLES A. BEASLEY, Chairperson
Upton Hall 315

DR. N. JOHN POPOVICH, Coordinator
Upton Hall 314

**TED 110*
INTRODUCTION TO
TECHNOLOGY EDUCATION**

3, 3/0; 1987-89; plus observations

Technology in general education; preparation for teaching Technology Education; philosophy and objectives; survey of approaches to Technology Education; organization of materials for instruction; public school observation.

**TED 360*
TECHNOLOGY EDUCATION METHODS
AND EVALUATION**

3, 3/0; 1989-91

Prerequisite: EDF 303, TED 110. 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, and the preparation of instructional materials.

**TED 450*
PROFESSIONAL SEMESTER**

12, 5/0 (15 wks.); 1989-91

Prerequisite: EDF 303, TED 110 and TED 360, cumulative average 2.5 or higher. Full-time assignment in a junior or senior high school as a student-teaching intern working with a supervising teacher and a college supervisor; seminars in public schools to study teaching techniques, organization, management and other aspects of teaching Technology Education; guided full-time teaching experience including the use of videotape to analyze teaching; participation in school and professional activities. Students must be prepared to accept assignment at any center; have completed a minimum of 105 semester hours of approved credit applicable for the Technology Education Certification Program; students may not enroll for any other college courses.

*Required of Technology Education majors.

See Technology courses for description of courses listed in the Technology Education major.

VOCATIONAL TECHNICAL

Offered by the Technology Department
DR. CHARLES A. BEASLEY, Chairperson
DR. N. JOHN POPOVICH, Coordinator
Upton Hall 314

**VTE 100
COMPREHENSIVE THEORETICAL
TRADE OR TECHNICAL SKILLS**

15 cr.

**VTE 200
COMPREHENSIVE TRADE OR
TECHNICAL PERFORMANCE**

15 cr.

These credits are awarded for satisfactorily completing the trade theory and performance examinations. Admission to these examinations is based on verification of four years of work experience 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 of work experience. The National Occupation Competency Testing Institute Examination is used to determine credit of 15 semester hours for each area. Earned examination credits will be recorded on student's transcript only after student has successfully completed the 33-credit VTE provisional certification program.

**VTE 300
INTRODUCTION TO VOCATIONAL
TECHNICAL EDUCATION**

3, 3/0; 1989-91

An introduction to the history, philosophy, and objectives of vocational technical education; growth of technical education; description of the various programs of vocational education — full and part time; characteristics and content of effective programs; personal and professional characteristics of teachers and trends in vocational education.

**VTE 301
OCCUPATIONAL/CONTENT
ANALYSIS**

3, 3/0; 1989-91

Techniques of analyzing a trade. Development of the elements of teachable content for a trade, including: the selection of skills, operations, tools, equipment, and materials; mathematics, science, drawing, safety, and hygiene.

**VTE 302
COURSE ORGANIZATION**

3, 3/0; 1989-91

Prerequisite: VTE 301. Arrangement of instructional material in a logical, performance based teaching-learning sequence appropriate to the student's ability.

**VTE 306
SHOP/LABORATORY ORGANIZATION
AND MANAGEMENT**

3, 3/0; 1989-91

Emphasizing the many organizational factors essential to sources in the teaching profession. Includes faculty planning, supervision, and managerial phases of the vocational-technical teacher's position.

**VTE 307
USE OF INSTRUCTIONAL MEDIA**

3, 3/0; 1989-91

Effective preparation and use of commercial, instructor, and student-prepared media. Familiarization with sources, criteria for selection, and evaluation procedures.

**VTE 404
METHODS OF TEACHING
VOCATIONAL TECHNICAL SUBJECTS**

3, 3/0; 1989-91

Basic principles and methods of teaching vocational technical subjects. Prepares the craftsman, technician, or engineer to effectively impart his knowledge to the learner.

**VTE 411
EVALUATION OF INSTRUCTION**

3, 3/0; 1989-91

Types and characteristics of school tests; principles of test construction; practice in the development of tests and interpretation of test data all related to vocational technical students and classes.

**VTE 412
TEACHING CLINIC**

3, 3/0; 1989-91

Prerequisite: VTE 100, 200, 307, 404, EDU 303. Emphasizing specific methods and procedures, effective use of instructional aids, selection of student work assignments, and criteria for evaluation. Presentation of practice lessons by class members for constructive criticism and evaluation in a clinic situation using videotape.

**VTE 413
PRACTICE TEACHING AND
OBSERVATION**

3, 6/0; 1989-91

Prerequisite: VTE 412. Supervised teaching in vocational technical classes in selected vocational schools. Conferences and reports based upon teaching assignments will be required. Students should be prepared to accept an assignment at any school designated by the student teacher coordinator.

**VTE 415
PROFESSIONAL DEVELOPMENT
SEMINAR**

3, 3/0; 1989-91

Opportunity to synthesize the pedagogical courses and practice-teaching experience and to analyze the problems which confront the teacher.

**VTE 450
ORGANIZATION OF DIVERSIFIED
COOPERATIVE WORK-STUDY
PROGRAMS**

3, 3/0; offered on staff availability

Provides information for industrial arts or occupational education majors interested in establishing diversified cooperative programs. Included are procedures for promoting a new program, working with advisory boards, developing employment opportunities, arranging trainee outlines, planning instructional facilities, and securing regents accreditation.

**VTE 455
OPERATION OF DIVERSIFIED
COOPERATIVE WORK-STUDY
PROGRAMS**

3, 3/0; offered on staff availability

A course for those interested in conducting effective instruction in diversified cooperative programs, including how to interview employers; supervise trainees; interpret legal aspect; prepare records and reports, and conduct classes in related theory.

Theater Arts

Offered by the Performing Arts Department
MYRON H. NADEL, Chairperson
Rockwell Hall 203

**THA 100, 101, 102
PLAY READING**

1 cr. ea. up to 3 cr., 1989-91 (GEE)

Reading and analysis of a variety of plays containing scenes appropriate for use in the various aspects of play production.

**THA 106
INTRODUCTION TO THEATER ARTS**

3, 3/0; 1989-91 (A)

An introduction to all aspects of theater. Includes discussion of professional, educational, and community theater.

**THA 200
VOICE AND DICTION**

3, 3/0; 1989-91 (A)

A comprehensive study of the speech mechanism and voice production.

**THA 207
PLAY PRODUCTION**

3, 1/4; F 89, 90 (A)

A hands-on introduction to all aspects of producing a play. Discussions include theater management, publicity, theatrical design, stage properties, and makeup. Participation on at least one preparation or run crew for performing arts productions is required.

**THA 208
TECHNICAL THEATER**

3, 1/4; offered by contract. (GEE)

Prerequisite: THA 207 or consent of instructor. Continuation of THA 207 with emphasis on scenery and property construction. Studio projects include scene painting, objects duplication, and material simulation techniques. Participation on at least one preparation or run crew for performing arts productions is required.

**THA 226
ACTING: THEORY AND PRACTICE**

3, 1/4; F 89, 90 (GEE)

Prerequisite: THA 106 or consent of instructor. An examination of the actor's art, the relationship of theory to practice.

**THA 260
BASIC MOVEMENT FOR ACTORS**

3, 2/2; F 89, 90 (GEE)

Prerequisite: THA 106 or consent of instructor. Designed to give student actors a knowledge and awareness of their bodies so they can more fully incorporate the physical dimensions of acting into their character portrayals. (Appropriate for non-majors.)

**THA 300
ADVANCED VOICE**

3, 3/0; offered based on staff availability (GEE)

Prerequisite: THA 200. Further application and appreciation of vocal production methods with a special emphasis on individualized projects.

**THA 310
ADVANCED TECHNICAL PROBLEMS**

3, 2/2; offered by contract

Prerequisite: THA 208. Lecture on supervisory techniques and scene planning techniques. Examination of special problems; theories and the trends in technical theater, independent projects in technical theater.

**THA 311
COSTUME FOR THE THEATER**

3, 2/2; Sp 90, 91 (GEE)

Prerequisite: THA 207 or consent of instructor. A hands-on introduction to costume construction and design. Discussions include design theory, script analysis, fabric selection. Studio sessions on shop equipment. Costume construction for performing arts productions is required.

**THA 312
LIGHTING TECHNIQUES**

3, 2/2; offered based on staff availability (GEE)

Prerequisite: THA 207 or consent of instructor. An introduction to lighting design for theater, dance, studio, and industrial applications. Discussions include principles of optical systems, stage lighting equipment, color media, electricity, control systems, stage lighting, history, and the McCandless stage lighting system. Assigned practical experience required.

THA 315
PERIOD STYLES FOR THE THEATER

3, 3/0; offered based on staff availability (GEE)

A study of fashion and the decorative arts and how they relate to the period styles of theatrical productions.

THA 317
HISTORY OF THEATER: ANCIENT TO RENAISSANCE

3, 3/0; F 89,90 (A)

An examination of the origins and development of the physical theater; the consideration of dramatic literature in its theatrical context.

THA 318
HISTORY OF THEATER: RENAISSANCE TO MODERN

3, 3/0; Sp 90, 91 (A)

The emergence of the modern theater, the consideration of dramatic literature in its theatrical context.

THA 319
PLAYWRITING

3, 3/0; offered based on staff availability (GEE)

Prerequisite: THA 106 or consent of instructor. Development of critical capacities in reference to the student's own work and that of his or her classmates; productive work in playwriting.

THA 326
SCENE STUDY

3, 3/0; Sp 90, 91

Prerequisite: THA 226 or equivalent. Scene analysis and role development with special attention to the interaction of characters in a dramatic scene.

THA 360
ADVANCED MOVEMENT FOR THE ACTOR

3, 1/4; Sp 90, 91

Prerequisite: THA 260. Continued exploration and development of the body as an organic tool for the actor. Concentration will be on the physical dynamics of the characterization and their integration into the total acting experience of voice, body, and mind.

THA 370
STAGE MAKEUP

3, 2/2; F 89, 90

Prerequisite: THA 207 and THA 226. Study of the principles and techniques of theatrical makeup application and design.

THA 407
ENSEMBLE THEATER

3-9, 0/6-18; 1989-91

Prerequisite: Audition. An examination of ensemble theatrical production through the preparation and performance of plays.

THA 411
ADVANCED COSTUME DESIGN FOR THEATER

3, 3/0; offered based on staff availability

Prerequisite: THA 311 or consent of instructor. Advanced studies in costume design and rendering techniques. Drawing skills necessary; design and construction projects for performing arts productions required.

THA 426
ADVANCED ACTING

3, 3/0; F 89, 90

Prerequisite: THA 326 and consent of instructor. Styles, periods, and methods of acting.

THA 450
DIRECTING

3, 3/0; Sp 90, 91

Prerequisite: THA 226 or consent of instructor. An examination of the responsibilities of the play director.

THA 495
PROJECT

THA 496
SEMINAR IN THEATER ARTS

3, 3/0; Sp 90, 91

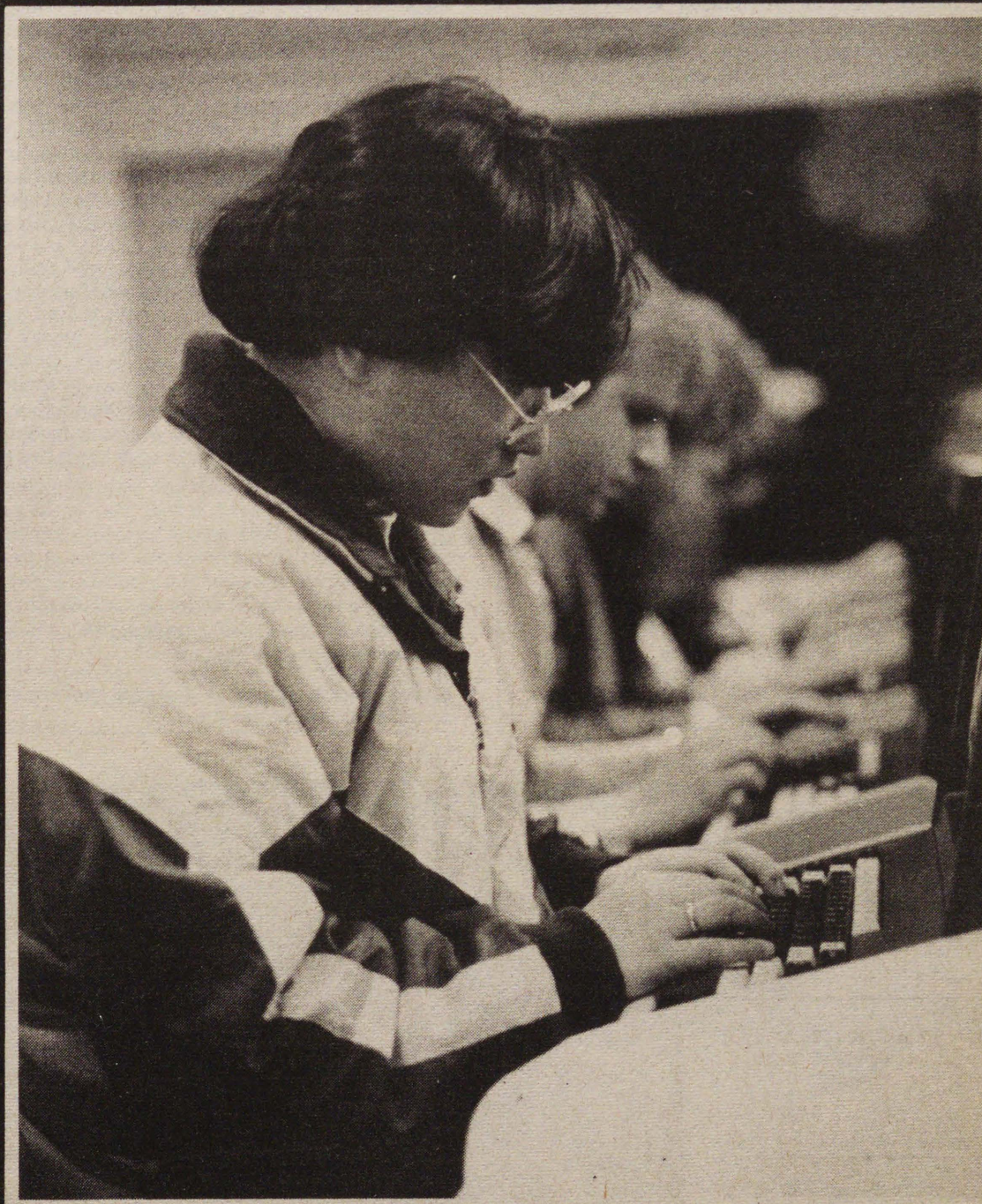
Prerequisite: 24 hours completed in theater arts. Examination of attitudes, sharpening of critical capacities; production of scholarly and creative works.

THA 499
INDEPENDENT STUDY



6

ACADEMIC POLICIES



Academic Policies

The following college academic regulations apply to all students and all college sessions. Students are responsible for determining their academic programs and for meeting every degree requirement. Faculty 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 faculty adviser, department chairperson or academic dean. Check with the Academic Standards and Certification Office, Twin Rise 130-S, 878-5222, for clarification of other regulations or procedures.

Registration

The registrar has established the following registration procedures which all students must follow.

Procedures for registering are published in the class schedule each semester. Class schedules are available for the fall semester in April, for spring in November, and for summer in March. Students are responsible for obtaining a schedule each semester according to the procedures established by the Records and Registration Office.

Students subject to possible dismissal under probation regulations should register, but they are not officially enrolled until their official status has been determined by the appropriate dean.

Academic advisement is mandatory for all matriculated students. Students who have declared a major must seek advisement by contacting the chairperson of the department responsible for their major. Advisement for all other students is available in the Uncommitted Academic Advisement Center, Twin Rise 110-S. This advisement can take place any time dur-

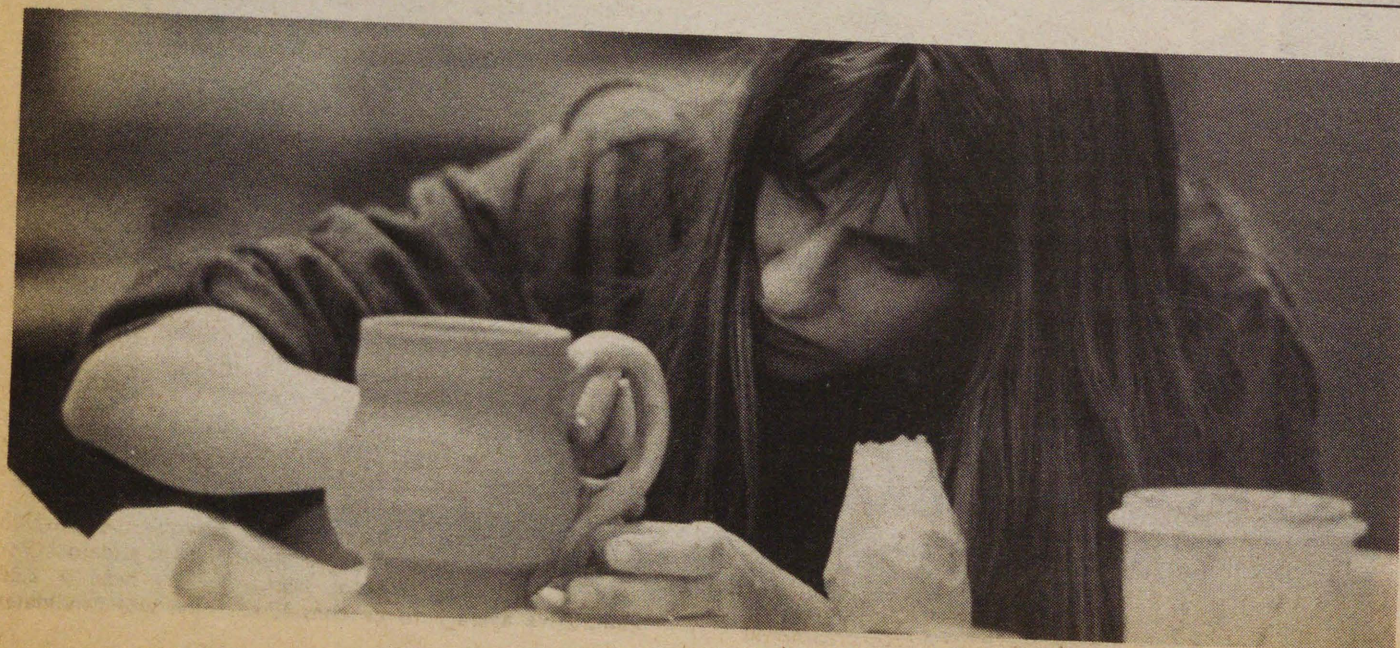
ing the semester prior to registration. The adviser must sign the student's advisement card. A student may remain "uncommitted" for three semesters or 45 semester hours. Students must declare a major prior to registering for work beyond 45 semester hours.

Schedule Adjustment Period is designed to accommodate students who find it necessary to drop or add a course after the start of classes. Dates and instructions for schedule adjustment period are published in the class schedule each semester.

The average courseload for most undergraduates is 15-16 hours a semester. A student's class schedule may not exceed 19 hours a semester. This policy may be waived by submitting a petition to the Academic Appeals Board through the Academic Standards and Certification Office, Twin Rise 130-S. It will take a minimum of two weeks for the board to respond to the petition. Students seeking a waiver of this policy should have an above average academic record. All requests for waiver of this policy must be submitted two weeks prior to the beginning of the semester.

Students with outstanding financial obligations will not be allowed to register at any time.

Students clearly subject to dismissal should not begin a new semester or summer session.



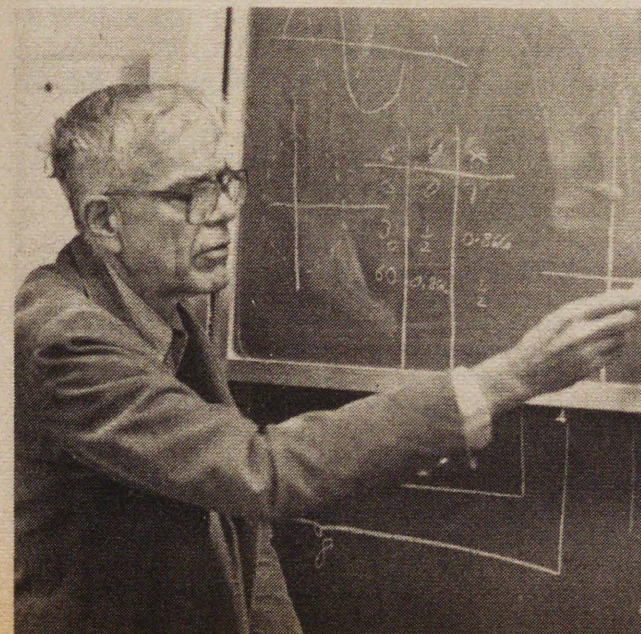
Academic Advisement: Role of Students and Faculty

Effective academic advisement is the interaction between a qualified adviser who is knowledgeable and sympathetic 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 the guidance and information necessary 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.

The student must be convinced that the adviser is interested, informed, and caring. The adviser must foster open two-way communication and be willing to share greater experience without attempting to impose value systems on the student. Therefore, advisement requires an environment of mutual respect, trust, and cooperation.

The adviser should maintain a view of the student's progress and be aware of any difficulties the student encounters. Personal, financial, health, study habits, and a host of other factors may directly affect the progress of a student's academic career. The good adviser should be willing to listen sympathetically to any problems arising from these factors and help the student to arrive at informed decisions. The adviser should be prepared to inform the student of options and campus sources available for the solutions of the problems that may affect academic performance. Since the academic adviser is often the only person on campus to whom the student can turn in times of indecision or stress, it is incumbent upon the adviser to ensure that the student's problems are treated with seriousness and concern.



Attendance

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

Auditing Courses

Students may audit or take courses without earning credit provided they have the approval of the department chairperson and the instructor of the course. A person auditing a course will attend without formal recognition, not be on the official class list in the Records and Registration Office for such courses, not be required to meet the requirements of the course, and not be charged tuition or fees for the course.

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

Special audit: Persons over 60 years old may audit courses if there is space available. Arrangements can be made through the Admissions Office, Cleveland Hall 206, 878-5511.

Dropping or Withdrawing from a Course

Dropping Courses

Students may completely cancel their registration in one or more courses during schedule adjustment period each term. Dropping a course at that time removes all record of the course from the student's transcript.

Withdrawal from Courses

Students who wish to leave a course after schedule adjustment period and before the final withdrawal date (prior to the 10th week of the semester or fifth week of a summer session) may file withdrawal forms signed by the appropriate instructor with the Records and Registration Office, Cleveland Hall 204. Withdrawals remain on the transcript and are recorded as Ws, but do not count in credit hours or grade point average.

Instructors are required to apprise students of their academic standing not later than the end of the ninth week of the semester or the fourth week of a summer session. If a student does not officially withdraw from a course and stops attending, a grade of E will be recorded.

Students withdrawing from some course work may be eligible for a refund in accordance with the bursar's refund schedule. Beyond the end of the bursar's time limit full charges are assessed.

Declaring a Major

All students who have started as freshmen at the college must decide on an academic major before the completion of 45 semester hours. Transfer students who have completed more than 30 credits must declare a major at the time of application for admission. Before declaring a major, students should seek the advice of the chairperson of the department or division responsible for the major. A change of major form, available from the chairperson, must then be completed and sent to the Records and Registration Office.

Some academic programs have special requirements which the student must meet before being admitted as a major. (For example, potential criminal justice majors need a 2.50 cumulative average to be considered. Fine arts candidates

must submit a portfolio of representative work.) The department chairperson or program coordinator can provide information on specific requirements.

Changing a Major

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

A student on probation will not be permitted to transfer to a new major without the approval of the faculty responsible for the new major.

Dual 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 with a major and 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 files for a degree in the Records and Registration Office indicating on the degree form the degree major and the second major. Upon receipt of the degree, the student's transcript will contain two entries: (1) the major degree and (2) a second notation that "this student has also completed all requirements for a second major in the appropriate area."

Regular advisement of the student is done by the primary major advisor. Students opting for a dual major should contact the department involved, request a review of their progress and academic advice concerning the second major, and complete a declaration of second major form. Only one baccalaureate degree may be awarded for a four-year, 123 credit hour program.

Dual Baccalaureate Degrees

The awarding of two degrees at the baccalaureate level may occur under given circumstances. Course work 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 course work (at least 32 hours — usually one additional year) in distinctly different fields. Exceptions to this requirement are the bachelor of fine arts and bachelor of technology, in which instances two degrees may be awarded upon the fulfillment of requirements of each degree. Students must earn a minimum of 155 credit hours to qualify for two baccalaureate degrees. Advisement should be sought from the Academic Advisement Office, Cleveland Hall 417.

Leave of Absence/Withdrawal from College

Leave of Absence

Students who wish to leave the college for personal or finan-

cial reasons may be granted leaves of absence of up to one full year as long as they are in good standing with at least a 2.00 cumulative average. They may take up to two full semesters beyond the one which they are completing when applying for a leave. A leave will not be granted to study at another college or university.

Students wishing to begin a leave during a semester already in progress must make application before the end of the first 10 weeks of the semester. These approved leaves will begin at the date of the request, and the student will be included in the one full year allowed for the leave.

Emergency medical leaves of absence of varying lengths of time are granted for documented serious injury or illness.

An application for leave of absence form is used to apply for a leave. It can be obtained in the Academic Advisement Office, Twin Rise 110-S, 878-5223, or in the appropriate dean's office. Begin the application by conferring with the department chairperson.

Withdrawal

To maintain good standing and eligibility for readmission to the college, students finding it necessary to withdraw must do so officially. Refunds of tuition will be made on a prorated basis up to the fourth week of classes of the semester, upon written request and the recommendation of the department chairperson.

To officially withdraw, a student must:

1. Consult the department chairperson and obtain an Application for Withdrawal From College form from the appropriate dean's office.

2. File the form with the Records and Registration Office, Cleveland Hall 204, and complete the withdrawal procedure as outlined by that office.

Failure to file for withdrawal will result in the recording of an E grade in each course in which the student is registered. Where it is impossible to withdraw in person, it must be done by a letter from the student or parent to the dean. Students withdrawing officially with no outstanding obligations or commitments to the college are considered to be in good standing.

Graduation/Commencement

All students expecting to qualify for a degree must fulfill certain requirements. They are:

1. File application with Records and Registration Office, Cleveland Hall 204, by the specified date. Failure to make application before the date may eliminate the student from the commencement program and unduly delay the granting of the degree.

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

3. Students must meet all curricular requirements. They must have completed the prescribed curriculum for their major. If requirements have changed since they were admitted to a program, they may choose to graduate under the old or new requirements.

a. Students must maintain a 2.00 cumulative average for all course work taken at the college. The cumulative average for the courses taken in the major field must also be at least 2.00. All students must satisfy the English composition and basic mathematics requirements.

b. Students must have taken 60 hours in the general education area.

c. All candidates must have completed a minimum of 45 hours of upper-division coursework, courses generally considered advanced and numbered 300-499.

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

e. Foreign language requirement, where appropriate, must be fulfilled.

f. All students must take two one-hour physical education activity courses.

g. A minimum of 121 academic credit hours must be completed for graduation. This, in addition to the two credits of physical education activity courses, makes 123 credits, the minimum needed for graduation.

4. Teacher-education majors must fulfill a drug-education requirement (described elsewhere in this section) and must file an application for a certificate in teacher education. This application can be picked up at and returned to the Certification Office, Twin Rise 130-S.

5. No student will be cleared for graduation until all symbols of I, N, or X have been replaced with an appropriate grade.

Commencement

Commencement is held each year at the end of the spring semester. All degree requirements must have been completed before students may participate in commencement exercises.

Grading

The college uses letters 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 in charge of 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. Instructors will inform students of their standing in each course by the end of the ninth week of the semester, the fourth week of a summer session, or the second week of a summer module. Questions regarding grading policies or an individual grade received in a particular course should be addressed to the instructor or to the instructor's department chairperson.

Grades awarded by the college are:

- A —Superior work
- B —Above average
- C —Average
- D —Below average, but passing
- E —Failure or unofficial withdrawal from a course
- S —Satisfactory
- U —Unsatisfactory
- P —Pass
- F —Fail

The following letters are used to indicate status:

- I —Incomplete
- N —Grade delayed
- X —Grade not submitted
- W —Withdrawn

Explanation of Grades

Satisfactory and unsatisfactory grades are reserved for student teaching or other field experience which is not readily evaluated by the normal letter grades and basic skills courses. P (Pass) and F (Fail) grades are given for courses taken on a pass-fail basis (see description below). They may be submitted

only under proper authorization. A W may be submitted only when a student has formally withdrawn from a course. An I may be submitted only when the department chairperson or program coordinator has been properly notified. An N may be given when course work normally carries over from one semester to another and when it is necessary to delay grading to a subsequent semester. The N may be submitted only with the permission of the department chairperson or program coordinator.

Incompletes: An instructor may grant an incomplete only when circumstances leading to a student's failure to complete course requirements are known to be beyond the student's control, for example, serious illness or unavailability of material. An Incomplete Course Contract form must be completed and signed by both the student and the instructor granting the I grade.

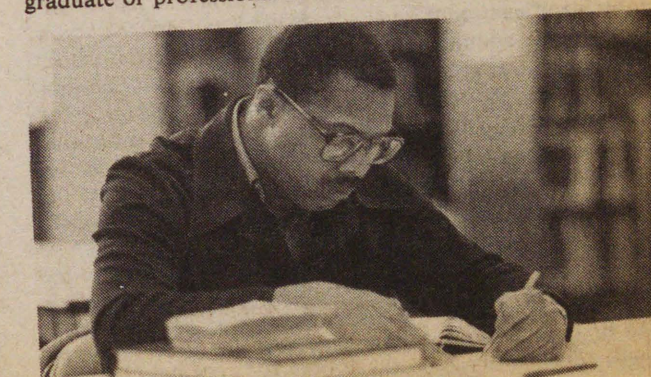
Incompletes must be converted to a letter grade by the tenth week of the following spring or fall semester. Anyone not completing the course requirements within this time will automatically have an E recorded. In the event the instructor who granted the incomplete is not able to evaluate the student's fulfillment of course requirements during the stipulated time period, the chairperson or program coordinator will take responsibility for changing the grade.

Pass-Fail System

The pass-fail option permits any matriculated student with at least sophomore standing and a 2.20 cumulative average to take a course for credit without receiving a letter grade of A, B, C, D, or E. Students may enroll in one course each semester or summer on a pass-fail basis. A pass P provides credit but no quality points and is not counted in total hours used to determine cumulative average. A fail F is treated as a failure E although the hours are not used in computing the cumulative average. No more than 18 hours of pass-fail credit may be applied toward a degree.

Any course, except English composition 100-level courses or Math 100 or any course 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 seventh week of classes in any semester or by the end of the first half of classes in the summer. After receiving the approval signature of the student's adviser, a declaration of intent must be filed with the Records and Registration Office, Cleveland Hall 204. An instructor may choose to substitute a letter grade for the pass if he receives written consent from the student.

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.



Quality Point System

The quality point system is used for determining all cumulative averages. A student receives four quality points for each hour of **A** earned; three points for each hour of **B**; two points for each hour of **C**; one point for each hour of **D**, and zero points for each hour of **E** or **F**. No other letters carry quality point value. A student's cumulative average is computed by dividing the total number of quality points awarded by the total number of semester hours attempted in which a grade of **A, B, C, D** or **E** is earned.

An example may be useful. A student has the following courses and grades at the end of a semester:

Course	Grade	Credit	Quality Point Value	Quality Points
MAT 161	B	4	(x3)	= 12
SOC 101	A	3	(x4)	= 12
ENG 250	E	3	(x0)	= 0
HPR 101	C	1	(x2)	= 2
PHI 220	D	3	(x1)	= 3
		14		29

The student has attempted 14 credits, successfully completed 11 and earned 29 quality points. The cumulative average is $29 \div 14$ or 2.07.

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

Change of Grade

Grades submitted at the end of the semester are considered final and may be changed only under these special circumstances:

1. In the event of a clerical error resulting in an incorrect grade, the instructor must submit a written request to the office of the appropriate faculty dean requesting a grade change. Requests will be accepted only during the period before April 1 for fall and summer courses and before Nov. 15 for spring courses. The appropriate dean must approve all grade changes.
2. Any other request for a grade change will be granted by the office of the appropriate dean after it has been considered by the Academic Appeals Committee or other committee authorized to consider such petitions. A full written justification for the change must be submitted by the instructor to the office of the appropriate dean.

Repeating Courses

A student may repeat a course for which an **E** grade was earned. If the student subsequently passes, only a passing grade and those semester hours completed will be used in determining the cumulative average. If a course is failed more than once and subsequently passed, then the passing grade will replace only one failing grade in the determination of the cumulative average. All grades remain on the permanent record. The student must file the appropriate form in the Records and Registration Office, Cleveland Hall 204, by the end of the fifth week of classes in the semester in which the course is repeated or by the end of the second week of classes in the summer. The cumulative average cannot be raised by repeating a course that has been previously passed.

Honors

Dean's List

Students earning a one-semester grade point average of 3.50 or higher for a minimum of 12 credit hours will be named to the Dean's Honors List for that semester. Grades of **S** and **P** will not be counted. Students are ineligible for honors if they are student teaching or have incomplete course work **I, N, X**, or a grade of **U** in a course for that semester.

An honors citation is given graduating students who have maintained a 3.50 or higher average for all work completed here. Students with an average of 3.80 to 4.00 will be designated summa cum laude; 3.65 to 3.79 magna cum laude; and 3.50 to 3.64, cum laude. To be considered for an honors citation, a student must complete at least 60 credits at the college.

No students with outstanding grades of **I, U, X**, or **N** may be considered for honors. (See section explaining grades.)

All-College Honors Program

The All-College Honors Program is designed to address the needs of academically gifted students within the framework of the 60-hour general education requirement. The All-College Honors Program requires 30 hours of honors credits earned across disciplines in the arts, humanities, social sciences, math/science, and applied science and technology. Students must maintain a 3.50 cumulative grade point average overall and a 3.25 average in honors courses to remain in the All-College Honors Program.

Students interested in this program should contact the Admissions Office or the coordinator of the All-College Honors Program.

Honors in Majors

Many departments have programs leading to baccalaureate degrees with honors. Generally these departments require specific criteria for admission to the departmental major and six credits of predetermined honors work to earn the distinction.

Students interested in Departmental Honors Programs should contact the department of their choice to determine if there is a Departmental Honors Program in the major. Currently, the following majors can be pursued as baccalaureate degrees with honors: Anthropology, Biology, Criminal Justice, Design, Economics, Geography, Geology, Geosciences, History, Journalism, Broadcasting and Speech, Performing Arts, Philosophy, Physics, Psychology, and Urban-Regional Analysis and Planning.

Honors Convocation

This recognition of academic excellence is held every spring semester. Students with a cumulative grade point average of 3.50 or higher after 45 credit hours are invited to attend the Honors Convocation with family members and a faculty guest. (Transfer students are eligible after completion of 30 credit hours.)

Academic Probation/Dismissal

Good Academic Standing

The term "in good standing" means that a student is eligible or has been allowed to register for and undertake academic course work at the college for the term in question. In some instances a student may be defined as being "on academic probation." The mechanism of academic probation, including any accompanying constraints upon a student's activities, is intended merely as an educational device designed to en-

courage greater effort on the part of a student who appears to be having difficulty in meeting certain academic standards. Placement on academic probation may precede denial of the right to register for academic course work if certain conditions are not met, but a student on academic probation is considered to be in good academic standing. Any questions concerning whether or not an individual student is in good academic standing will be determined by the campus committee on academic standards.

Probation

A student whose cumulative average falls below 2.00 is automatically classified as on academic probation. The cumulative average is determined at the end of each semester and is included on the term grade report. A student on probation has until the completion of the next regular semester to raise the cumulative average to 2.00. Failure to do so by that time may result in dismissal from the college.

A student facing dismissal because of a low cumulative average may appeal that status by seeking a hearing before the appropriate Probations Appeal Board. An appointment may be made in the dean's office of the faculty responsible for the student's major program. Uncommitted students (who have not enrolled in major programs) can make such an appointment in the Academic Advisement Office, Twin Rise 110-S. The dean or director of Academic Standards may extend the period of probation according to the merits of the individual student's case.

Each student on probation must report grades to the appropriate office cited above at the end of the semester. The student grade and average report form is available for this purpose.

Academic Dismissal

A student may be dismissed from the college for:

1. Failing any course for the third time.
2. Failing one-half or more of a semester's work.
3. Failure to satisfy the probation regulations.
4. Failure to complete basic skills requirements by the end of the sophomore year.

A student who has been academically dismissed must wait one full year from the time of dismissal before being considered for readmission. If readmitted, all course work taken previously will be considered in computing the cumulative average.

Readmission forms are available in the Admissions Office, Cleveland Hall 206.

Academic Misconduct

All students at the college are expected to display honesty and integrity in completing course requirements and complying with college academic regulations. "Academic misconduct" refers to plagiarism or cheating on examinations or assignments, and is inconsistent with the aims and goals of Buffalo State College. Specifically, students may neither use the work of another individual without proper acknowledgment nor perform work for another individual. Other examples of inappropriate academic conduct include prior acquisition or possession of an examination or submission of false data. As a result of a sustained allegation of academic misconduct, a low or failing grade for part or all of the course work may be given to the student, at the discretion of the instructor. No penalty for an alleged instance of academic mis-

conduct may be imposed unless the student has been apprised of the allegation, the penalty, and the procedures of due process that are available.

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, and in the Student Life Office.

Cases of severe infractions of acceptable standards may be brought before the Academic Misconduct Board, chaired by the director of Academic Standards, and may result in academic dismissal.

Academic Eligibility for Financial Aid

Financial aid guidelines require that to continue to receive financial aid a student must show evidence of making satisfactory academic progress toward a degree.

The state (TAP) and federal Title IV (Pell, NDSL, SEOG, CWSP, and Stafford Student Loan/NYSHESC) regulations for eligibility are basically concerned with **program pursuit** for each semester and **satisfactory academic progress**, which is a cumulative item. These regulations affect all students regardless of the date of their first award. (Note Title IV chart on following page.)

Good Academic Standing—is defined as the eligibility charts below suggest. To be in good academic standing a student must have completed the minimum number of credit hours for the appropriate semester of enrollment AND have maintained at least the cumulative grade-point average listed for that semester.

Reasonable Progress Toward a Degree—In addition to good academic standing requirements, it is necessary for recipients to be full-time students and to pursue an academic program at a minimum rate of progress.

The charts below indicate the minimum criteria for pursuit of a program and satisfactory academic progress. TAP allows a one-time waiver for students who may be temporarily below the standards of good academic standing. Title IV regulations allow a student to continue receiving aid when mitigating circumstances prevent the student from remaining in good academic standing.

Undeclared Students—To be eligible for TAP or Title IV funds, an undeclared student must declare a major no later than the beginning of the junior year or after the accumulation of 57 credits.

Critical questions may be directed to the Academic Standards and Certification Office, Twin Rise 130-S, 878-5222.

Level Codes (Academic)

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

Freshmen — 0 to 28 hours
Sophomores — 29 to 56 hours
Juniors — 57 to 88 hours
Seniors — 89 hours and over

TAP Academic Eligibility Chart											
		Award Terms									
Semester		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
EACH SEMESTER	Pursuit of Program										
	1. No. of credit hours	12	12	12	12	12	12	12	12	12	12
	2. No. of credit hours completed in the previous semester with a passing or failing grade	0	6	6	9	9	12	12	12	12	12
CUMULATIVE	Satisfactory Academic Progress										
	3. No. of credit hours through end of previous semester	0	3	9	21	33	45	60	75	90	105
	4. Cumulative grade point average through end of previous semester	0	1.00	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90

Title IV Academic Eligibility Chart											
		Award Terms									
Semester		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
EACH SEMESTER	Program Pursuit										
	1. No. of credit hours enrolled	12	12	12	12	12	12	12	12	12	12
	2. No. of credit hours completed in the previous semester with a passing or failing grade	0	6	6	9	9	12	12	12	12	12
CUMULATIVE	Satisfactory Academic Progress										
	3. No. of credit hours accrued through end of previous semester	0	3	9	21	33	45	60	75	90	108
	4. Cumulative grade point average through end of previous semester	0	1.50	1.80	1.80	1.90	1.90	2.00	2.00	2.00	2.00

Alternate Methods of Earning College Credit

Advanced Placement Examinations

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

Students receiving the lowest passing grade may be admitted to an advanced course but will receive no credit for the beginning course that was exempted. All other passing grades carry college credit. Before taking such an examination for credit, students already enrolled at the college must receive advance approval from the appropriate department chairperson. 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 college credit by challenging the specially designated courses. The following rules apply:

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

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. 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 registration for the course. These requirements must be filed with the department chairperson.

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

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

Application forms are available in the academic departments and the Records and Registration Office, Cleveland Hall 204, and must be filed with that office by the deadline date published in the class schedule each semester. Applications must be signed by both the instructor and department chairperson.

Credit for Experiential Learning (CAEL)

Credit for college-level experiential learning is available at the college through a program affiliated with the Council for the Advancement of Experiential Knowledge (CAEL). Students who consider their previous learning experience as college-level creditable may enroll in AEL 100, Educational Assessment and Portfolio Development, a three-credit course. Enrollment in AEL 100 will be granted only with permission of the Lifelong Learning Office. Permission is contingent upon the interested individual attending an information session which is conducted each semester by the Lifelong Learning Office and the Admissions Office. This information session is designed to familiarize individuals with the portfolio development process. In AEL 100, students will conduct a self-appraisal and inventory of all potentially creditable prior learning. The portfolio will be treated as an application to appropriate academic 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 that conforms to existing college courses. Students may receive a maximum of 30 credit hours. Credit will be awarded on the basis of its correspondence to existing Buffalo

State College courses. Credit earned will be recorded as credit (CR) only, rather than by grade.

For information, contact the Lifelong Learning Office, Twin Rise 100, 878-5906.

Cross-Registration

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

Students wishing to take a course on another campus that will apply toward a major must receive permission from the department chairperson. Cross-registration approval forms are available at the Records and Registration Office, Cleveland Hall 204, and must be signed by the department chairperson and returned to the Registration Office for signature. Students must then take the signed cross-registration approval to the appropriate campus where they must register according to the registration procedure of that campus.

Off-Campus Study

Courses may be taken at other institutions locally or elsewhere for transfer credit as long as approval from the department chairperson is obtained and the proper forms from the Records and Registration Office, Cleveland Hall 204, are filled out and returned to that office.

Students are urged to have transcripts of all course work completed elsewhere forwarded to the Records and Registration Office as soon as possible. Any credits taken at a two-year institution after a student has achieved upper-division status cannot be applied to degree requirements. Course work undertaken elsewhere, other than by cross registration, will be recorded as 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 they work out all aspects of the study, including the method of evaluation. The description of the study must be approved by the chairperson of the department sponsoring 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 are:

1. Sophomores, juniors, and seniors who have satisfactorily completed basic courses or their equivalent in the area of study chosen are eligible to participate. They need a minimum cumulative average of 2.00 and an average of at least 2.00 the previous semester plus a better than 2.00 average in work completed in the selected area. Freshmen who have successful advanced preparation in the selected area may also be allowed this option.
2. The study must be relevant to the student's total program, and it must be such that the student will derive special

benefit from supervision by the college staff. The study must meet standards established for such programs by the department or program.

3. No independent study may be undertaken for fewer than three 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 chairpersons and program coordinators. Application forms are available in the academic department and the Records and Registration Office, Cleveland Hall 204, and must be filed with that office by the deadline date published in the class schedule each semester.

Project (495)

Upperclassmen may undertake a project related to a required course for up to three credit hours per project. No more than six semester hours of academic project work is allowed. Application forms are available in the academic department and the Records and Registration Office, Cleveland Hall 204, and must be filed with that office by the deadline date published in the class schedule each semester.

Internship (488)

Internship programs provide students with guided and supervised field experiences (experiential learning) as part of their degree programs. Students who wish to participate in the program MUST have at least a 2.00 GPA 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 chairman of the department within which the student is a major, the supervising faculty member, and a chairman 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 also be used to accommodate requests of external agencies or the specialized resources of visiting faculty members. An individual student may accumulate a maximum of nine credit hours in one discipline.

Military Service Educational Experience

College credit 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, Cleveland Hall 206. Documents showing completion of such courses should accompany all requests.

The maximum credit allowed from such sources is 15 hours. 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:

Source	Maximum Credit Hours
1. Published examinations.....	30
No more than 18 may be in general examinations	
2. Course challenge.....	30
3. Military service courses.....	15
4. Non-collegiate institutions.....	15
5. 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 Examinations (CPE). Passing grades are required for credit.

Course Challenge: Requirements are outlined above.

Military Service Courses: Requirements are outlined above.

Courses from Non-Collegiate Organizations: For credit to be granted, the institution must be approved by the State Education Department and listed in its "A Guide to Educational Programs in Non-Collegiate Organizations." Non-collegiate 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 profit-making such as Bryant & Stratton Business Institute. Such credit is applied primarily to the major and is determined by the appropriate department.

Transcript of Record

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

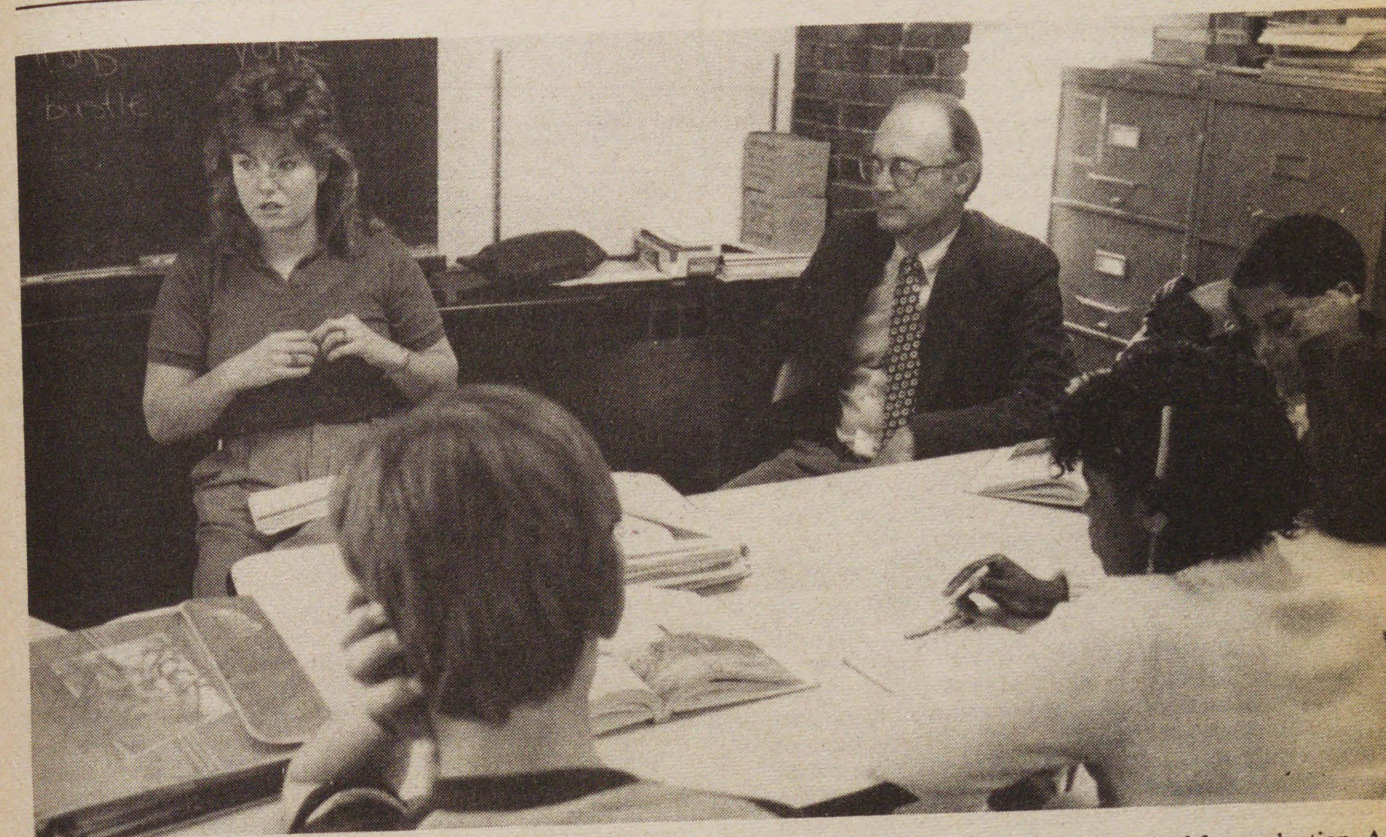
A student copy may be ordered for personal use. A \$3 fee must be paid for each transcript requested. Proper identification and 24-hours notice is required when picking up the student copy. Transcript request forms are available in the Records and Registration Office, Cleveland Hall 204.

Transcripts will not be furnished for students who have incurred a financial obligation to the college.

Transcript requests sent by mail must include the student's name, current address, student (Social Security) number, dates of attendance, graduation date (if applicable), name and address of the party to whom the transcript is to be sent, the student's signature authorizing release of the transcript, and a \$3 check or money order payable to State University College at Buffalo. All checks or money orders must include student (Social Security) number.

Transcript requests by telephone cannot be honored.

All requests are acted upon in the order in which they are received. Sufficient time is necessary for processing. Requests for transcripts should be made well in advance of the date on which the transcript is needed.



Teacher Education

New York Certification

All students who successfully complete an approved program in teacher education will be recommended to the New York State Education Department for a certificate of qualification. Applications for certification can be obtained by attending the All College Student Teaching Seminar or at Twin Rise 130-S.

The New York State Education Department regulations require an examination. A satisfactory performance on this exam is necessary before a certificate can be issued.

National Teacher Exam

Successful completion of the National Teacher Exam is required for certification in New York state. Generally, the Communication Skills and General Knowledge tests should be taken about the time a student has completed 64 hours of study, thus allowing time for remediation should it be necessary. All teacher education students are required to complete the General Knowledge and Communication Skills portion of the NTE with at least the minimum acceptable New York state scores prior to placement in a student-teaching experience. Students are responsible for ensuring that NTE scores are officially released to departments in time to meet placement deadlines for student teaching or other course requirements. Students should consult with advisors to ascertain requirements of individual departments.

Dual Certification

Certification in two teaching areas—such as high school English and social studies or elementary education and special education—gives students wider career possibilities. Like a dual major, dual certification may require a student to com-

plete more credits than the 123 required for graduation. A list of possible dual certification combinations is available in these offices: Academic Standards and Certification, the deans, and the Secondary Education Interdisciplinary Unit.

Interstate Certification

As a participant in the Interstate Certification Project, Buffalo State has reciprocity agreements with a number of other states allowing its graduates to be certified there. These include reciprocity with 32 states for classroom teachers, with 10 states for vocational teachers, and with 14 states for administrative personnel. These lists are posted near Twin Rise 130-S. More details may be obtained from the director of Academic Standards and Certification.

Drug Education

All persons certified to teach in the public elementary schools of this state are required by state law to have had sufficient background in the area of drug education so they are prepared to give adequate instruction which will discourage the misuse and abuse of alcohol, tobacco, and other drugs and promote attitudes and behavior that enhance health, well being, and human dignity. Students should check with their advisers about ways of fulfilling this requirement.

Secondary Education Professional Core

All secondary education programs include a 24-credit-hour professional core. The core is intended to fulfill the requirements of Buffalo State's registered programs in secondary education, State Education Commissioner's Regulations, and National Council for Accreditation of Teacher Education (NCATE). Therefore, the following courses represent the professional core of the certification requirements in all secondary education programs.

SST 200/SED 200	Field Experience: Secondary Education and Related Careers
EDU 303/SED 303	Educational Psychology for Adolescents
EDU 403/SED 403	Forces Influencing Secondary Education
EDU 416/SED 416	Teaching Reading in the Secondary Schools*
XXX XXX/XXX XXX	Methods in the Content Area
XXX XXX/XXX XXX	Student Teaching and Professional Seminar in Content Area

*Mathematics majors substitute MAT 181-182

(Teacher education programs offered by Buffalo State College are accredited by the National Council for Accreditation of Teacher Education.)

For more information regarding certification procedures, contact the director of Academic Standards and Certification, Twin Rise 130-S.

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

Holders of a B.S. or B.A. degree may complete certification requirements in secondary education programs. The following requirements apply.

1. The secondary education professional core, as described above, must be completed.
2. A department may require subject matter courses in the major area to remove deficiencies.
3. All requirements listed in the professional core and all subject matter courses must be completed before the student teaching semester.
4. A full semester of student teaching (12-15 credit hours) must be successfully completed. Student-teaching placements will be based on availability of faculty resources after the program majors are assigned.

Holders of a B.S. or B.A. degree interested in certification for elementary or exceptional education are advised to commit to the appropriate major. Otherwise, there is no guarantee that required coursework will be available.

Student Teaching

Student-teaching experiences are coordinated through the student teaching coordinator, Twin Rise 130-S. Each student must fulfill the requirements detailed in the Student Teaching Handbook, which is distributed prior to student teaching. The General Knowledge and Communication Skills portion of the NTE must be successfully completed prior to placement in a student-teaching experience.

Transportation to Off-Campus Instructional Sites

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

Unit of Credit

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 three semester hours of credit. Studio, laboratory, and shop classes usually earn one credit for each two hours of atten-

dance unless otherwise indicated. The college expects student preparation of two hours for each hour in class.

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 regulation without very strong evidence to justify the waiver. No retroactive requests will be honored.

The director of Academic Standards and Certification makes decisions on requests for waivers which do not relate to a student's major after consulting with the Academic Appeals Committee. The director'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 chairperson in accordance with procedures established by the department or area faculty.

Transfer Students

Credits previously earned will be evaluated for all transfer students upon receipt of official transcripts, and all transfers will receive a copy of this evaluation. A maximum of 91 semester hours may be transferred from other accredited institutions, no more than 65 hours of which may be transferred from two-year colleges.

No credits will be accepted from a two-year institution after a student has earned an associate's degree or its equivalent (57) from a four-year institution.

All passing grades will be evaluated on the same basis as grades earned by students at this college.

Most credits from another institution will be accepted, although the college cannot guarantee how credits earned at a two-year institution will relate to bachelor's degree requirements. The most common cases in which transfer credits are not accepted are:

1. Secretarial science courses (except for transfers in the business education or office administration majors).
2. Developmental courses in mathematics, English, and learning skills.
3. 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 credits is recorded on an audit sheet. Each department has such a form arranged to reflect all of the major and general college requirements which have already been fulfilled and those which remain.

Departments reserve the right to refuse to accept transfer credits in fulfillment of their own major requirements. Whether or not a course fulfills a major requirement may be open to discussion with the department chairperson or academic adviser, and it is useful to have a copy of the catalog from the previous institution available.

7

SPECIAL ACADEMIC PROGRAMS AND FACILITIES



Special Academic Programs and Facilities

Academic Skills Center

The Academic Skills Center offers support services to students to facilitate their efforts to achieve educational and academic growth. The center is dedicated to providing remedial, developmental, and enrichment assistance to all students at Buffalo State College. Created to meet the needs of the diverse college population, the center works with student services and academic departments to help students acquire and strengthen college-level academic and study skills. The Academic Skills Center provides free academic support services and supplemental tutorial programs for the college community in the areas of reading, writing, mathematics, and study skills.

The specific goals of the Academic Skills Center are:

1. To assist all students in improving their academic skills.
2. To offer and maintain a library of materials to assist adult and re-entry students, and to strengthen other services provided to these students.
3. To work with the offices of Academic Standards and Certification and Academic Advisement, as well as with the academic deans, to develop and maintain a program of activities for probationary students and academically disadvantaged students.
4. To sponsor and coordinate regular programs, workshops, and mini-courses for academic and study skills improvement.
5. To provide tutoring services in writing, reading, mathematics, and study skills.
6. To assist with diagnosis of academic skills deficiencies and with placement and testing.
7. To help students address and correct identified deficiencies.
8. To conduct study groups for selected courses such as psychology and journalism.
9. To maintain basic skills materials, including printed materials, audio and video cassettes, and computer-assisted software packages.
10. To offer individual and group English-as-a-second-language instruction for students who speak English as a second language.
11. To offer, in cooperation with the Lifelong Learning Center, a preparatory course of the National Teachers Examination.

Burchfield Art Center

Highlighting Western New York's cultural scene is the college's Burchfield Art Center, a museum and regional art center devoted principally to art produced in Western New York and the largest public repository for the works of Charles E. Burchfield, one of America's outstanding watercolorists and long-time resident of the Buffalo area.

The center is devoted to building a distinguished and comprehensive collection of the work of Charles E. Burchfield which is available for study with significant works of art by



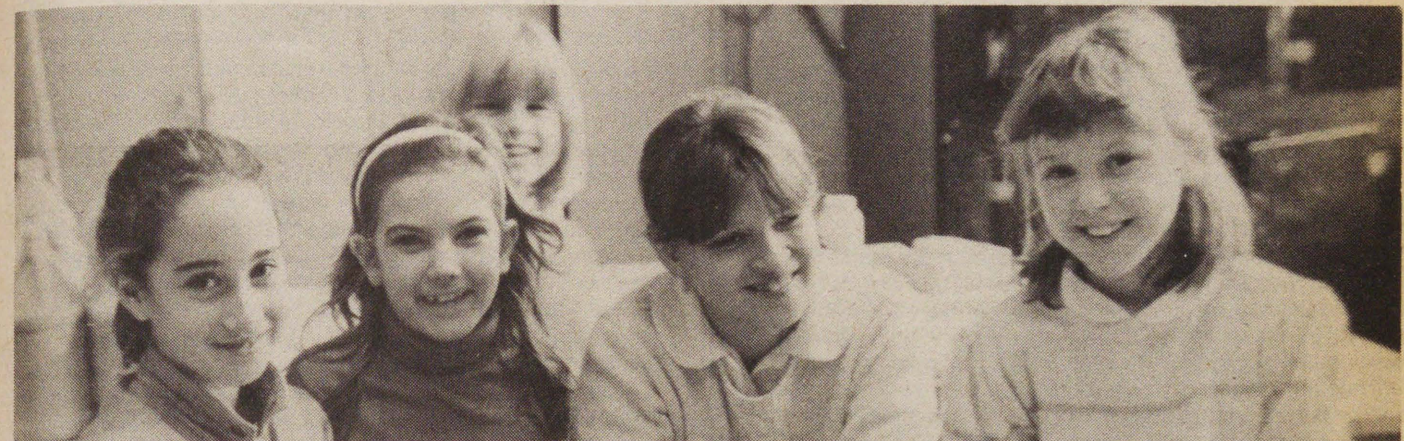
other Western New York artists. Each year the center attracts about 30,000 visitors.

The center serves the college community as a teaching museum. An Exhibition Techniques course, taught by the staff, enables students to participate in planning, developing, and installing specific exhibitions. Students gain experience in research and in creating descriptive catalogs or brochures to accompany the exhibitions. The center's education program trains students as docents who can knowledgeably teach others about the collection. Forums on the arts are sponsored regularly for the enjoyment of children, young people, and adults. Poetry readings, concerts, lectures, and workshops complete the center's programming efforts, touching on both historical and contemporary issues.

The Burchfield Art Center is located in Rockwell Hall at the Elmwood Avenue entrance to the campus. The center is open from 10 a.m. to 5 p.m. Tuesday through Saturday and from 1 to 5 p.m. on Sundays. It is closed Sundays in summer.

Edward H. Butler Library

One of the newer buildings on campus, Butler Library seats 1,400 and houses a collection of more than 456,000 books, microforms, and other non-print materials, and 2,100 current periodicals. Informational handouts detailing library services, hours, maps, and other important data are available upon request in the Information Services Department. Learning Systems provides multimedia self-instructional facilities. Archives/Special Collections contains information about the college, student organizations, and special collections. The library is open during the following hours: Monday-Thursday, 8 a.m.-11 p.m.; Friday, 8 a.m.-5 p.m.; Saturday, 9 a.m.-5 p.m.; Sunday, 1 p.m.-11 p.m. Library hours are subject to change during holidays, summer sessions, and intersessions.



College Learning Laboratory

The College Learning Laboratory/Campus West is a research, development, and demonstration school operated by Buffalo State College. The school also has an agreement with the Buffalo Public Schools to serve as a magnet school. The school's mission is to be a human resource laboratory for the college's academic and professional disciplines having need to utilize it to meet program objectives. The school provides a sound, comprehensive educational program for the racially integrated and special needs population served.

The primary manner in which the College Learning Laboratory/Campus West performs its mission is to establish a variety of learning environments appropriate to the learning styles of children. This approach enables the CLL/CW to provide for individual differences, implementation and demonstration of innovative programs, curriculum development, research, and exemplary practices. This occurs through interaction with the college community and the community at large to foster the advancement of knowledge about children, teaching, and learning.

Within its racially balanced population, the CLL/CW has a component of special needs children from preschool through grade eight. The CLL/CW demonstrates the concept of placing children in the least restrictive environment. Mainstreaming of a significant number of the identified children is an integral component of its demonstration practices.

The CLL/CW is committed to the intellectual, social, physical, and emotional development of children. Meeting these needs is best accomplished through a variety of learning environments. This commitment recognizes the uniqueness and diversity of the population while fostering the belief that every child is inherently worthy of respect and has the right to develop as an individual. Consequently, the school's mission is accomplished by enabling children and college students to realize their potential and to develop an awareness of their responsibility as citizens in a changing, democratic society.

Computing Services

Computing Services provides computing hardware and software support for instructional and research activities on campus. The computer hardware includes over 200 ports on three large mainframe computers: a UNISYS model A-10, a UNISYS model B7900, and an IBM 3090 at the State University of New York at Binghamton, and on a super-mini, the Digital Vax 8600. Terminals located across the campus, which

number over 200, access these computers over a local area network. Students and faculty members can obtain a user code through classes and departments. There are also more than 150 microcomputers for student and staff use, including IBM PC/XT, IBM PC, and Apple II.

Available software consists of all major programming languages, including APL, ALGOL, BASIC, COBOL, FORTRAN, Pascal, and IBM Assembler and JCL under MVS; a variety of sophisticated software packages, including SAS and SAS/GRAPH; and word processors, including WORDSTAR and WPS. LOTUS and DBASE III are also available in the IBM PC student lab.

The Instruction and Research section of Computing Services offers seminars and workshops to introduce students and faculty to new and existing computing facilities. Help with resolving software and system problems is also available. The Remote and Central Operations section conducts tours of the computer facilities.

Administrative Information Systems that support student record, financial, personnel, alumni, and other miscellaneous campus-wide operational systems are processed on the UNISYS A-10 mainframe computer.

Educational Opportunity Program

The Educational Opportunity Program is an academic and student support service program designed to assist students who have been both traditionally underrepresented in higher education and are in need of financial assistance.

Initiated in 1967, it is the largest special program in the SUNY system and has become a model for other colleges and universities.

The primary goals of the Educational Opportunity Program are:

1. To provide an opportunity for underrepresented (e.g., African American, Native American, Hispanic, and Asian American) and disadvantaged students to gain admission to Buffalo State College.
2. To provide sufficient support services necessary to enhance the ability of students to successfully complete a baccalaureate degree.
3. To develop a positive relationship between Buffalo State College and the Buffalo community and to better communicate our goals, objectives, and service to the community.

By virtue of enrollment in the Educational Opportunity Program, every student is entitled to all the rights and privileges

accorded to all Buffalo State College students in addition to special services designed to enhance their success. Each student is assigned a counselor who not only helps the student learn more about himself and the academic environment, but also serves as a communication link between the Educational Opportunity Program and college administration. Counselors are skilled at providing academic and financial aid advisement, personal and social counseling, and career planning and advisement.

To assist students in overcoming specific academic problems, the college offers developmental courses in English, reading, and mathematics. All such courses below the 100 level are non-degree courses and may not be counted toward fulfilling degree requirements. In addition, Educational Opportunity Program students encountering difficulty in a particular course may take advantage of the Tutorial Center, where qualified tutors and instructional staff work on a one-to-one basis or with small groups.

The Educational Opportunity Program provides a six-week summer program and fall and spring orientation programs for new students.

There are a variety of social, cultural, and educational activities planned by the college to add a further dimension to the college experience. Annually, the Educational Opportunity Program sponsors an honors convocation to recognize achievement and academic excellence in the classroom.

The Educational Opportunity Program counseling, tutorial, and administrative offices are located in South Wing on the 5th, 6th, and 7th floors. The Educational Opportunity Program Admissions Office is located in Cleveland Hall 207. Admissions information can be obtained by calling 878-4415/878-4429. General information regarding EOP eligibility and application processing can be found in the SUNY Application Guidebook.

Whitworth Ferguson Planetarium

Students taking astronomy courses have the opportunity to use the planetarium as a laboratory. They assist in maintaining, improving, and operating the equipment and in developing presentations about the planets, stars, and the constellations in our universe. The planetarium schedules a number of different public shows and programs during each school year. All students may attend these presentations free of charge. The planetarium also arranges educational programs attended by thousands of area school children and adults annually.

Great Lakes Laboratory

The Great Lakes Laboratory specializes in applied and basic environmental research and instruction in the area of aquatic sciences with particular emphasis on the environmental toxicology and chemistry of water pollutants and aquatic ecology. The laboratory is the largest academically affiliated program conducting investigations on the Great Lakes. GLL maintains several modern laboratories in the Science Building on the campus devoted to biological and chemical research. A field station located at the confluence of Lake Erie and the Niagara River is also a part of the laboratory. The Great Lakes Laboratory owns several research vessels and maintains an extensive library of publications on the Great Lakes, water pollution, pesticides, toxic chemicals, and aquatic organisms.

Health Professions: Preparation and Advisement

The health professions require a strong undergraduate preparation in science. Buffalo State College offers all the necessary and appropriate courses needed for admission to the health professions schools. A vigorous advisement system is offered for students interested in such professions as medicine, dentistry, optometry, osteopathic medicine, podiatry, veterinary medicine, chiropractic medicine, and allied health professions. Students also have successfully transferred into upper-level programs in nursing, physical therapy, pharmacy, and medical illustration. Guidance is offered in helping students prepare for national aptitude exams and in assembling applications for health professions schools.

There is no specific degree required by the health professions schools. Students may major in any degree program that is of interest, but most health professions candidates are biology, chemistry, or psychology majors. It is recommended that students interested in health careers begin chemistry early in their program at the college.

Highly recommended are the following areas of study and courses:

Area of Study	Courses
Biology (8 credits)	BIO 115, 116, 214
Inorganic Chemistry (8 credits)	CHE 111, 112
Organic Chemistry (8 credits)	CHE 201, 202
General Physics (6-8 credits)	PHY 111, 112
Math-Calculus (3-6 credits)	MAT 126, 127
English (6 credits)	ENG 101, 102

Students planning a career in the health professions should contact the pre-health adviser or secretary for advisement information. Most medical, dental, and other professional schools require pre-health professions committee evaluation as part of a student's application.

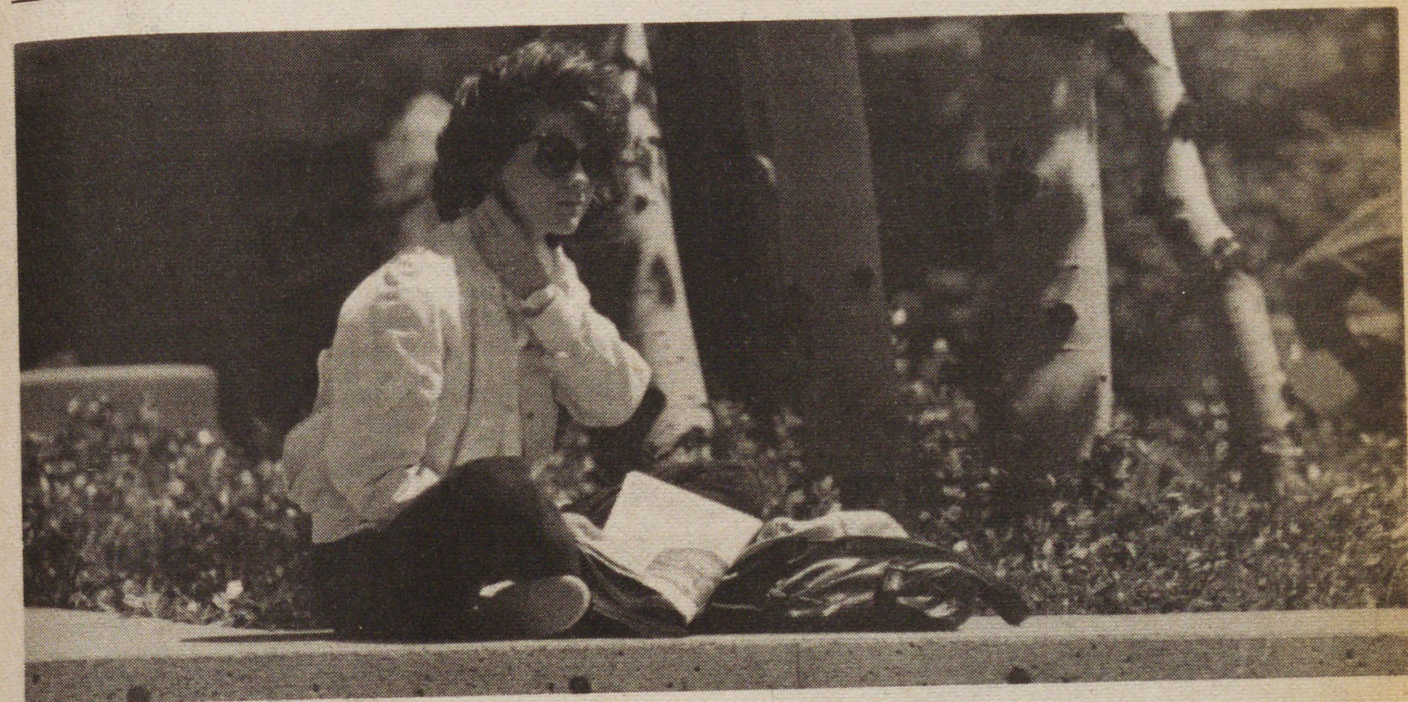
For further information, contact the pre-health adviser, Science Building 363, 878-5418, or the pre-health committee secretary, Biology and Chemistry Departments, Science Building 314, 878-5203/5204.

Instructional Resources Center

The Instructional Resources Center provides media support for classroom instruction, scholarly activities, and research. The center assists faculty, administration, and staff through a one-stop production facility, from scripting to the finished production.

The IRC produces professional slide shows, photography, graphics, transparencies, and audio and television productions. It provides the audiovisual equipment to support the use of instructional materials. In addition, it provides a full range of satellite programming, e.g., educational programs and teleconferences via three campus satellite receivers. Programming is transmitted via the college's 12-channel cable TV system to 310 locations throughout the campus.

The IRC Film/Video Library provides 16mm films and videotapes to faculty, student teachers, schools, and community organizations. Lectures and special events may be audio or videotaped and made available for future use. Another service provided by the IRC is the repair of all college-owned AV, TV, and computer equipment. The



center's professional staff is available to assist in recommending equipment for departmental purchases.

The facilities are located in Communication Center, 878-4104.

Interdisciplinary Units

The college has a number of interdisciplinary units designed to give expanded attention to areas of particular importance. The **African and African-American Studies** Unit coordinates academic programs related to the study of the history and culture of African and African-American peoples. The **Future Studies** Academy develops and coordinates programs to deal with future concepts and goals. The **General Studies** Unit coordinates a program directed, primarily, at working adults. The **Secondary Education** Unit encourages excellence in secondary teacher education while serving as a line of communication linking the many secondary education programs on campus. The **Women's Studies** Unit coordinates and initiates activities with other academic and community groups involved with women's issues.

M.B.A. Advisement Committee

Students interested in learning more about the master's (M.B.A.) or doctorate degrees in business administration may contact a member of the M.B.A. Advisement Committee. Students will be advised on course selection, receive information on the Graduate Management Aptitude Test, and be shown appropriate graduate catalogs. Anyone interested in any aspect of graduate business education should contact either the Business Department or the Economics Department.

Prelaw Advisement

To assist students who eventually plan to attend law school, the college provides a prelaw advisement service. Faculty members familiar with the legal profession are available for consultation on such matters as recommended undergraduate courses, LSATs, law school admission practices, and related areas. An undergraduate moot court program, one of the few of its kind in the country, is available during the spring semester. It is strongly recommended that students interested in law take advantage of this service by contacting the chairperson of the advisement committee, Classroom Building B215, 878-6205.

Special Study Options

International Education

Buffalo State College students have a rich opportunity to expand their educational experience through study abroad. Structured programs ranging from a summer session in Salamanca to a year in Osaka give students the ability to immerse themselves in another culture. Through course work and travel, students learn firsthand about the history and people of the host country. They also have an opportunity to see how others view their own culture.

In some programs students are encouraged to live with host families, while in others, dorms or apartments are available. English is the language of instruction in some programs while others require competence in another language.

Buffalo State College students have a unique opportunity to participate not only in the five programs administered by this campus, but also may register through Buffalo State for 140 programs sponsored by SUNY or 80 programs sponsored by the International Student Exchange Program. Buffalo State College is the only SUNY campus with membership in ISEP.

Information concerning all programs can be obtained by contacting the International Education Office, Cleveland Hall 415, 878-4620.

National Student Exchange

A program designed to expand the scope and variety of academic, social, and cultural experiences available to students, the National Student Exchange enables qualified students to spend a semester or a year at one of more than 80 colleges and universities in 40 states and U.S. territories. To be eligible, a student must be in good standing and have a minimum GPA of 2.50.

The program, organized through the National Student Exchange Consortium, provides an inexpensive means of studying in another state by paying tuition at Buffalo State College or at the host school at the resident rate.

For further details, visit or call the Special Programs Office, Cleveland Hall 415, 878-4328.

Visiting Student Program

Buffalo State College participates in a state-wide Visiting Student Program which allows students to attend, on a short-term basis, other participating colleges or universities in New York state for a semester or a year. Interested students should consult with their adviser or dean about which institution may best meet their educational goals. Application forms are available in the Special Programs Office, Cleveland Hall 415, 878-4328. Deadlines are March 1 for the fall semester and Nov. 1 for the spring semester. There is no visiting student status for summer sessions.

Cooperative Education

Cooperative Education is a college-wide program which gives students the opportunity to gain career experience while pursuing classroom studies. Periods of classroom study are alternated with periods of employment on a job or internship which is related to academic and career objectives.

This is a voluntary program available to all undergraduate students who have completed a minimum of one year on campus and are in good academic standing. College credit may be earned for each cooperative experience. Cooperating organizations and institutions cover a broad spectrum of disciplines and careers including government agencies, profit-making organizations and not-for-profit organizations. Further information can be obtained in the Cooperative Education Office, Chase Hall 208, 878-6122, for students seeking credit from the Faculty of Applied Science and Education, or from the appropriate dean's office for students seeking credit in other areas.

Creative Studies

The Center for Studies in Creativity offers a variety of services and programs to promote and improve the understanding of creativity and its applications to problems and challenges in personal and professional settings. The center's goal is to provide instruction, to conduct research, and to offer a range of opportunities that facilitate the development of creative individuals, groups, and organizations.

The center offers a variety of academic classes that assist students in maximizing their creative potential. The focus of course work in creative studies is on increasing students' awareness and understanding of the nature/nurture of creativity and on learning about creative problem-solving methods and techniques.

In addition to individual course options, the center offers an undergraduate minor for students who are interested in pursuing in-depth study. The minor provides students with experience in a variety of creative problem-solving approaches and

leadership situations. An undergraduate club, the Association for Studies in Creativity, provides opportunities for center and campus involvement. Graduate work leading to certification or a master of science degree in creative studies is also available.

In conjunction with Butler Library the center provides one of the most comprehensive compilations of print and non-print material on creative thinking and creative problem solving in the United States. In addition, the center maintains a Computer-Based Innovation Resources (CBIR) database of annotated periodical literature relating to the study of creativity and innovation.

Institute of Jewish Studies

Special credit and non-credit courses are available to Buffalo State students through the Institute of Jewish Studies at the Jewish Center of Greater Buffalo's Amherst Building, 2640 N. Forest Rd., Amherst, N.Y. 14228. The Institute is operated by the Buffalo Bureau of Jewish Education. There is a nominal materials fee.

All courses are subject to minimum registration. Credit-bearing courses are PHI 120, 121, 202, 220, 221, 330, and 331 in the Philosophy and Religious Studies Department, and HEB 101-302 and HLI 101, 102, 141, 201, 202, 242, and 341 in the Foreign Language Department. Further information can be obtained by consulting the course descriptions of the respective departments or by calling the institute at 689-8844.

Paul G. Bulger Lifelong Learning Center

The Lifelong Learning Center coordinates and facilitates services for the college's evening and adult students. These services include information sessions, short courses, and open houses presented in cooperation with other college offices. The center publishes an evening bulletin each semester and administers the credit process for experiential learning. The Lifelong Learning Center's Evening Student Assistance Center is open until 9 p.m. Monday through Thursday and until 4:30 p.m. Friday when classes are in session throughout the academic year. Students are encouraged to visit the center any time they require information, college forms, or whenever they encounter difficulties. The Evening Student Assistance Center is responsible for providing evening students with academic and student services similar to those provided for the college's daytime students.

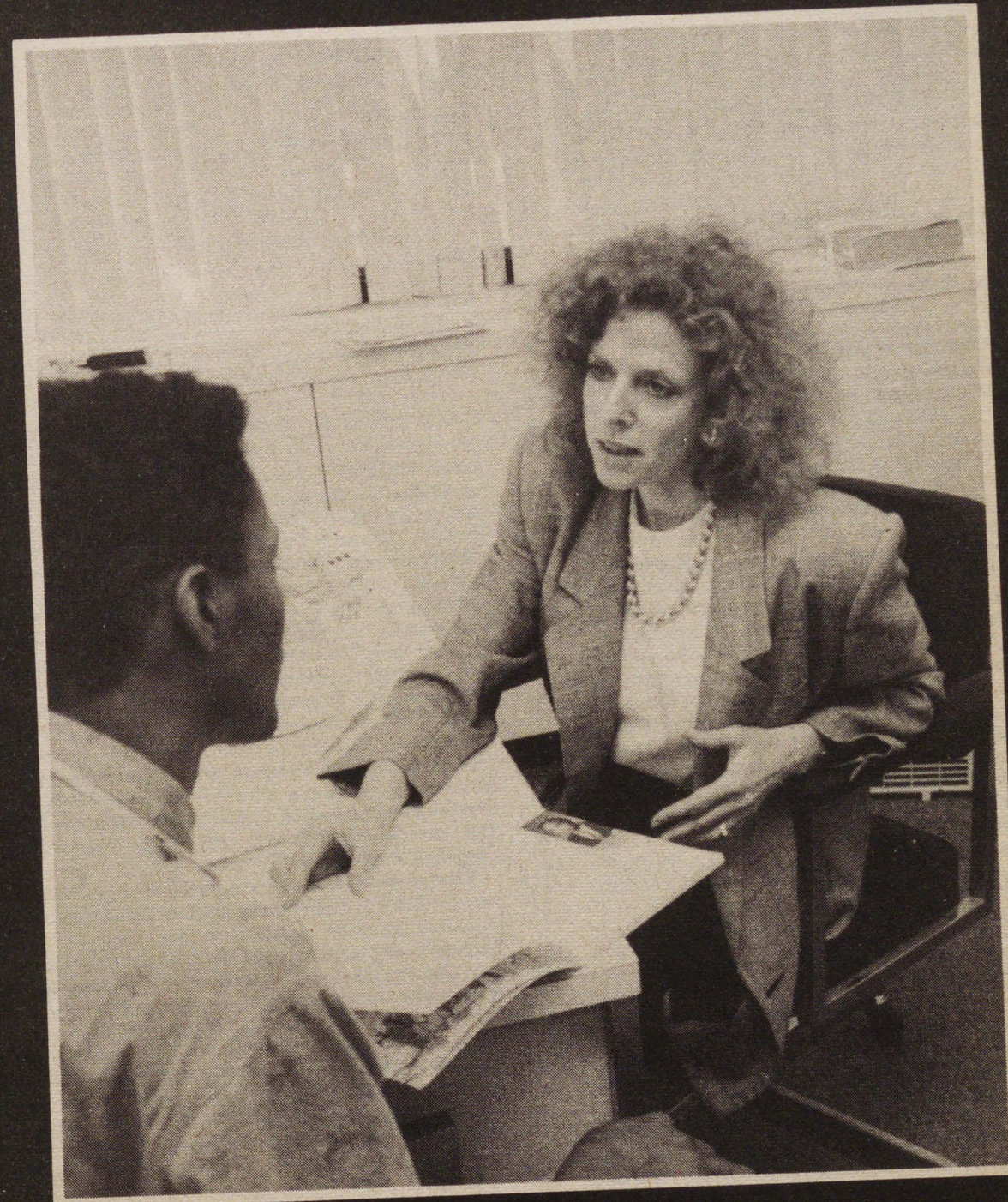
The Lifelong Learning Center is located in Twin Rise 100, (716) 878-5906.

Uncommitted Academic Advisement Center

The Uncommitted Academic Advisement Center in Twin Rise 110-S, (878-5223) is responsible for providing academic advisement for all uncommitted (0900) students. The center also offers general academic counseling, helps to interpret academic policies, and provides students with assistance in solving academic problems. The center is staffed with faculty who are especially interested in helping students.

Each semester, uncommitted students will receive letters reminding them that academic advisement is required for all Buffalo State students prior to course registration. Students are requested to schedule individual appointments for advisement. Students are also welcome to walk in or call the center for assistance at any time.

8 STUDENT SERVICES



Student Services

Career Development Center

The Career Development Center (CDC) helps students determine what the best majors, occupations, and careers are for them. It also helps students find jobs in their chosen fields.

Students read the "Career Courier," the CDC's newsletter, to keep informed of the center's varied activities, its workshop schedule and services, and to read about timely career-related information.

Located in Cleveland Hall 306, the CDC is open year-round, including some evening hours. Freshmen, sophomores, juniors, seniors, and graduates all turn to the CDC for help in making decisions about majors and careers and for help in finding jobs.

Making Decisions About Majors and Careers

Students use the CDC to learn what their options might be in the world of work. They can learn how their own unique qualities translate into careers and occupations. They also can find out about careers and occupations that relate to each Buffalo State major. Finally, the CDC makes sure students learn methods for making good decisions about careers and majors. The services offered by the CDC that help students explore careers and make decisions are:

Choosing a Career or Major Workshops — Small groups of students work with a counselor to examine their own skills, values, and interests, relate these to majors and occupations, and learn to apply decision-making skills in the process.

Computer-Assisted Career Guidance (DISCOVER) — This system helps each student see where he or she would fit into the world of work by displaying the majors, occupations, and careers most relevant to the student's own special qualities.

Career Information Library — This is an up-to-date reference library used by students to find detailed information about careers they are considering. Information about entry occupations and careers for which each Buffalo State major prepares students is also available.

Career Information Programs — Representatives of career fields come on campus to offer students a personal firsthand look into a variety of career options.

Career Counseling — Students may meet individually with a career counselor to discuss career decisions. All sessions are kept confidential.

Finding Jobs

The center teaches students how to go about finding jobs and develops professional opportunities for them. Workshops, current literature, and free handouts on such topics as resume and cover letter writing, interview preparation and job searching, a resume critique service, and a mock interview videotape program are among services offered.

The on-campus recruitment program, the resume referral service, and a job listing service are some of the ways the Career Development Center brings Buffalo State job candidates to the attention of national and local employers. In addition, large recruitment events, such as Teacher Recruitment Days and the Summer Camp and Job Fair, are held annually.

A credentials service is available for use in job and graduate school applications. A graduate school library completes the center's services for postgraduate planning.

Commuter Services

Whether the question has to do with off-campus housing, transportation, dealing with campus bureaucracy, or knowing how to take advantage of the many opportunities college provides, commuting students can receive the help they need from the Commuter Services Office, located in Student Union 311, 878-5533.

Commuters make up about 80 percent of the student body at Buffalo State. The Commuter Services Office strives to provide for the day-to-day needs of these students, in addition to solving long-range problems.

Transportation, off-campus housing, and communication among commuting students are three especially important concerns of this office.

A computerized carpool program offers students help in arranging a car pool that fits their needs and schedule. Whether you need a ride to school, can drive, or want to share the driving, the car pool is for you. A recent survey of Buffalo State students showed that of those who drive to school, almost two-thirds drive alone. Car pooling can relieve the parking problem, save some money, and give riders a chance to meet some new people. Car pool applications are available in the class schedule or in the Commuter Services Office.

As a service to students desiring to live off campus in nearby apartments, Commuter Services takes listings from neighborhood landlords and aids students in finding an appropriate place to live. Students are given a brochure on off-campus living, including sample leases, rental agreements, copies of landlord-tenant regulations forms concerning damage deposits, and landlord evaluation forms. The office also works closely with the Community Relations Advisory Council to establish congenial student-community relations.

Because many students use public transportation to get to and from campus, Commuter Services is constantly working to encourage better service from Metro Bus. Currently, four Metro Bus line stops are located within a short walk from campus. One line takes passengers directly to a Metro Rail station, from where connections can be made to other city and suburban lines, the airport, and the Amtrak station. Copies of bus schedules are available at the Union Information Center, and bus tokens and monthly passes are sold at a reduced rate through the Ticket/Travel Center.

To facilitate and encourage communication among commuters, Commuter Services publishes a bimonthly Commuter Classified Newsletter.

Other specific services include:

1. Providing typewriters for student use free of charge.
2. Supervising the Commuter Locker Room, which has free full-size lockers on the first floor of the Student Union.
3. Distributing applications for social service, food stamps,

and public service information.

4. Assisting students with landlord-tenant problems.
5. Referring students to both on- and off-campus volunteer positions. The Volunteer Center is an ideal way for commuter students to get involved and obtain excellent career exploration experience.

To make sure the college understands the needs of its commuters, there are commuter representatives in every major campus organization, including the College Senate Community Relations Advisory Council, Faculty-Student Association, Parking Committee, Substance Abuse, Public Safety, Probation Appeals, and Day Care Center. This representation is coordinated by the Commuter Services Advisory Council. To become a member of this council, see the coordinator of Commuter Services.

The Commuter Council, funded by the activity fee, represents the 8,000 commuters on campus and sponsors a variety of social and service activities throughout the year. These include: free hot beverages daily in the Commuter Council Office off the Fireside Lounge, midday coffeehouses, spaghetti dinners, Monday night football, theater ticket discounts, and Commuter Daze, 12 hours of festivities at the close of each semester. Students interested in working on the council should sign up in the Commuter Services Office.

Counseling

The Counseling Center provides professional psychological services to students experiencing developmental or situational difficulties which may interfere with their ability to take advantage of the educational opportunities offered by the college. The staff includes licensed psychologists, counselors, social workers, and professionals in training. The center offers a variety of services: individual and group counseling, intervention in crisis situations, skill development workshops, limited psychiatric consultation, psychological testing, and help with academic, personal, and vocational problems. Developmental programming is also offered in the areas of wellness, retention, substance abuse, stress management, and cultural diversity.

Information shared in counseling is confidential and is protected to the full extent of the law.

Our services are limited to short-term counseling, and referral is provided to students to link them with appropriate community helping resources for more long-term assistance.

The Counseling Center is open from 8:45 a.m. to 4:45 p.m. and appointments may be made by phoning 878-4436 or stopping by the office (Porter Hall basement). After-hours emergency service is provided in collaboration with Crisis Services (834-3131), a 24-hour community hot-line service.

Dean of Students Office

A helping hand to students in need of assistance in handling just about any problem on campus, the Dean of Students Office seeks to develop a positive environment and promote all aspects of student welfare on campus.

The office, in Student Union 306, 878-4618, serves as an informational center, with copies of all the rules, regulations, and procedures of the college available there. The office also serves as an ombudsman for persons with problems requiring special help and oversees the College Judicial System.

Complete information on rights, freedoms, and responsibility



ities is also available in the Admissions, Records and Registration, Residence Life, and Commuter Services offices.

Disabled Student Services

Buffalo State College strives to provide an integrated campus experience for disabled persons. In order to achieve this goal, the college provides services and makes accommodations based on the individual needs of the student.

The office responsible for coordinating services for the disabled is located in the Weigel Health Center, 878-6711.

When inquiring about services available in areas such as Butler Library, residence life, orientation, and parking, disabled persons are encouraged to contact those departments directly.

Faculty-Student Association

The Faculty-Student Association is comprised of three divisions: Dining and Vending Services, College Store, and General Services Division.

The Faculty-Student Association is governed by a 13-member board of directors comprised of elected faculty, students, and professionals, and by representatives of administration appointed by the college president. The FSA office is located in Campus House (878-5211) and is open Monday-Friday, 8:15 a.m.-4:30 p.m. throughout the year. Inquiries about student employment in the areas listed below can be directed to this office.

Campus Dining

Dining and vending service is available every day of the week, and students have a choice of many campus restaurants. The **Plaza Complex**, open five days a week in the Student Union, houses a cafeteria, **Bengal Burger**, **Deli**, and **Bakery**. The **Cookery** (pizza and calzones), **Fitness Food Center**, **The Ice Cream Place**, **Just Drinks**, and **The Park** are located in the Student Union, and are open seven days a week. **The Restaurant** is open Monday through Friday in Moot Hall. **The Bite**, located in Moore Complex, is a take-out snack bar (tacos, chicken wings) open Monday through Sunday. **The Weekender** in Moore Complex serves a la carte brunch and dinner, Saturday and Sunday. Vending machines are located throughout the campus. Catering services are available by calling 878-4433.

A schedule of restaurant hours can be obtained by calling the FSA office at 878-5211. Call FOOD (3663) on any campus telephone for daily menu offerings.

College Store

The College Store is located in the basement of the Student Union (878-5509). The store carries books and educational materials for course-related use and other merchandise to meet the casual needs of the college community. Included in the wide range of merchandise are: new and used textbooks, general paperbacks, bargain books, art, school, and office supplies, emblematic merchandise, greeting cards, gifts, sundries, and computer software and supplies. Some additional services offered are: cassette tape copying, book special orders, film processing, gift wrapping, money orders, and refrigerator, typewriter, and VCR rentals.

The store accepts cash, personal checks, MasterCard and Visa. Personal charge accounts are not available. Hours of operation are: Monday-Thursday, 8 a.m.-5:30 p.m.; Friday, 8 a.m.-3:30 p.m.; Saturday, 11 a.m.-2:30 p.m. Extended hours are offered at the beginning of each semester. Summer hours are: Monday-Friday, 8 a.m.-4 p.m.

Campus Pharmacy

The Campus Pharmacy is a separate unit of the College Store and is located on the second floor of the Weigel Health Center. The pharmacy offers prescription services and nonprescription products. The hours of operation are: Monday-Friday, 9:30 a.m.-5 p.m. The pharmacy is open limited hours in summer.

General Services

The General Services Division operates the pool room and coin-operated amusement games in the Student Union, in addition to overseeing washers and dryers in the residence halls and copiers in Butler Library.

The pool room is open seven days a week during the academic year.

The manager of General Services has an office in the Student Union (878-4029).

Health Center

The Weigel Health Center provides health services for all registered students, including commuters.

In addition to diagnosis and treatment of illnesses and injuries, the professional staff stresses health education and preventive medicine. No appointment is necessary, and there is no charge for most services, with the exception of special services such as allergy injections, for which there is a nominal fee. Students are also encouraged to discuss personal problems with the professional staff with the assurance of complete confidentiality.

The health center is open 8 a.m. to 6 p.m., Monday through Friday, 878-6711.

Weigel Health Sexuality Center provides complete gynecological services, including pelvic and breast examinations, contraceptive information and methods, pregnancy testing and referrals, VD testing and treatment for males and females, and sexuality counseling. Located on the second floor of Weigel Health Center, the Sexuality Center is open from 9 a.m. to 6 p.m., Monday through Friday, and Thursday evening 6 p.m. to 8 p.m. by appointment, 878-6715.

The **Student Health Insurance Plan** is designed specifically to meet the needs of college students. It covers laboratory fees, X-rays, and prescription drugs, in addition to providing hospital, surgical, and other benefits. Major medical benefits also are included. The premium for 12-month protection is substantially lower than for comparable policies, and all registered

students should enroll in this plan unless they can show evidence of comparable insurance. The Student Insurance Service Office is located in Weigel Health Center 204, 878-5121. Trained representatives are available to explain policy provisions and to help students submit claims.

The Weigel Health Center also provides these special facilities:

Campus Pharmacy. A professional pharmacy offers prescription services to all registered students. Students enrolled in the Student Health Insurance Plan may fill their prescriptions at no charge. The pharmacy is located on the second floor of Weigel Health Center, 878-5824.

Laboratory Service. A private lab provides services at the health center by appointment. Fees for laboratory services are covered by the Student Health Insurance Plan. Students not enrolled in the plan are directly responsible to the lab for payment.

Additional services funded by the United Students Government activity fee are:

Dental Clinic. All activity-fee-paying students are eligible to have their teeth cleaned and X-rayed, emergencies dealt with, dental needs diagnosed, and preventive instruction supplied. Presentation of ID card is required. Phone 878-6716.

Campus Volunteer Ambulance Corps. Emergency medical services are available through the Campus Volunteer Ambulance Corps, staffed by emergency medical technicians (EMTs) and other specially trained students. The Campus Volunteer Ambulance Corps office is in Weigel Health Center, second floor, 878-6527.

Intercollegiate Athletics

The Intercollegiate Athletics Department and United Students Government sponsor varsity competition in nine sports for men (basketball, cross country, football, golf, indoor track, soccer, swimming and diving, tennis, and track and field) and nine sports for women (basketball, cross country, indoor track, soccer, softball, swimming and diving, tennis, track and field, and volleyball). Club teams in such sports as ice hockey, judo, bowling, and rugby are also funded through USG.

International Student Affairs

A variety of assistance is available to international students through the International Student Affairs Office, Cassety Hall 115, which offers academic advisement and personal counseling in addition to aid regarding visas, work permits, and relevant regulations of the Immigration and Naturalization Service. A special orientation program is provided for incoming international students and tests are administered for English language competency and placement.

This office also coordinates the American Host Family Program, which pairs international students with American families, and the International Friendship Program, which pairs incoming international students with American students. It also coordinates an International Student Helper Program. A semiannual newsletter, a special booklet entitled "Information for New Students from Abroad," and a "Directory of Faculty and Staff with International Qualifications" are published. Various cultural events are planned throughout the year to add an international flavor to campus life.

Orientation

Entering freshmen and transfer students are introduced to many aspects of campus life during orientation sessions, conducted during the summer and early September for students beginning in the fall, and in January for midyear students.

The New Student Programs and Orientation Office plans and conducts sessions designed to meet the needs and special interests of new students. Programs include academic advisement, course scheduling assistance, registration, information sessions on academic and student-related services, small group meetings, academic survival workshops, competency testing, and campus tours.

During this period there are also opportunities for meeting faculty, staff, and upperclassmen. A series of evening activities ranging from films, music festivals, and informal parties, to barbecues, live theater, and open recreation are planned to give students a taste of the social climate of the college.

Parent workshops held during orientation introduce parents to administrators and staff who can provide information on such topics as public safety, student health, help resources, residence facilities, and academic services. Attendance at orientation is optional, and a program fee is required for participation. All entering students receive program registration material in the admissions process.

In addition, throughout the first year, the office continues to provide assistance and referrals to new students. These services include the coordination of the Freshman Seminar Program, a freshman newsletter, and other specific programs targeted toward new students.

The New Student Programs and Orientation Office is located in South Wing, 878-5336.

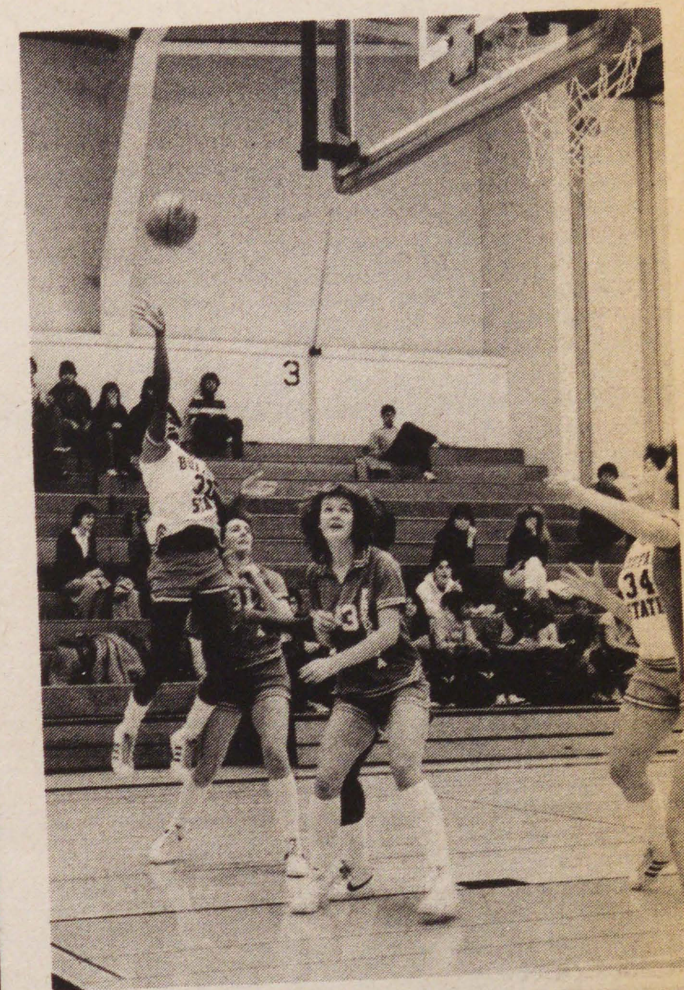
Public Safety

An independent law-enforcement agency charged with the responsibility of providing a safe environment for the college community, the Public Safety Department is involved in the areas of crime prevention and control, criminal investigations, traffic and parking supervision, physical-plant security, emergency first-aid treatment, disaster coordination, and the maintenance of public order.

Special services provided by the department include:

1. The loan of jumper cables, flashlights, hand tools, or shovels, at no charge.
2. Provision of Operation Identification marking pens and registration of student I.D. numbers for property identification purposes in a statewide computer system.
3. Rape prevention lectures.
4. Bicycle-safety lectures.
5. Assisting motorists with minor vehicle problems or calling for service for them if necessary.
6. Door openings in emergency situations.
7. Escort service.
8. Notification in emergency situations.
9. Found Property Department.
10. Provision of literature on crime prevention, including home safety, personal safety, and basic tips on how to avoid becoming a victim of a crime.

The department is located in Chase Hall 110. For all emergencies or for information, call 878-6333. To make arrangements for lectures or special programs, call 878-6332 or 878-6921 between 8 a.m. and 4 p.m.



Parking Rules and Regulations

The rules governing motor vehicles on campus are intended to assure maximum pedestrian and vehicular safety and to establish the most convenient arrangements possible for students, staff, and visitors. Violations will result in tickets.

Parking: Motor vehicles may park in any of the designated areas shown on the campus map, available in the Public Safety Office. Parking is PROHIBITED:

1. On all roadways.
2. In all fire lanes.
3. On lawns, grass, or grounds.
4. On or over painted lines in parking areas or crosswalks.
5. In such a way as to interfere with free and proper use of a roadway or pedestrian crossing.

The department may authorize the towing away of any vehicle found to be in violation of the college's rules and regulations.

ONLY handicapped persons may use campus parking spaces reserved for the handicapped. They must obtain a municipal handicapped parking permit from the municipality in which they live. New York state vehicle registration plates issued to handicapped persons are also valid in campus handicapped parking spaces. Handicapped parking rules are strictly enforced, and violators' vehicles may be tagged and towed away.

Parking tickets may be paid at Chase Hall 109. For more information, call the Traffic Office at 878-3041.

Residence Life (Housing)

Students who choose to live on campus will find the primary mission of the college residence life program and its staff is to provide "an outstanding program which enhances the quality of student life and fosters an atmosphere conducive to student development for the benefit of the students and the campus community as a whole."

Each residence hall is staffed with selected students, both graduate and undergraduate, who are directly responsible to professionals in their area and to the director of Residence Life. Staff members are available to advise and assist residents, to promote student health and safety, and to help students initiate educational, social, and recreational programs.

Most residence hall rooms accommodate two students. If no roommate preference is expressed, students are assigned a roommate based on available information. Roommate preferences are honored on a space-available basis. Preferences will be considered only if both students request each other. Each student is provided with a bed, desk, chair, closet space, and a chest of drawers. Students are reminded to bring with them such items as: sheets, pillow, blankets, bedspread, towels, and a desk lamp. Both room and board fees must be paid in full before room assignment is finalized.

The residence hall program has many alternatives to offer students. There are three basic living arrangements available. The corridor-style structure is the traditional hall setting with rooms next to each other extending down a long hallway. Corridor-style halls on campus include Neumann Hall, Perry Hall, and Porter Hall. The second type of hall is a suite arrangement in which three or four student rooms connect with a communal living room. North Wing, and Towers I through IV are designed in the suite setting. The third type, known as a modified suite, is found in Moore Complex. The suite area in this hall is a separate room which is available only to the residents of the adjacent four bedrooms.

All residence halls are coeducational, which means that they have both females and males residing in the same hall — not the same room. All bathroom areas are single sex. Specialized areas, such as 24-hour quiet floors, all female floors, or all male floors are available. In addition, every effort is made to accommodate a request for a non-smoking roommate. However, any such request is contingent upon space available.

Computer centers exist in some of the residence halls, and a number of the halls have computer terminals available for student use. Theme areas such as international living and wellness are also available on campus. The wellness hall has an exercise room available for its residents.

Additional information may be obtained from the Residence Life Office, Porter Hall, 878-6806.

Speech-Language-Hearing Clinic

The Speech-Language-Hearing Clinic located in Ketcham Hall 213 provides individual speech-language-hearing services to the college community and to residents of Western New York at no charge. Services are provided by undergraduate and graduate students in the Speech Language Pathology and Audiology Department under the direct supervision of faculty who hold Certificates of Clinical Competence in Speech Language Pathology and/or Audiology and the New York state license in speech language pathology and/or audiology. Services include hearing testing and diagnosis and individual

and group therapy for those who stutter, are hearing impaired, or have voice, articulation, or language disorders.

For additional information or an individual appointment, call 878-5502.

Student Government

The United Students Government (USG) strives to represent the interests of all students and encourages active participation in college life. USG sponsors a well-rounded program of educational, recreational, cultural, and social activities. A variety of service operations such as the Dental Clinic and Legal Aid Clinic are also provided. All of these programs are funded by the mandatory activity fee. The USG office is in Student Union 402, 878-6701.

The executive branch consists of the president, executive vice president, treasurer, assistant treasurer, and four administrative vice presidents. This body is responsible for establishing long-term goals for the student government.

The Senate, USG's legislative branch, consists of four chief officers and 25 senators. This body develops and coordinates activities, passes legislation for the general welfare of all students, and makes determinations as to which student groups are granted recognition and funding. A budget committee makes recommendations to the Senate regarding distribution and control of student activity fee monies. The Senate, in turn, makes recommendations to the president of the college.

All activity-fee-paying students are automatically members of USG. All are eligible to run for office, provided they meet grade point average and credit hour requirements. Campus-wide elections are held late in the spring semester.

The Judicial Council determines the constitutionality of questions brought before it by individuals and organizations.

The USG Business Office includes a business manager and bookkeeper who are directly responsible for the disbursement of USG monies. The office is located in Student Union 418, 878-6702.

Student Life Office

The Student Life Office encourages student involvement in a variety of out-of-classroom experiences. Participation in campus activities, clubs, organizations, and committees enhances academic work and helps students develop their skills, attitudes, and talents.

The Student Life area includes Student Activities, Commuter Services, Greek Affairs, Minority Student Services, and Student Union Operations. The office coordinates programs such as leadership/organizational development workshops, recreation tournaments, Homecoming, Community Days, and Who's Who Among Students in American Universities and Colleges.

Whether you are a commuter or resident and no matter what your age, there is something happening on campus for you. For more information on student organizations, activities, and campus committees, stop by the office, Student Union 400.

Student Union

For students, one of the most important buildings on campus is the Student Union, located in the center of campus. Commuter and resident students alike use the facilities. It's a place to meet your friends and to make new ones.

The first floor, normally a beehive of activity, houses, among other things, the Campus Information Center, the Plaza Complex, Fitness Food Center, pool room, commuter locker rooms, automatic banking facilities, Elms yearbook office, and the campus FM radio station, WBNY. The College Store is in the lower level and supplies the educational materials for course-related use and other merchandise to meet the casual needs of the campus community. On the second floor are the Fireside Lounge, the Campbell Social Hall, and the Assembly Hall. All are the scene of a wide variety of programs. The offices of Commuter Services and the Dean of Students are also located on the second floor.

The third floor houses the offices of Student Life, College Judicial System, United Students Government, and Student

Public Notice Designating Directory Information

The State University College at Buffalo 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.

1. Name, address, telephone number, dates of attendance, class.
2. Previous institution(s) attended, major field of study, awards, honors (includes dean's list), degree(s) conferred (including dates).
3. Past and present participation in officially recognized sports and activities, physical factors (height, weight of athletes), date and place of birth.

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 in the Records and Registration Office, Cleveland Hall 204, State University College at Buffalo, 1300 Elmwood Ave., Buffalo, New York 14222-1095, by Oct. 1. Non-disclosure of information will commence immediately thereafter and be effective until Sept. 30 of the following year. Written notification to withhold disclosure must be made each academic year.

The State University College at Buffalo 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.



Union Board, as well as nine meeting rooms.

Union hours are Monday through Thursday, 7 a.m. to 11 p.m.; Friday, 7 a.m. to midnight; Saturday, 10 a.m. to midnight; Sunday, 10 a.m. to 11 p.m.

Veterans Certification

The Veterans Certification Office, located in Cleveland Hall 209, 878-5045, provides advisement to current and prospective students who are veterans, servicepersons, or dependents or survivors of veterans regarding Veterans Administration educational benefits. Information on advance payment, tuition deferments, tutorial assistance, and dependency allowance is also provided.

Important: Students Unable Because of Religious Belief to Attend Classes on Certain Days

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he or she is unable, because of his or her religious beliefs, to attend classes or to participate in any examination, study, or work requirements on a particular day or days.
2. Any student in an institution of higher education who is unable, because of his or her religious beliefs, to attend classes on a particular day or days, shall, because of such absence on the particular day or days, be excused from any examination or any study, or work requirements.
3. It shall be the responsibility of the faculty and of 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 make up any examination, study, or work requirements which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.
4. If classes, examinations, study, or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup classes, examinations, study, or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study, or work requirements held on other days.
5. In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student for availing himself or herself of the provisions of this section.
6. Any student, who is aggrieved by the alleged failure of any faculty or administrative official to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his or her rights under this section.
7. As used in this section, the term "institution of higher education" shall mean schools under the control of the board of trustees of the State University of New York or of the board of higher education of the City of New York or any community college.



State University of New York

State University of New York

State University's 64 geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New York citizens and comprise the nation's largest, centrally managed system of public higher education.

When founded in 1948, the University consolidated 29 state-operated, but unaffiliated, institutions. In response to need, the University has grown to a point where its impact is felt educationally, culturally, and economically the length and breadth of the state.

More than 370,000 students are pursuing traditional study in classrooms or are working at home, at their own pace, through such innovative institutions as Empire State College, whose students follow individualized and often non-traditional paths to a degree. Of the total enrollment, more than 100,000 students are 24 years or older, reflecting State University's services to specific constituencies, such as refresher courses for the professional community, continuing educational opportunities for returning service personnel, and personal enrichment for more mature persons.

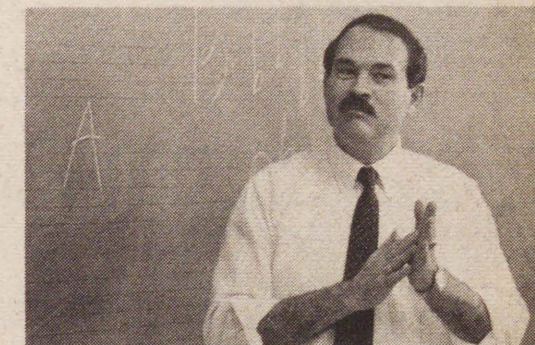
State University's research contributions are helping to solve some of modern society's most urgent problems. It was a State University scientist who first warned the world of potentially harmful mercury deposits in canned fish, and another who made the connection between automobile and industrial exhaust combining to cause changes in weather patterns. Other University researchers continue important studies in such wide-ranging areas as immunology, marine biology, sickle-cell anemia, and organ transplantation.

More than 1,000 public service activities are currently being pursued on State University campuses. Examples of these efforts include special training courses for local government personnel, state civil service personnel, and the unemployed; participation by campus personnel in joint community planning or project work, and campus-community arrangements for community use of campus facilities.

A distinguished faculty includes nationally and internationally recognized figures in all the major disciplines. Their efforts are recognized each year in the form of such prestigious awards as Fulbright-Hayes, Guggenheim, and Danforth Fellowships.

The University offers a wide diversity of what are considered the more conventional career fields, such as business, engineering, medicine, teaching, literature, dairy farming, medical technology, accounting, social work, forestry, and automotive technology. Additionally, its responsiveness to progress in all areas of learning and to tomorrow's developing societal needs has resulted in concentrations which include pollution, urban studies, computer science, immunology, preservation of national resources, and microbiology.

SUNY programs for the educationally and economically disadvantaged have become models for delivering better learning opportunities to a once-forgotten segment of society. Educational Opportunity Centers offer high school equivalen-



cy and college preparatory courses to provide young people and adults with the opportunity to begin college or to learn marketable skills. In addition, campus based Educational Opportunity Programs provide counseling, developmental education, and financial aid to disadvantaged students in traditional degree programs.

Overall, at its EOCs, two-year colleges, four-year campuses, and university and medical centers, the University offers 3,600 academic programs. Degree opportunities range from two-year associate programs to doctoral studies offered at 12 senior campuses.

The 30 two-year community colleges operating under the program of State University play a unique role in the expansion of educational opportunity. They provide local industry with trained technicians in a wide variety of occupational curriculums, and offer transfer options to students who wish to go on to earn advanced degrees.

The University passed a major milestone in 1985 when it graduated its one-millionth alumnus. The majority of SUNY graduates pursue careers in communities across the state.

State University is governed by a Board of Trustees, appointed by the governor, which directly determines the policies to be followed by the 34 state-supported campuses. Community colleges have their own local boards of trustees whose relationship to the SUNY board is defined by law. The state contributes one-third to 40 percent of their operating costs and one-half of their capital costs.

The State University motto is: "To Learn — To Search — To Serve."

University Centers

State University of New York at Albany
State University of New York at Binghamton
State University of New York at Buffalo
State University of New York at Stony Brook

Colleges of Arts and Science

State University College at Brockport
State University College at Buffalo
State University College at Cortland
State University of New York Empire State College
State University College at Fredonia
State University College at Geneseo

State University College at New Paltz
 State University College at Old Westbury
 State University College at Oneonta
 State University College at Oswego
 State University College at Plattsburgh
 State University College at Potsdam
 State University College at Purchase

Colleges and Centers for the Health Sciences

State University of New York Health Science Center at Brooklyn
 State University of New York Health Science Center at Syracuse
 State University of New York College of Optometry at New York City
 (Health Sciences Center at SUNY at Buffalo)*
 (Health Sciences Center at SUNY at Stony Brook)*

Colleges of Technology

State University of New York College of Technology at Alfred
 State University of New York College of Technology at Canton
 State University of New York College of Agriculture and Technology at Cobleskill
 State University of New York College of Technology at Delhi
 State University of New York College of Technology at Farmingdale
 State University of New York College of Agriculture and Technology at Morrisville
 State University of New York College of Technology at Utica/Rome** (Upper-division and master's programs)
 (Fashion Institute of Technology at New York City)***

Specialized Colleges

State University of New York College of Environmental Science and Forestry at Syracuse
 State University of New York Maritime College at Fort Schuyler

Statutory Colleges****

New York State College of Agriculture and Life Sciences at Cornell University
 New York State College of Ceramics at Alfred University
 New York State College of Human Ecology at Cornell University
 New York State College of Industrial and Labor Relations at Cornell University
 New York State College of Veterinary Medicine at Cornell University

Community Colleges

(Locally-sponsored, two-year colleges under the program of State University)
 Adirondack Community College at Glens Falls
 Broome Community College at Binghamton
 Cayuga County Community College at Auburn
 Clinton Community College at Plattsburgh
 Columbia-Greene Community College at Hudson
 Community College of the Finger Lakes at Canandaigua
 Corning Community College at Corning
 Dutchess Community College at Poughkeepsie
 Erie Community College at Williamsville, Buffalo and Orchard Park
 Fashion Institute of Technology at New York City***
 Fulton-Montgomery Community College at Johnstown
 Genesee Community College at Batavia
 Herkimer County Community College at Herkimer
 Hudson Valley Community College at Troy

Jamestown Community College at Jamestown
 Jefferson Community College at Watertown
 Mohawk Valley Community College at Utica
 Monroe Community College at Rochester
 Nassau Community College at Garden City
 Niagara County Community College at Sanborn
 North Country Community College at Saranac Lake
 Onondaga Community College at Syracuse
 Orange County Community College at Middletown
 Rockland Community College at Suffern
 Schenectady County Community College at Schenectady
 Suffolk County Community College at Selden, Riverhead and Brentwood
 Sullivan County Community College at Loch Sheldrake
 Tompkins Cortland Community College at Dryden
 Ulster County Community College at Stone Ridge
 Westchester Community College at Valhalla

*The Health Sciences Centers at Buffalo and Stony Brook are operated under the administration of their respective University Centers.

**This is an upper-division institution authorized to offer baccalaureate and master's degree programs.

***While authorized to offer such baccalaureate and master's degree programs as may be approved pursuant to the provisions of the Master Plan, in addition to the associate degree, the Fashion Institute of Technology is financed and administered in the manner provided for community colleges.

****These operate as "contract colleges" on the campuses of independent universities.

State University of New York

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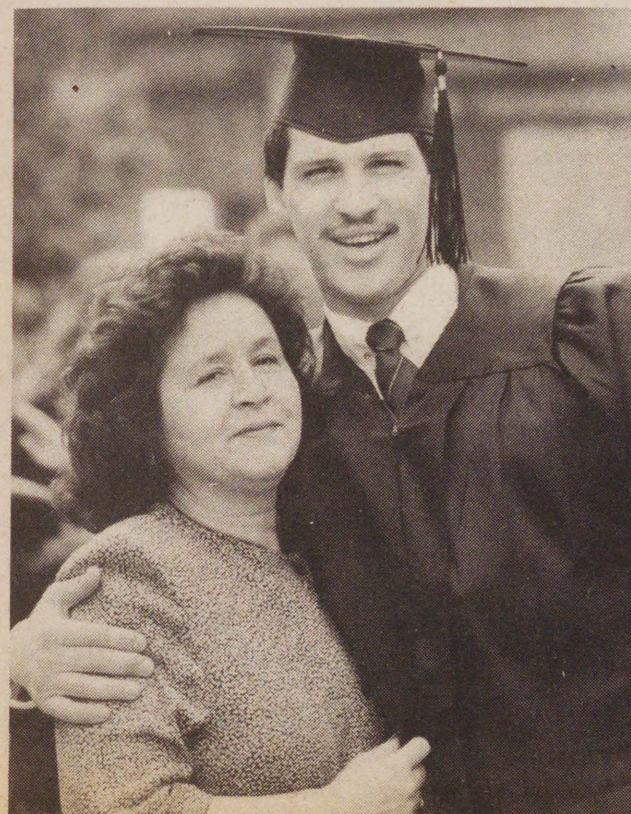
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Harry K. Spindler, B.A., M.P.A.

Buffalo State College: Important Facts



State University College at Buffalo

College Council

	Term Expires
Ross B. Kenzie, <i>Chairman</i>	1990
Pasquale A. Greco, M.D.	1988
Walter B. Holland Jr., D.D.S.	1993
Edward T. Hunt Jr.	1992
Randolph A. Marks	1993
Walter E. Moxham Jr.	1995
Olivia Smith-Blackwell, M.D.	1991
Paul A. Tokasz	1994
Timothy J. Toohey	1989
Plus a student member	

Accreditations

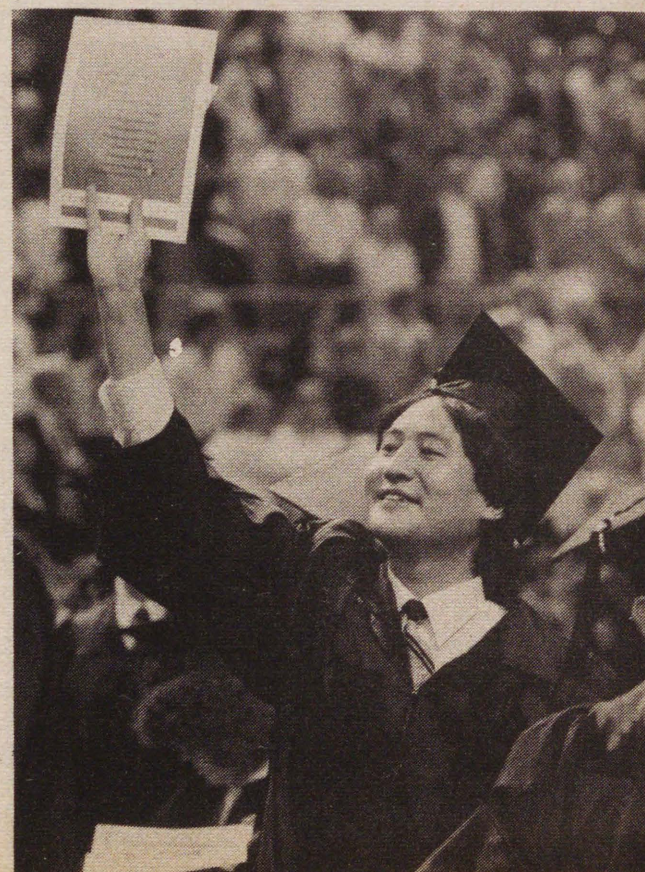
Accrediting Board for Engineering and Technology
 American Chemical Society
 American Dietetic Association
 American Speech-Language-Hearing Association
 Board of Regents, University of the State of New York
 Council on Social Work Education
 Middle States Association of Colleges and Secondary Schools
 National Association of Industrial Technology
 National Council for Accreditation of Teacher Education

Significant Dates in the History of the College

- 1867 Legislature created the Normal School at Buffalo
- 1871 Henry B. Buckham appointed principal; school opened with three departments: Normal, Collegiate, Scientific
- 1873 First graduating class—23 graduates
- 1886 James M. Cassety appointed principal
- 1895 Three-year Primary and Kindergarten Course initiated
- 1906 Manual Arts Department established
- 1909 Daniel Upton appointed principal
- 1910 Household Arts Department established
- 1915 Edward H. Butler, Jr., succeeded Edward H. Butler as president of Local Board
- 1919 Harry W. Rockwell appointed principal
- 1919 Home Economics Program became four-year course leading to bachelor of science in home economics
- 1920 Manual Arts Department changed to Industrial Arts Department
- 1925 Normal course became four-year program leading to bachelor of science in education
- 1928 Name changed to New York State College for Teachers; principal changed to president; accredited by American Association of Teachers Colleges
- 1930 Art Education Department established
- 1931 Moved to present campus
- 1939 Accredited by American Association of University Women
- 1944 Exceptional Children Education Division established
- 1945 Master of science in education degree authorized

- 1948 State University of New York established; college accredited by Middle States Association of Colleges and Secondary Schools
- 1951 President Harry W. Rockwell retired; Dean Ralph Horn became acting president; Harvey M. Rice appointed president
- 1958 President Harvey M. Rice resigned; Dean Ralph Horn became acting president; approval of secondary teacher education curricula in mathematics and science
- 1959 Mrs. Bruce E. Wallis (formerly Kate Butler Righter) appointed chairman of Local Council
- 1959 Dean Ralph Horn, acting president, retired; Paul G. Bulger appointed president
- 1959 Name changed to State University College of Education at Buffalo
- 1961 Name changed to State University College at Buffalo
- 1962 Approval of secondary teacher education curriculum in social studies; college accredited by National Council for Accreditation of Teacher Education
- 1963 Approval of liberal arts degree program
- 1963 Mrs. Bruce E. Wallis (formerly Kate Butler Righter) reappointed chairman of Local Council
- 1964 Approval of secondary teacher education curriculum in foreign language and vocational technical baccalaureate curriculum
- 1966 Approval of bachelor of science curriculum with major in home economics
- 1967 President Paul G. Bulger resigned; Dr. Houston T. Robison, vice president for academic affairs, became acting president; E.K. Fretwell Jr. appointed president; master of arts degree authorized with major in English and mathematics; SEEK/Educational Opportunity Program established
- 1968 Master of arts degree with major in history authorized; approval of bachelor of science curriculum with major in industrial technology; Chemistry Department accredited by American Chemical Society
- 1969 Master of arts degree with major in chemistry, biology, and philosophy authorized
- 1970 Bachelor of technology and master of science in student personnel administration degrees authorized
- 1971 Bachelor of fine arts degree authorized; centennial year
- 1972 Accreditation renewed by Middle States Association of Colleges and Universities; accreditation of teacher-education programs renewed by National Council for Accreditation of Teacher Education
- 1975 Master of science in creative studies authorized
- 1977 Master of science in criminal justice and clinical dietetics authorized
- 1978 Bachelor of science in special studies authorized; President E.K. Fretwell Jr. resigned; master of arts and master of science in multidisciplinary studies authorized

- 1979 Dr. Barbara R. Frey, vice president for academic affairs, became acting president; Dr. D. Bruce Johnstone appointed president
- 1980 Bachelor of science in business studies authorized; bachelor of science in business education authorized; bachelor of arts in special studies authorized; bachelor of science in general studies authorized
- 1981 Accreditation of teacher education programs renewed by National Council for Accreditation of Teacher Education
- 1982 Accreditation renewed by Middle States Association of Colleges and Secondary Schools; Ross B. Kenzie appointed chairman of College Council
- 1983 Engineering technology programs accredited by Accrediting Board for Engineering and Technology; acquisition of master's level Art Conservation Program from the State University College at Oneonta
- 1984 Master of science degree in bilingual exceptional children education approved
- 1988 President D. Bruce Johnstone resigned; Dr. Richard A. Wiesen, vice president for academic affairs, became acting president



College Administration

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Chp., Performing Arts Dept. Myron H. Nadel, M.A.
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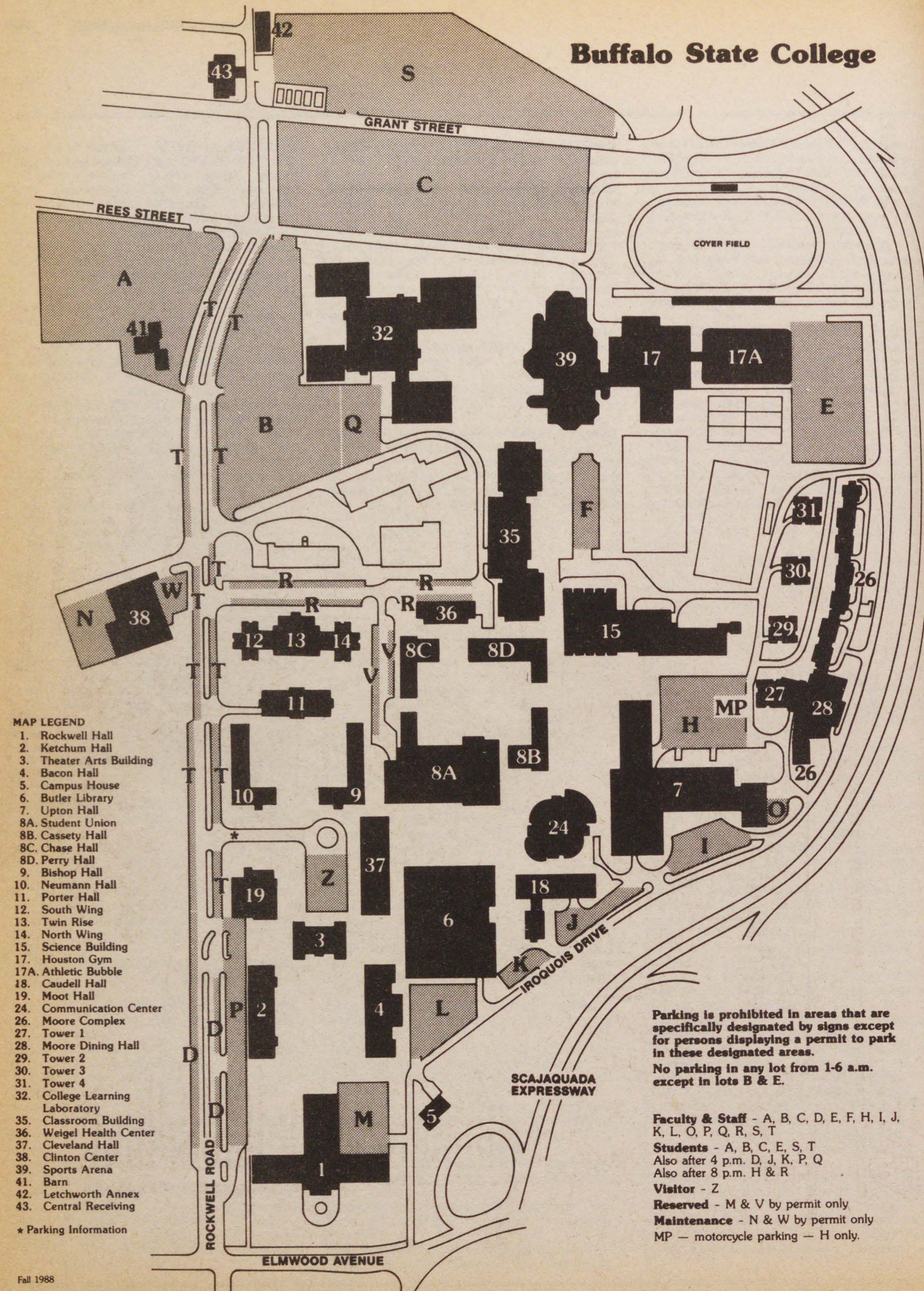
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Buffalo State College



MAP LEGEND

1. Rockwell Hall
2. Ketchum Hall
3. Theater Arts Building
4. Bacon Hall
5. Campus House
6. Butler Library
7. Upton Hall
- 8A. Student Union
- 8B. Cassety Hall
- 8C. Chase Hall
- 8D. Perry Hall
9. Bishop Hall
10. Neumann Hall
11. Porter Hall
12. South Wing
13. Twin Rise
14. North Wing
15. Science Building
17. Houston Gym
- 17A. Athletic Bubble
18. Caudell Hall
19. Moot Hall
24. Communication Center
26. Moore Complex
27. Tower 1
28. Moore Dining Hall
29. Tower 2
30. Tower 3
31. Tower 4
32. College Learning Laboratory
35. Classroom Building
36. Weigel Health Center
37. Cleveland Hall
38. Clinton Center
39. Sports Arena
41. Barn
42. Letchworth Annex
43. Central Receiving

* Parking Information

Parking is prohibited in areas that are specifically designated by signs except for persons displaying a permit to park in these designated areas.

No parking in any lot from 1-6 a.m. except in lots B & E.

Faculty & Staff - A, B, C, D, E, F, H, I, J, K, L, O, P, Q, R, S, T

Students - A, B, C, E, S, T
Also after 4 p.m. D, J, K, P, Q
Also after 8 p.m. H & R

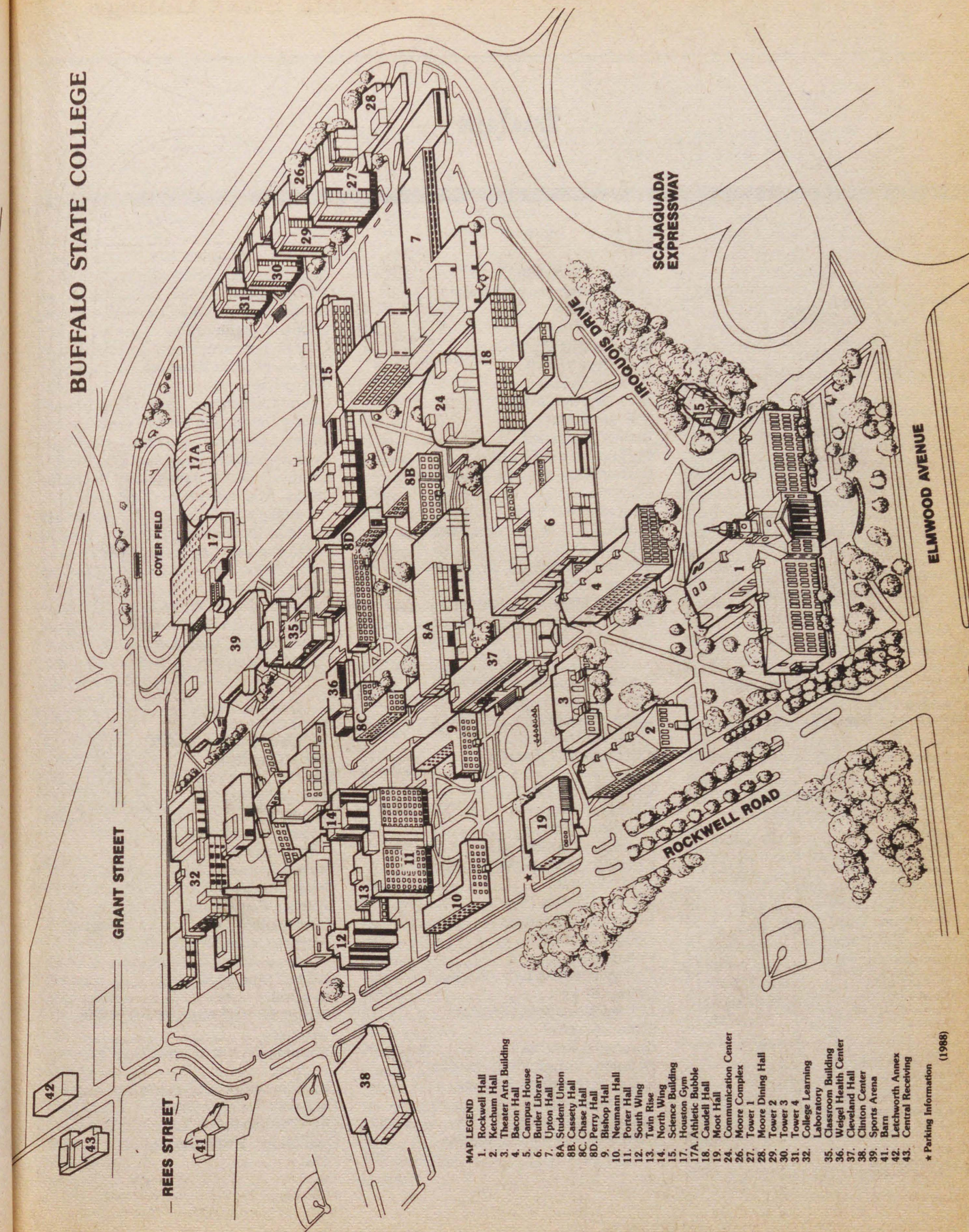
Visitor - Z

Reserved - M & V by permit only

Maintenance - N & W by permit only

MP - motorcycle parking - H only.

BUFFALO STATE COLLEGE



MAP LEGEND

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30. Tower 3
31. Tower 4
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35. Classroom Building
36. Weigel Health Center
37. Cleveland Hall
38. Clinton Center
39. Sports Arena
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42. Letchworth Annex
43. Central Receiving

* Parking Information

(1986)

Index

A	
Academic Advisement	179
Academic Calendar 1989-90	4
Academic Dismissal	182
Academic Eligibility Chart	184
Academic Eligibility for Financial Aid	183
Academic Misconduct	183
Academic Organization	24
Academic Policies	178
Academic Probation/Dismissal	182
Academic Programs	24
Academic Skills Center	190
Accreditations	204
Activity Fee	14
Administration	206
Admission Procedures	12
Admission, Special Departmental Requirements	11
Admissions	10
Advanced Placement Examinations	184
African and African-American Studies Courses	98
Alternate Methods of Earning College Credit	184
Ambulance Corps	198
Anthropology Courses	98
Anthropology Curriculum	35
Applied Science and Education, Faculty of	24
Art Curriculum	36
Art Education Courses	100
Art Education Curriculum	36
Art History Curriculum	38
Arts and Humanities, Faculty of	24
Arts, The, Curriculum	38
Athletics, Intercollegiate	198
Attendance	179
Auditing Courses	179

B	
B.A. Degree, General Requirements	24
Bad Check Fee	14
Basic Mathematics Requirement	32
B.F.A. Degree, General Requirements	33
Biology Courses	102

Biology Curriculum	39
Biology-Secondary Education Curriculum	40
Board of Trustees	203
Broadcasting Curriculum	41
B.S. Degree, General Requirements	24
B.T. Degree, General Requirements	33
Budget, Estimated	15
Buffalo State College	6
Buffalo State College: Important Facts	204
Burchfield Art Center	190
Business and Distributive Education Curriculum	41
Business Education Curriculum	42
Business Courses	104
Business Studies Curriculum	43
Butler Library	190

C	
Calendar, Academic 1989-90	4
Campus Pharmacy	198
Career Development Center	196
Certification, Dual	187
Certification, Interstate	187
Certification, New York State	187
Change of Grade	182
Changing a Major	180
Chemistry Courses	105
Chemistry Curriculum	44
Chemistry - Secondary Education Curriculum	45
Classics Courses	128
College Aid Programs	22
College Council	204
College Fee	14
College Learning Laboratory	191
College Store	198
College Work-Study Program	18
Commencement	180
Commuter Services	196
Computer Information Systems (See Information Systems Management)	
Computing Services	191
Consumer and Family Studies Courses	107

Consumer and Family Studies Curriculum	46
Contract	185
Cooperative Education	194
Core Requirement	26
Costs — Student Expenses	14
Counseling	197
Course Challenge	186
Course Description Sample	96
Course Listings	96
Creative Studies	194
Creative Studies Courses	109
Credit, Alternate Methods of Earning	184
Credit by Evaluation	186
Credit for Experiential Learning (CAEL)	185
Credit, Unit of	188
Criminal Justice Courses	110
Criminal Justice Curriculum	48
Criminalistics Curriculum	49
Cross Registration	185

D	
Dance Courses	111
Deadlines, Student 1989-90	4
Dean of Students	197
Dean's List	182
Declaring a Major	179
Dental Clinic	198
Department (Major) Requirement	33
Design Courses	112
Design Curriculum	49
Dietetics Coordinated Curriculum	51
Dietetics Generalist Curriculum	50
Disabled Student Services	197
Dismissal	182
Distributive and Business Education Courses	114
Dropping or Withdrawing from a Course	179
Drug Education	187
Dual Baccalaureate Degrees	180
Dual Certification	187
Dual Major, Single Degree	180

E	
Early Admission	11
Earth Science - Secondary Education Curriculum	52
Earth Sciences Courses	115
Economics Courses	116
Economics B.A. Curriculum	54
Economics B.S. Curriculum	53
Education Courses	118
Educational Foundations Department	55
Educational Opportunity Program	10, 19, 191
Electives	33
Elementary Education Curriculum	54
Engineering Technology Courses	169
Engineering Technology: Electrical (Electronics Option) Curriculum	56
Engineering Technology: Electrical (Power and Machines Option) Curriculum	57
Engineering Technology: Mechanical Curriculum	58
English Composition Requirement	32
English Courses	121
English Curriculum	59
English - Secondary Education Curriculum	60
Evening Student Assistance	12
Evening Study, Admissions	12
Exceptional Education Courses	124
Exceptional Education Curriculum	61
Expenses	14
Experiential Learning, Credit for (CAEL)	185

F	
Faculty and Professional Staff	208
Faculty of Applied Science and Education	24
Faculty of Arts and Humanities	24
Faculty of Natural and Social Sciences	24
Faculty-Student Association	197
Federal Aid	18
Fees	14
Ferguson Planetarium	192
Finances	14
Finances and Financial Aid	13
Financial Aid	16
Financial Aid Programs	18
Financial Aid, Academic Eligibility	183
Fine Arts Courses	125

Fine Arts Curriculum	62
Food	197
Food Systems Management Curriculum	63
Foreign Language Courses	128
Foreign Language Education Courses	128
Foreign Language Requirement for B.A.	33
French Courses	129
French Language and Literature Curriculum	64
French-Secondary Education Curriculum	64
Freshman Admission	10

G	
General Education Electives	28
General Education Requirement	24
General Requirements for B.A.	24
General Requirements for B.F.A.	33
General Requirements for B.S.	24
General Requirements for B.T.	33
General Services	198
General Studies Curriculum	65
Geography Courses	133
Geography Curriculum	66
Geology Curriculum	67
Geosciences Courses (see Earth Sciences)	
Geosciences Curriculum	68
German Courses	129
Grades, Explanation of	181
Grading	181
Graduation	180
Great Lakes Laboratory	192
Greek Courses	130

H	
Health Center	198
Health Insurance	15, 198
Health, Physical Education, and Recreation Courses	135
Health Professions: Preparation and Advisement	192
Health Sciences Courses	136
Hebrew Language and Literature Courses	130
History Courses	137
History Curriculum	68
History of the College	204
Home Economics Education Courses	141
Home Economics Education Curriculum	69
Honors	182

Housing, Residence Life	200
Humanities Curriculum	69

I	
Incompletes	181
Independent Study (499)	185
Industrial Technology Courses	171
Industrial Technology Curriculum	70
Information Systems Management Courses	142
Information Systems Management Curriculum	70
Institute of Jewish Studies	194
Instructional Resources Center	192
Intercollegiate Athletics	198
Interdisciplinary Sciences Courses (see Science Education)	
Interdisciplinary Units	193
International Education	193
International Student Affairs	198
International Students, Admissions	11
International Students, Language Policy	33
Internship (488)	186
Interstate Certification	187
Italian Courses	131
Italian Language and Literature Curriculum	71

J	
Job Location and Development Program	22
Journalism, Broadcasting and Speech Courses	144
Journalism Curriculum	72

L	
Language Policy, International Students	33
Late Fees	14
Latin Courses	131
Leave of Absence	180
Level Codes (Academic)	183
Library	190
Library Courses	146
Lifelong Learning	194
Loans	18

M	
Major, Changing a	180
Major, Declaring a	179
Maps, Campus	218, 219
Map, Western New York	8
Mathematics B.A. Curriculum	73
Mathematics B.S. Curriculum	74

Mathematics B.S. Secondary Education Curriculum	74
Mathematics Courses	146
Mathematics Requirement, Basic	32
M.B.A. Advisement	193
Military Service Educational Experience	186
Minors	34
Music Courses	148
Music Curriculum	75

N

National Student Exchange	194
National Teacher Exam	187
Native Americans, Federal Aid to	19
Native Americans, State Aid to	21
Natural and Social Sciences, Faculty of	24
New York Certification	187
New York State Aid Programs	19
Non-Degree Status	12
Nutrition and Food Science Courses	151
NYSHESC/Student Bank Loan/Stafford Loan	20

O

Off-Campus Study	185
Office Administration: Special Studies Curriculum	76
Orientation	199

P

Parents Loan for Undergraduate Students (PLUS)	21
Parking Rules and Regulations	199
Pass-Fail System	181
Pell Grant	18
Performing Arts Courses	153
Perkins Loan	18
Pharmacy	198
Philosophy and Religious Studies Courses	153
Philosophy Curriculum	77
Physical Education Requirement	25, 33
Physics B.A. Curriculum	78
Physics B.S. Curriculum	79
Physics Courses	155
Physics-Engineering Program ("Three-Two") Curriculum	80
Physics-Secondary Education Curriculum	80
Planetarium	192
Planning Courses	156
Polish Courses	131

Political Science Courses	157
Political Science Curriculum	81
Prelaw Advisement	193
Probation	182
Project (495)	186
Psychology Courses	159
Psychology B.A. Curriculum	82
Psychology B.S. Curriculum	82
Psychology-Honors Program Curriculum	84
Public Communication Curriculum	85
Public Notice Designating Directory Information	201
Public Safety	199

QR

Quality Point System	182
Readmission	12
Recreation Courses	162
Refund Policy	15
Regents College Scholarship	19
Registration	178
Registration, Cross	185
Religious Holidays, College Policy on	201
Repeating Courses	182
Residence Life (Housing)	200
Room and Board	14
Russian Courses	131

S

Safety Studies Courses	171
Schedule Adjustment	178
Scholarships	19, 22
Science Education Courses	163
Secondary Education	
Biology	40
Chemistry	45
Earth Science	52
English	60
French	64
Mathematics	74
Physics	80
Professional Core	187
Spanish	89
Social Studies Education Courses	164
Social Studies Education Curriculum	86
Social Work Courses	164
Social Work Curriculum	86
Sociology Courses	166
Sociology B.A. Curriculum	87
Sociology B.S. Curriculum	88
Spanish Courses	132

Spanish Language and Literature Curriculum	89
Spanish-Secondary Education Curriculum	89
Special Academic Programs and Facilities	190
Special Study Options	193
Speech-Language-Hearing Clinic	200
Speech Language Pathology and Audiology Courses	168
Speech Language Pathology and Audiology Curriculum	90
Stafford Student Loan	20
State University of New York	202
Student Government	200
Student Life Office	200
Student Retention	12
Student Services	196
Student Teaching	188
Student Union	200
Summer Session	12
Supplemental Education Opportunity Grant (SEOG)	18
Supplemental Loans for Students (SLS)	21
Supplemental Tuition Assistance Program	20
Swahili Courses	133

T

TAP Academic Eligibility Chart	184
Teacher Education	187
Technology Courses	169, 172
Technology Education Courses	174
Technology Education Curriculum	91
Theater Courses	175
Theater Curriculum	92
Title IV Academic Eligibility Chart	184
Topics Courses (389 and 489)	186
Transcript of Record	186
Transfer Students	10, 32, 188
Transportation to Off-Campus Instructional Sites	188
Tuition	14
Tuition Assistance Program (TAP)	19

U

Uncommitted Academic Advisement Center	194
Unit of Credit	188
Urban-Regional Analysis and Planning Curriculum	92

V

Veterans Administration Education Benefits	19
Veterans Certification	201
Vietnam Veterans (N.Y. State) Tuition Award	20
Visiting Student Program	194

Vocational Rehabilitation Office	21
Vocational Technical Education Courses	174
Vocational Technical Education Curriculum	94

W

Waiver of Academic Regulations	188
Weigel Health Center	198
Withdrawal from College	180
Writing Across the Curriculum	32

