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Buffalo State College

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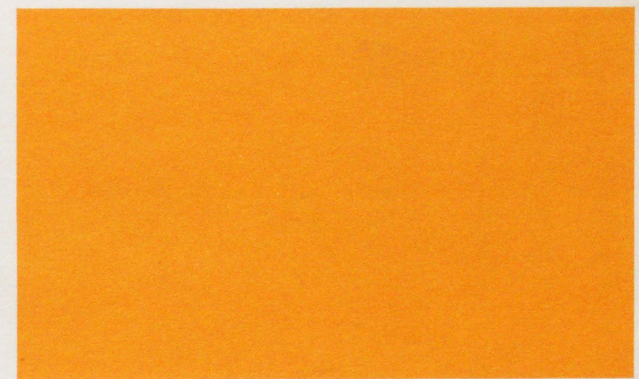
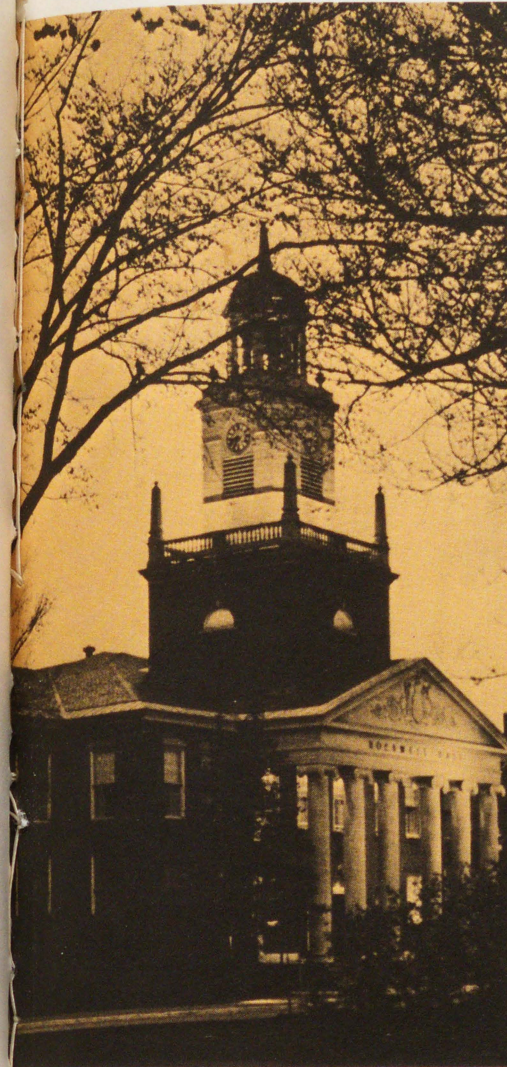
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College at Buffalo 1967-68 General Catalog



STATE UNIVERSITY OF NEW YORK



STATE UNIVERSITY
OF
NEW YORK

College at Buffalo

1967-68

COLLEGE CALENDAR FOR 1967-68

FALL SEMESTER — 1967

- September 4* Monday, Labor Day
 6-8 Wednesday-Friday, Undergraduate Registration
 9 Saturday, Graduate Registration
 11 Monday, Classes Begin
 15 Friday, Freshmen Testing and Petition Changes
 October 20* Friday, Western Zone
 November 22-24* Wednesday-Friday, Thanksgiving Recess
 27 Monday, Classes Resume
 December 20*- 20-29-30 TH Dec 1
 January 2* Winter Recess
 3 Wednesday, Classes Resume
 11-19 Thursday-Friday, Semester Examinations

SPRING SEMESTER — 1968

- January 20 Saturday, Graduate Registration
 22, 23 Monday, Tuesday, Inter-Session
 24-26 Wednesday-Friday, Undergraduate Registration
 28 Sunday, Midyear Commencement
 29 Monday, Classes Begin
 February 2 Friday, Schedule Petition Changes
 April 12-19* Friday-Friday, Spring Recess
 22 Monday, Classes Resume
 May 20-28 Monday-Tuesday, Semester Examinations
 June 2 Sunday, Commencement

SUMMER SESSION — 1968 Day and Evening Classes

- First Session Monday, June 3-Friday, July 12
 Middle Session Monday, June 24-Friday, August 2
 Last Session Monday, July 15-Friday, August 23
 Post Session Monday, August 5-Friday, August 23

*College not in session.

STATE UNIVERSITY OF NEW YORK

The State University of New York, established by the State Legislature in 1948, comprises 67 colleges and centers. At present, 57 conduct classes: four University Centers, two Medical Centers, ten Colleges of Arts and Science, seven Specialized Colleges, six two-year Agricultural and Technical Colleges and 28 locally-sponsored, two-year Community Colleges.

Three additional Colleges of Arts and Science are in varying stages of development. Two four-year campuses, in Nassau and Westchester Counties are now in early planning. The third campus as proposed in an amendment to the University's 1964 Master Plan, would be upper-divisional (junior-senior years) in concept and located in the Utica-Rome-Herkimer Area. Master's level programs will be offered at all three campuses.

The Trustees also have approved the establishment of seven additional community colleges. In varying stages of development, they are sponsored by Clinton, Columbia-Greene, Cortland-Tompkins, Essex-Franklin, Genesee, Herkimer and Ontario Counties.

State University further comprises the Ranger School, a division of the College of Forestry which offers a 43-week technical forestry program at Wanakena, and the Center for International Studies and World Affairs located at Oyster Bay.

The University offers four-year programs in many fields, including agriculture, business administration, ceramics, dentistry, engineering, forestry, home economics, industrial and labor relations, law, liberal arts and sciences, maritime service, medicine, nursing, pharmacy, professional museum work, public administration, social work, teacher education and veterinary medicine.

Its two-year programs also include nursing and liberal arts study and a wide variety of technical courses in such areas as agriculture, business, and the industrial and medical technologies.

Graduate study at the doctoral level is offered by the University at 12 of its campuses, and graduate work at the master's level at 24 campuses. The University is continuing to broaden and expand over-all opportunities for advanced degree study.

Governed by a Board of Trustees appointed by the Governor, State University of New York comprises all State-supported institutions of higher education, with the exception of the four-year colleges of City University of New York. Each college and center of State University is locally administered. Although separated geographically, all are united in the purpose to improve and extend opportunities for youth to continue their education beyond high school.

The State University motto is: "Let Each Become All He Is Capable of Being."



THE COLLEGE

The State University of New York College at Buffalo, established and maintained by the State of New York, is under the jurisdiction and control of the State University Board of Trustees, the President of the State University, and the Local Council of the College.

OBJECTIVES

The College achieves its primary purpose, the development of people to their fullest potential, by observing the following objectives.

1. To give the student a broad cultural background in the principal fields of organized knowledge.
2. To give the student a mastery of his field and a supporting knowledge of related fields.
3. To help those students, in teacher preparation programs, to understand the important position of the teacher in the relationship between education and society.
4. To aid the student to develop his personal resources in preparation for leadership in today's world.
5. To help the student acquire a knowledge of human growth and development.
6. To help the student understand and master the professional knowledge and skills needed for success in his chosen field.
7. To encourage the student to develop a guiding philosophy of education and of life.

CURRICULA

The curricula offered by the College are:

1. *Art Education* — A four-year curriculum leading to the degree of Bachelor of Science in Education preparing teachers and supervisors of Art for the elementary and the secondary schools of New York State.
2. *Elementary Education* — a four-year curriculum leading to the degree of Bachelor of Science in Education for teaching in the elementary schools

of New York State (nursery through grade six) with an opportunity to extend certification to teach in the junior high school (grade seven through nine) in the areas of English, General Science, Foreign Language, Mathematics, and Social Studies.

3. *Exceptional Children Education* — a four-year curriculum leading to the degree of Bachelor of Science in Education and certification for teaching in the elementary grades and in one of the following fields: mental retardation, education of the deaf, physical handicap and emotional disturbance. A curriculum leading to certification in speech pathology and audiology is also offered.
4. *Home Economics*
 - a. A four-year curriculum leading to the degree of Bachelor of Science in Education with a major in Home Economics Education for teachers of Home Economics in the elementary and secondary schools of New York State.
 - b. A four-year curriculum leading to the degree of Bachelor of Science with a major in Home Economics for the student interested in Home Economics and a broad cultural education. It permits the student to plan for a concentration in Clothing and Textiles; Family Life; or Foods and Nutrition. As soon as possible after choosing this curriculum the student should plan with the adviser for a selection of courses that will insure a concentration as well as a balanced program.
 - c. A four-year curriculum leading to the degree of Bachelor of Science with a major in Dietetics for the student who wishes to prepare for positions both in food service and nutrition education.
5. *Industrial Arts Education* — a four-year curriculum leading to the degree of Bachelor of Science in Education for teachers of Industrial Arts in elementary and secondary schools of New York State.
6. *Secondary Education* — a four-year curriculum leading to the degree of Bachelor of Science in Education and provisional certification for teaching English, French, Spanish, Mathematics, Biology, Chemistry, Earth Science, Physics or Social Studies in the secondary schools of New York State (grades seven through twelve), with certification becoming permanent following completion of 30 semester hours of graduate study within five calendar years of the date of original certification.
7. The Arts and Science Departments provide many required courses for the various Teacher Education Programs. In addition, a wide variety of elec-

tive courses in the arts and humanities, social sciences, mathematics and science may be selected by students in all divisions.

8. *Liberal Arts* — a liberal arts curriculum leading to the Bachelor of Arts degree is available. Comprehensive majors are available in the Arts, Humanities, Social Science, Art, Biology, Chemistry, English, Foreign Languages, Geography, Geology, History, Mathematics, Music, Philosophy, Physics, Sociology and Speech and Theatre Arts. The program is further enriched by offering inter-divisional area majors in Latin American and American Studies.
9. *The Vocational Technical Education Division* — prepares candidates to teach Vocational Trade Shop Subjects, Related Trade Subjects, Technical Subjects, or Related Technical Subjects in the public Vocational and Technical High Schools of New York State as well as Technical Institutes and Community Colleges. Graduates of the basic program are eligible for certification in accordance with the Regulations of the Commissioner of Education.
10. *Graduate* — a program leading to the degree of Master of Science in Education in the areas of Elementary Principalship and/or Supervision, Art Education, Early Secondary and Secondary Education (English, Mathematics, Science and Social Studies), Elementary Education, Exceptional Children Education, Home Economics Education, Industrial Arts Education, or Vocational Technical Education. There is also a program leading to the degree of Master of Arts with a major in English.

THE CAMPUS AND BUILDINGS

The College has a campus of one hundred and ten acres, located on Elmwood Avenue near Scajaquada Creek in the distinctive Delaware Park area of the City of Buffalo. This location gives ready access to the cultural, historical, research and scientific facilities of the second largest city in the Empire State. Many leading cultural and artistic institutions are located near the College such as the Albright-Knox Art Gallery, Buffalo and Erie County Historical Society Building, Kleinhans Music Hall and the Museum of Science. The College is easily reached by bus and car from all parts of the city, the suburbs, and from railroad, air and bus terminals.

In 1931, when the College moved to its present location at 1300 Elmwood Avenue, five buildings were erected: Rockwell Hall, named in honor of the first

President of the College, Harry W. Rockwell, contains the major administrative offices and the main auditorium. Jesse Ketchum Hall, named in honor of the man who deeded the land to provide for a State Normal School in the City of Buffalo, houses the English and Language Departments, and the Vocational Technical Education and Exceptional Children Education Divisions. Gertrude Mary Bacon Hall, named for a former principal of the School of Practice, houses faculty offices, seminar and class rooms. The old Gymnasium now houses the College store and faculty offices. The original President's residence is now the Faculty House.

Since 1931 many structural additions have been added to the growing campus. The Edward H. Butler Library, named in honor of a past president of the former Board of Visitors, contains the College's extensive book and periodical collection. Expansion of the Library is underway. Caudell Hall, named in honor of Myrtle V. Caudell, former Director of the Home Economics Division, houses that Division. The College Union has offices for the Administration of Student Activities, and provides a recreational setting for students.

Irving P. Bishop Hall, named for a former member of the Normal School faculty; Susan Frances Chase Hall, named for a former faculty member; George Bradford Neumann Hall, named for a former Dean of Men; May Louise Perry Hall, named for a former faculty member; High Rise, North Wing, South Wing, Scajaquada Halls and Towers, furnish resident accommodations for men and women. Louise Margaret Cassety Hall, named for a former Director of the Kindergarten Department, contains faculty offices. The Health, Physical Education and Recreation Building, provides space for departmental instruction, spectator sports, and recreational facilities. Adelbert Moot Hall, named for a former member of the Board of Regents, provides the College community with dining, banquet and lounge areas.

Daniel Sherman Upton Hall, named in honor of the third principal of the Normal School, contains the Art Education and Industrial Arts Education Divisions. The new Science Building houses the biological and physical sciences. The Communication Center contains the most advanced technological equipment and facilities available for group teaching and can seat approximately 1,550 students at one time in rooms of varying size. The Home Management House, at 5 Granger Place, provides a residence where Seniors live for a five-week period to gain experiences in the social and economic management of the home. Albright Hall contains the Music Department. A new Campus School enrolls 1,200 children from three-year nursery school through the twelfth grade. In addition, it houses the Child Study Center and has classes for children with exceptional problems of learning.

ADMISSION TO UNDERGRADUATE STUDY

Admission to State University College at Buffalo is based on the academic and personal qualifications of the respective applicants and is made without regard to the race, color, creed, or national origin of individuals. Applicants for admission, either as freshmen or with advanced standing, should be able to meet the requirements below. Application materials can be obtained and arrangements for visiting can be made through the Admissions Office, State University College, 1300 Elmwood Avenue, Buffalo, New York 14222—862-5511.

FRESHMAN ADMISSION REQUIREMENTS

1. A diploma awarded by an approved high school upon the completion of a four-year course of study, or a State High School Equivalency Diploma.
2. High school preparation
 - a. For admission to the *secondary education* (gr. 7-12) *mathematics and science curricula*: for mathematics, chemistry or physics specialization, mathematics three units, science three units; for general science, earth science or biology specialization, mathematics two units, science three units.
 - b. For admission to a *Foreign Language program*: at least two years of high school study in the proposed major language.
3. Personal Interview. During the processing of an application the interview is scheduled by the Admissions Office for those who meet minimum requirements.
4. A medical examination report indicating satisfactory physical condition and good health (See Section on Health Services).
5. Recommended:
 - a. A high school program which reflects a balance between general, special or technical studies as nearly as possible like that in the college curriculum to which the applicant seeks admission. For all students "college entrance" electives in high school will offer the best preparation. Beyond this, electives in special fields (art, home economics,

- industrial arts, music) are preferred to the extent that they appear in the applicant's proposed College course of study.
- b. Regents examination course scores. These permit the College to judge the applicant's achievement with greater confidence and uniformity, minimizing the difference among high school programs.
 - c. For admission to the Home Economics Education curriculum, the student should have shown competence in high school sciences and mathematics, preferred in this order: chemistry, biology, or physics and mathematics.
 - d. For admission to the *Industrial Arts Education curriculum*, preference will be shown to applicants who present two units of mathematics (including elementary algebra) and two units of science (chemistry and physics preferred).
 - e. For admission to the Vocational Technical Education curriculum, an admissions committee selects applicants according to trade and technical proficiency, personal qualifications, scores on aptitude tests, and the probable need for teachers in each vocational technical area. For information and application forms write directly to the Office of Vocational Education on campus.
6. Satisfactory high school grades.
 7. Satisfactory scores from the New York State Regents Scholarship Examination or the State University Admissions Examination.
 8. At least 16 years of age.
 9. The High School's recommendation.
- Final decision on an application is made on the basis of all of the above qualifications.

APPLICATION PROCEDURE

1. Secure application forms and instructions from the College Admissions Office any time after the beginning of the senior year in high school.
2. Complete the application form and cards and mail them with a \$5.00 application fee (non-refundable) in the addressed envelope accompanying the application forms.
3. Fill out page one of High School Record form (green A-2 form) and submit it to the appropriate high school office for completion and forwarding to the College. Information called for on page four is particularly important in the admissions process.



4. New York State residents must take the New York State Regents Scholarship Examination or the State University Admissions Examination. An examination permit is returned to the applicants after application form and cards are filed. Non-residents of New York State must take the Scholastic Aptitude Test of the College Entrance Examination Board and have the results forwarded to the College.
5. Appear for the personal interview when requested. Applicants living in Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans or Wyoming counties will be invited to the campus for interview when possible. Applicants from other areas of the state will be informed of an appointment when a College representative will be near their homes to complete admissions interviews. All applicants are encouraged to request appointments when they can visit the campus and complete the interview requirement at the same time. Interviews may be scheduled on any day that the College is in session between 9 A.M. and 3 A.M.

Applicants for admission to the *Division of Art Education* must present a portfolio of art work as part of the interview.

6. With the application, high school record, admissions examination scores and interview report, the College may make an admission decision conditional upon completing further requirements. Acceptance at this point requires the applicant to submit an acknowledgment of the acceptance, a satisfactory medical report on a form sent with the acceptance notice, residence card, and a \$50.00 non-refundable deposit on the first semester Student Association collections. (For specific information see "How to Apply for Admission" Booklet).
7. Final acceptance is offered following the receipt from the applicant's high school verifying certification of graduation and satisfactory senior year marks. Acknowledgment of final acceptance is also required before registration is permitted.

Applicants accepted for admission should be present at the Freshman Orientation program. If this requirement is not met, the applicant will not be admitted except by special permission. Those unable to attend this Orientation should notify the Admissions Office. Those absent without permission relinquish their status to those on a waiting list.

Applicants are admitted in September, February and June. Care should be taken to indicate the desired entrance date.

ADVANCED STANDING ADMISSION REQUIREMENTS

1. Applicants for admission with advanced standing must apply to the Admissions Office on an Advanced Credit Application Form which may be secured from the Office.
2. Applicants must submit an official transcript* of all college work taken elsewhere and evidence of honorable dismissal.
3. Applicants must meet all general requirements including personal interview, if required, and health report.
4. Applicants of freshman and sophomore rank are required to take the New York State Regents Scholarship Examination or the State University Admissions Examination. All applicants transferring from other State University units should have copies of their Admissions Examination scores sent to the Admissions Office from the unit previously attended.
5. Transfer Procedures
 - a. Apply to State University (A-1 Form). Admission packets may be obtained from the Admissions Office or by written request.
 - b. Submit High School Record to Admissions Office (A-2 Form).
 - c. Submit the Personal Inventory Form (A-5 Form) from college(s) previously attended.
 - d. Submit official transcript(s) and catalog(s) from college(s) previously attended.
 - e. Submit a list of courses now in progress at college attending.
 - f. Interview may be required if Admission Office finds it is necessary.

A Consideration for Acceptance Will Not Be Evaluated Until All of the Above Conditions Have Been Fulfilled.
6. Completion Dates for Applications and Materials

September Admissions

 - a. Application must be on file by May 1.
 - b. All materials pertaining to transfer except the final transcript must be on file by May 15.

Summer Admissions

 - a. Applications must be on file by May 1.
 - b. All materials pertaining to transfer except the final transcript must be on file by May 15.
7. No student will be admitted to the College until his/her final transcript and all other transfer records are complete. If the final record is not on file the day prior to official registration, the student would stand rejected.

*An official transcript is one mailed directly from the college issuing it, to this College.

8. An applicant from an institution which is not a unit of the State University of New York must have an over-all Grade Point Average of 2.5. Students now attending another unit of the State University of New York will be considered according to State University policy.
9. No student will be accepted who *is on probation* (either academic or social) at another institution. A student who has been dismissed from another institution will not be considered for admission until one academic year has elapsed.
10. Special provisions concerning Normal School graduates will be in effect according to State regulations.
11. a. Credits in academic courses earned ten or more years previous to filing application for advanced credit will be evaluated very carefully prior to being accepted at this college.
 b. Credits in education courses earned five or more years previous to filing application for advanced credit will be evaluated very carefully prior to being accepted at this college.
12. The Admissions Committee will evaluate advanced credit for transfer but will not evaluate the total program of the student in terms of hours to be completed for a degree. The hours required to complete the degree program will be at the advice of the Division Director.
13. Readmission Procedures
 - a. The applicant applies to the Admissions Office for a readmission application, stating the time he desires to re-enter, the reasons for re-entering, and Division re-entering.
 - b.

<i>Semester or Session You Wish to Be Readmitted</i>	<i>Deadline Date</i>
February (2nd Semester)	November 15
Summer Session	Preceding April 1
September (1st Semester)	Preceding May 1
 - c. An applicant who has been on social or academic probation will not be considered for readmission until one year has elapsed.
 - d. The Admissions Office will check the proper offices or divisions for their professional judgment on whether or not readmission should be considered.
 - e. A decision is made by the Admissions Committee, and the applicant is notified.
 - f. The applicant will work out his program with the Division in which he/she is entering.

14. Inter-Divisional Transfer Procedures

- Student must obtain transfer request from the Admissions Office, fill out transfer request form, and return to the Admissions Office.
- The student may, within ten days, be called in for a conference with the Director of the Division for which he/she is applying.
- Application for inter-divisional transfer must be completed as shown below:

Semester or Session You

Wish to Transfer

February (Spring Semester)

Summer Session

September (Fall Semester)

Deadline Date

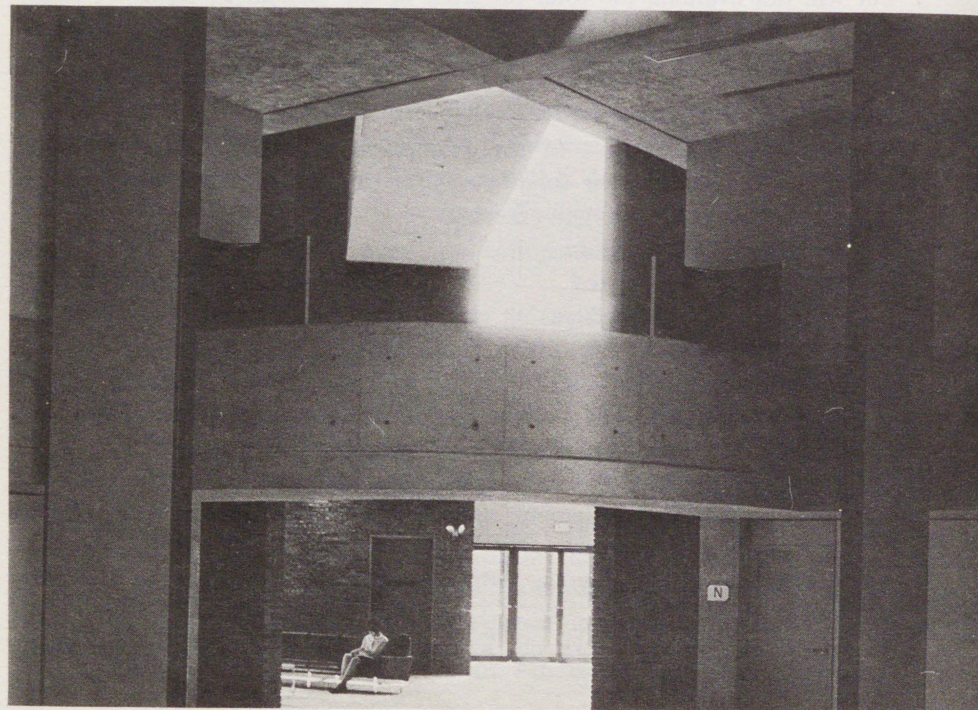
November 15

April 1

May 1

No requests for transfer will be considered after the above deadline dates.

- A student wishing transfer to another Division must meet the requirements of the Division to be entered.
- A student on probation (academic or social) will not be permitted to transfer unless acceptable to the Division to which he is requesting transfer.



STUDENT EXPENSES

Below are listed tuition and fees for residents of New York State. Students from other states pay six hundred dollars tuition each year, payable three hundred dollars each semester.

REQUIRED COLLEGE FEES

<i>Expense Items</i>	<i>First Semester</i>	<i>Second Semester</i>	<i>Total</i>
Tuition	\$200.00	\$200.00	\$400.00
College Fee	12.50	12.50	25.00
Student Association Collections	29.00	29.00	58.00
Insurance Premium	12.00	12.00	24.00
Total	\$253.50	\$253.50	\$507.00
Orientation fee (entering students)	\$3.25	or 3.25	\$3.25

ESTIMATE OF YEARLY EXPENSES

<i>Expense Items</i>	<i>Residence Hall</i>	<i>Commuter</i>
Tuition and Fees	\$ 507.00	\$ 507.00
Books and Supplies*	100.00	100.00
Room ¹	385.00 (double)	—
	310.00 (triple)	—
Board (Breakfast and Dinner)***	435.00	—
Lunches (Not on Contract)	160.00	125.00
Board (Three Meal Plan)***	485.00	—
Personal Items	150-300**	150-300
Travel	120-200	130-170
	\$1747-2087	\$1012-1202

*Art, Home Economics and Industrial Arts students should increase this estimate by the following amounts: Art \$250; Home Economics \$150; Industrial Arts \$150.

**Personal items may vary widely depending upon the individual situation and may include such items as clothing, cleaning, laundry, personal grooming and recreation.

***Optional.

1. All rooms have individual phones (Centrex System).

FEES AND COLLECTIONS

A combined charge of \$58.00 half payable each semester, is collected annually from each student. This fund is apportioned as follows:

1. The College Fee is used to provide equipment and services in College Union Building.
2. The Activity Tax supports student publications, dramatic presentations, musical organizations, film showings, convocations, and social activities.
3. The Athletic Tax supports a comprehensive intramural and varsity athletic program for men and women and admits students to all athletic events at the College.
4. The College Camp Tax is used to develop, equip, and maintain the College Camp for student use.
5. The Health Service Tax helps to provide health services including first-aid, consultations, and other essential health benefits.
6. The Class Dues are used for cultural, social and professional activities which are open to all members of the class. For the Senior Class this includes senior activities.

In addition to the above (not included in the \$58.00) are these fees:

1. The Orientation Fee is a charge of \$3.25 to be paid by Freshmen and transfer students entering in September.
2. The Accident and Sickness Insurance Premium of \$24.00 provides coverage at all times during the college year, on or off the campus, including athletic and camp activities.

REFUNDS

Refunds of tuition as due will be made on a pro-rated basis up to the fourth week of classes of the semester upon written request and recommendation of the Director of the Division.

Refunds of fees as are due will be made on a pro-rated basis up to the middle of the semester after which there are no refunds.

The activity fee collected is completely refunded to a student if and only if the student ceases to be a CSA member within fourteen days of classes. No partial refunds will be made.



STUDENT PERSONNEL PROGRAM

OFFICE OF THE VICE-PRESIDENT FOR STUDENT AFFAIRS

The Student Personnel Staff is responsible for all phases of the student life program on campus which includes:

1. Coordination of the group activity and leadership education program.
2. Provision for individual and group student counseling.
3. Supervision of all residence programs and facilities.
4. Administration of the military affairs program.
5. Provision of an educationally-oriented health program.
6. Administration of the financial aids program.
7. Administration of the Office of Admissions and Records.
8. Administration of Placement Services.

The Student Personnel Council consisting of student and faculty representatives serves as an advisory and policy-recommending group to the Student Personnel Program.

STUDENT RESIDENCES

All students who do not live at home within commuting distance or who do not live with relatives are required to live in residence halls on the campus if space is available.

Residence Halls—Living accommodations for approximately twelve hundred and ten women students and four hundred and fifty men students are provided in ten residence halls. Most rooms have facilities for two students; a few are equipped for triple occupancy. Rooms have beds, built-in wardrobes, dressers, and study desks. Lounges, recreational facilities and laundry rooms with washers and dryers are provided.

Students provide their own pillows, blankets, bedspreads, window draperies, study lamps and irons. Students may provide their own bed linens or use a linen rental service which is available. Meals may be obtained in the three dining halls

and two cafeterias on campus. Applications should be addressed to the Director of Housing, State University College at Buffalo, 1300 Elmwood Avenue, Buffalo, New York 14222.

Off-Campus Residences—Off-campus residence for students in nearby private homes approved by the College supplement facilities on campus if room is not available in Residence Halls. Some homes permit students to earn their maintenance. There are also a few housing facilities in which students provide food and services for themselves. Inquiries regarding off-campus residence and requests to live with relatives other than parents, should be addressed to the Director of Housing.

Residence Registration—A statement of residence is required at the time of Registration. No change in a student's residence can be made without prior approval of the Director of Housing. This regulation applies to both men and women students, including commuters and Buffalo residents.

HEALTH SERVICES

Health Facilities on Campus—The College maintains Student Health Facilities on campus for first-aid and general health services with a main office in South Wing Men's Residence Hall. Registered professional nurses are available twenty-four hours a day. The College physician and part-time physicians are available in South Wing Hall, Monday through Friday, for diagnosis and medical care of students.

Preadmission Health Requirements—All students must secure an examination by a physician, a chest x-ray, a urinalysis and a recent tetanus and smallpox vaccination (within three years) prior to admission.

The Campus Health Program—The College Health Service provides medical examinations without charge in certain special cases, as well as for all athletes prior to their engaging in competitive sports. All students approved for student teaching are required to have a chest x-ray for the detection of tuberculosis immediately preceding a student teaching assignment. The prospective student teacher is responsible to obtain his x-ray either through county facilities or at his own expense by a radiologist of his own choosing.

Necessary laboratory tests are made when advisable. From time to time certain preventive health measures are offered to students such as flu vaccine. Immunizations are given only with the consent of the parent to students under 21 years of age. Parents and students will be informed at the time of any new undertaking. It is highly recommended that parents consent to have their sons and

daughters participate in these programs for the optimum health of the College community.

The College reserves the right to refuse any student admission to class who fails to take the required physical examination, chest x-ray and/or immunizations.

Community Medical Resources—The College maintains a close relationship with hospitals and selected medical specialists in the community as an additional safeguard to the health of its students.

Charges for Health Program—A Health Service Fee, part of the Student Association Collections, helps maintain the health services provided for all students.

Insurance—All students must enroll in the Group Health and Accident Insurance Policy selected by the Student Association or present evidence of membership in some other satisfactory health and hospital-insurance plan.

COUNSELING SERVICES

The Office of the Vice-President for Student Affairs provides individual and group counseling services for all students. Special referrals are made to other services on and off the campus for those needing them.

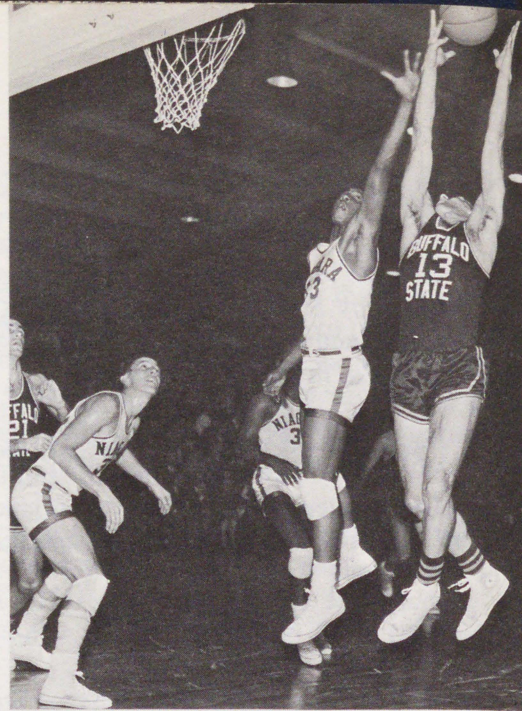
The Faculty Adviser Program—Each student meets several times during the year with his Faculty Adviser in individual conference and group sessions. The Adviser, well-informed of the progress and problems of the student, helps him develop personally and professionally.

Junior Counselors—Selected Juniors serve as counselors to new students during their first year and help them adjust to college life.

Freshman Orientation—The first week of the fall semester, known as New Student Days, introduces the Freshman to college life, traditions, academic offerings, campus facilities, and student activities. As a concluding feature students are encouraged to attend college-sponsored week-end camps. An Orientation course is required during the first semester for every new student.

OR. 100 Orientation—Designed to assist entering students in their adjustment to the college environment through a study of the college society, the issues related to college life and the students' role and purposes. Required of all students for graduation. *One hour per week. No credit.*

Individual and Group Counseling is available to students with academic, personal, social, or personality problems. Many students are self-referred for a considerable variety of difficulties, such as slow reading, poor study habits, or disturbed concentration and personal, social or emotional problems. Faculty refer absentees as well as those having various other difficulties. The Housing Staff and Probation Appeals Board regularly refer those having special problems. Probation students are invited for consultation.



STUDENT ACTIVITIES

The campus activities reflect the interests and needs of students. Some provide for cultural development, social relationships, leadership training, civic responsibilities and spiritual enrichment; others aid students to select hobbies, exercise special abilities, and grow professionally.

STUDENT GOVERNING GROUPS

All students upon matriculation, become members of the College Student Association. The Association has three distinct branches:

1. *House of Representatives.* It coordinates college-wide programs through its administration and delegation of responsibility to various commissions, boards and special committees.
2. *House of Finance.* Students levy their own activity tax and through the House of Finance obtain experience in the distribution and control of these funds.
3. *Judicial Council.* This branch determines the constitutionality of all legislation brought before them. Along with arbitrating disputes between C.S.A. Organizations or branches of government, they would give opinions on the interpretation of the C.S.A. constitution and constitutions of all C.S.A. approved organizations.

Membership on these three branches of government is open to all students through all college elections held in the spring of each year.

Commissions are administrative organizations of C.S.A. which coordinate, organize, and administer areas defined and established by the House of Representatives. Chairmen of these commissions are elected by the entire student body in the spring of each year. Members of the commissions, other than those elected, will be seated by the chairman of each commission and approved by the House of Representatives.

Some student activities have been so long a part of College life that they have become "traditions": Frosh-Soph Dazing, Homecoming, Dean's Tea, College Holiday Week, State Fair, Parents' Weekend, Moving-up-Day and Senior Week. All these activities are under the coordinating group called Traditions Commission.

Traffic Commission is the administrative organization of the C.S.A. which coordinates, organizes and administers the traffic control on the campus. Other commissions include: Community Services and Campus Services.

The four classes conduct business and carry out special activities under the guidance of the elected class officers.

The Boards are semi-dependent organizations which have as their primary purpose—service to C.S.A., and are totally or partially dependent on C.S.A. funds. Membership on the Boards is open to all interested students.

COLLEGE UNION BOARD

The College Union, "the living room of the campus," unites the College community through social, educational and cultural experiences. The Union provides many opportunities for democratic living, for student leadership, for creative self-expression, for social contact with the faculty, and for the development of a mature sense of social responsibility.

An on-going recreational program throughout the year is centered in the College Union. These activities are essentially provided by student activity taxes without additional costs to students, and are planned and carried out by the College Union Board. They are varied in nature to provide for a wide range of interest. Some of the most popular activities include: Union-Open Houses, film showings, dances, coffee hours and seminars.

CONVOCATIONS BOARD

Convocations held throughout the year provide special programs which include distinguished political commentators, literary personages, musical programs, and other events that together make a rich phase of college life.

CAMP BOARD

The College Camp, one of the major recreational features of the College, consists of four hundred and thirty-five acres of rural landscape, partly wooded, partly open, located in Cattaraugus County. Its hills and numerous ponds are ideal for skiing, skating, and other winter sports. Maple groves, wooded areas, open meadows, and streams make it a delightful summer recreation spot. An expansive lodge, equipped with large fireplaces, provides pleasant accommodations for fifty students for over-night or weekends. The Camp is open for use of all student groups and alumni.

ORIENTATION BOARD

A program for new students and their parents is organized by Orientation Board. It is designed to welcome and introduce them to the campus, through the aid of student counselors. The new student days program includes parents' reception, dances, tours, and luncheons. In order that upper classmen may identify and help Freshmen through those first weeks, each Freshman is presented with a colorful beanie.

HEALTH BOARD

A health service fee, part of the student association collections, helps maintain the health services provided for all students. See index for Health Services.

MUSIC BOARD

This is a coordinating group designed to foster appreciation for music of all types through various performing groups including: Band, Orchestra, A Cappella Choir, Men's and Women's Glee Clubs, and Faculty and Student Recitals. Membership is determined by audition in order to determine music ability in areas of tone, intonation, and technical facility. Each organization presents several concerts on campus as well as traveling to local schools and churches. The A Cappella Choir makes an annual performing tour.

PUBLICATIONS BOARD

College life is reflected and recorded by four publications, each edited by a student staff whose membership is open to all students.

The *Record*, the weekly newspaper, features current news of campus events and expresses student opinions on many issues, local, national and international.

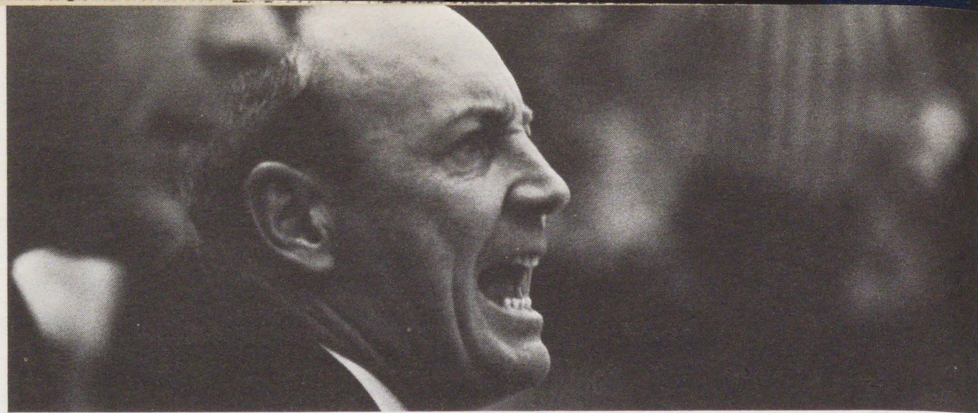
The *Elms*, the annual yearbook, contains a record of the Senior Class and other College organizations.

The *Elm Leaves*, an annual literary magazine, contains selected creative writings and art work of the students.

The *Handbook*, containing brief general information about the Student Government, College programs and activities policies is published by a student group during the summer.

CASTING HALL BOARD

Casting Hall, the student dramatic organization, produces several plays each



year. It offers, in addition to opportunities for acting, experiences in costume and stage set design and construction.

DEBATE BOARD

The Debate Club is open to all interested students, and club members participate in several inter-collegiate tournaments as well as local programs.

ATHLETIC BOARD

The College provides through the Department of Health, Physical Education and Recreation a balanced and extensive program of athletics for all students, including varsity, freshmen and intramural activities.

The intercollegiate athletic program includes teams in baseball, basketball, cross country, golf, soccer, tennis, track and swimming. Varsity teams have won several championships in their respective areas. The annual athletic schedule includes many of the leading colleges in the East. The College is affiliated with the SUNYAC Conference, the National Collegiate Athletic Association and the National Association for Intercollegiate Athletics.

Through these intercollegiate sports activities students are able to earn a Freshman Sweater, Varsity Sweater, Varsity Jacket and the College Blanket. All College athletics are coordinated by the Student Athletic Board and supported by the Athletic tax. Students are admitted to all College sports events without cost.

The Men's Athletic Association, financed out of student athletic tax, sponsors Intramural athletic activities for men. These activities include basketball, bowling, cross country, badminton, golf, softball, swimming, table tennis, paddle ball, handball, squash, football, tennis and volleyball. Regularly scheduled contests in most of these activities are organized in the fall and spring semesters. Women's recreational activities, through the Women's Recreation Association, include intramural competition in archery, badminton, basketball, bowling, fencing, softball, swimming, tennis and volleyball. An opportunity is also given for participation in camping, field hockey, horseback riding, golf, folk dance, modern dance, synchronized swimming and table tennis.

C.S.A. APPROVED ORGANIZATIONS

RECREATIONAL

Cheerleading Club is open to any woman student. Tryouts are in the early fall. The Cheerleaders actively support the College athletic teams at home and away.

Chess Club is open to all college students who play chess. Competition is arranged among club members as well as with other schools in the area. The club also competes in regional as well as national tournaments.

College Parachutists is a club open to all students, 18 years or older, who meet the physical and medical requirements. Its purpose is to foster interest in parachuting.

Karate Club was formed for the purpose of providing instruction, molding an appreciation of this Oriental form of self-defense, forming a brotherhood of karate students. Membership is open to any student of this college who is interested in karate.

Ski Club is open to all students at the College who are interested in skiing.

Varsity S Club provides a common meeting ground for men interested in furthering intercollegiate athletics. Membership is open to men who have earned a major varsity athletic award.

Crew, Hockey and Wrestling—club status has been given to crew, hockey and wrestling with the hope they will develop into intercollegiate programs in the near future.

PROFESSIONAL AND CULTURAL

Biology Club was formed to broaden and enlighten our understanding of biological sciences. Any student of State University College at Buffalo may join by payment of yearly dues of \$1.00 at any meeting.

Council for Exceptional Children is an affiliate of the national organization of the same name. Membership is open to college students interested in teaching children who are mentally handicapped, emotionally disturbed, blind, or partially sighted, deaf or hard-of-hearing, orthopedically handicapped or speech defective. Regular meetings give the members opportunities to meet and talk with specialists in the field. Visits are made to special schools and residential institutions.

Daniel Upton Chapter of the Student Education Association of New York (SEANY)—explores the professional aspects of teaching, through monthly meet-

ings featuring stimulating speakers, pertinent films and panel discussions. Local members who enroll in the New York State Teachers Association and the National Education Association, receive the monthly journals. All students who are interested in becoming teachers are welcome.

The Home Economics Club, affiliated with the American and New York State Home Economics Association, provides for the development of leadership and provides services to the College and the community.

The Industrial Arts Club, open to all students and faculty in the Industrial Arts Division of the College, exists to promote high standards of professionalism in Industrial Arts education.

Interim Group is an informal social fellowship, co-educational and school centered, aiming to integrate older students into campus life with academic and cultural immediacy.

The International Circle's objectives are to build a close relationship on a personal level between the foreign students and the American students in order to promote cultural and educational understanding.

Linus Pauling Chemistry Society, open to all interested persons, is organized to promote and stimulate interest in Chemistry and the related sciences, as well as to encourage independent study.

Mathematics Club, open to all interested persons, is designed to promote a better understanding of mathematics in its relation to life, and to encourage independent study.

Social Studies Club, open to any registered undergraduate social studies major, is an educational, professional and social organization.

Le Cercle Francais, open to all students with an interest in the French culture, offers an opportunity for students to come in contact with the French language, civilization and people.

RELIGIOUS GROUPS

Council of Religious Organizations — A coordinating group of all religious organizations.

The Christian Science College Organization is comprised of Christian Science students who are eager to increase their understanding of this religion. Inspirational meetings are held weekly to help the members make practical the concepts which this religion teaches. Meetings are open to the student body.

Hillel, an organization open to students interested in the Jewish faith, offers religious, cultural and social activities. Programs, including guest speakers, dis-

cussions, holiday ceremonies, music and folk dances, develop deeper understanding and appreciation of the Jewish heritage.

Inter-Varsity Christian Fellowship, an international and inter-denominational organization active on college campuses the world over, emphasizes positive Christian living based on teachings from the Scriptures.

The Lutheran Student Association assists students in the study and appreciation of Lutheran doctrines and beliefs. It sponsors an active program of forum and fellowship meetings, study groups, retreat conferences, and service projects. The national L.S.A. participates in the United Student Christian Council and shares in the life of the World Student Christian Federation.

The Newman Movement promotes the spiritual, intellectual and social growth of Roman Catholic students. Besides providing formal worship opportunities for students, its activities include the Newman Institute of Studies (a four-year curriculum of studies in Theology and Philosophy), lectures, retreats, discussion groups, and social activities. It maintains the Newman Center, adjacent to the campus, which includes a chapel, classrooms, recreation rooms, student lounge and library. The Newman Movement is affiliated with the National Newman Movement.

Student Christian Association is an organization of all Protestant denominations for fellowship and community service. The organization is introduced to Freshmen by "The Krisis," an occasional publication which is sent out to the members.

Wesley Fellowship — To lead students to Jesus Christ, to deepen Christian faith, to foster Christian education, to offer projects of service, to interpret Christian vocation and to deepen a sense of world Christian community.

HONORARY GROUPS

Epsilon Pi Tau is the Tau chapter of the national fraternity which limits its membership to Industrial Arts majors having an academic average in the upper half of their class. Its objectives are to promote research, to provide desirable social experience, and to recognize excellence in the crafts.

Kappa Delta Pi is the Gamma Mu chapter of the national society. Members must be of junior standing with six hours of credit in education courses and be in the upper quartile of the College. Candidates for membership must reveal exceptional interest in education by a letter submitted to the organization and must also manifest desirable personal traits and leadership qualifications.

Phi Upsilon Omicron is the Mu chapter of the national fraternity. Home Economics majors from the upper classes having achieved high scholastic records and having demonstrated professional leadership are selected as members. It provides for personal and professional development of its members.

SOCIAL GROUPS

Twelve fraternal organizations on campus, five open to men and seven open to women, select their members by invitation. The fraternities are Alpha Xi Omega, Delta Kappa, Gamma Chi, Psi Phi, and Sigma Tau Rho. The sororities are Alpha Sigma Pi, Alpha Tau Sigma, Delta Sigma Upsilon, Pi Kappa Rho, Pi Omega Nu, Sigma Sigma, and Theta Sigma Theta.

Inter-Sorority Council and *Inter-Fraternity Council* unite the women's and men's groups, respectively, in many phases of the greek program. *Inter-Greek Association* is delegated responsibility for major activities involving all "Greeks."

Boosters of College Morale is a social club open to any male student, graduate, or faculty member of the College. Its purpose is to promote better college morale and to give special support to campus activities.

State Spartans is a social group open to all men. The club's purpose is to foster the social, educational and spiritual development of its members.

State Titans is a men's organization that provides both social activities and service to the College community.

POLITICAL GROUP

Students for Democratic Society is an association of students which seeks to create a college community that concerns itself with issues of both a political and educational nature.



STUDENT FINANCIAL AID

The question of how to finance a college education is a perplexing and disturbing one for many college students. Recognizing this, the Office of the Vice-President for Student Affairs has provided a financial aids office that will give assistance to students in understanding and solving this problem.

Operating on the premise that every qualified student deserves an education, this College is participating in the Federal student aid programs as set forth in the National Defense Education Act, the College Work-Study Program of the Economic Opportunities Act and the Educational Opportunities' Grants of the Higher Education Act of 1965.

With the help of Federal Assistance, wise fiscal planning by parents, and timely consultation with the financial aids counselors, nearly every student that is academically qualified will be able to attend and obtain a college education — financially speaking.

HOW TO APPLY

In applying for most types of financial aid, a student should submit a Parents' Confidential Statement to the College Scholarship Service, Princeton, New Jersey. This form can usually be obtained from the high school counselor or by writing the Coordinator of Financial Aids of this College.

In many instances it is also necessary to obtain additional forms from the Financial Aid Office for the types of aid sought and should be submitted in accordance with the deadlines set forth in this catalog.

For further information write to:

Coordinator of Financial Aids
State University College at Buffalo
1300 Elmwood Avenue
Buffalo, New York 14222

Appointments to discuss problems or questions with the coordinator may be made in Room 212, Rockwell Hall.

NEW YORK STATE AID

New York State offers various types of financial assistance to qualified college students who are State residents. It is very important that students seeking such aid obtain full information and promptly meet each application deadline.

Regents College Scholarships—New York State residents who plan to attend college and qualify in a competitive examination during final year of high school are eligible. Children of deceased or disabled veterans may qualify for 500 separate awards. A student that receives a Regents Scholarship will also receive a Scholar Incentive Award. With the combination of these awards a student can receive a minimum of \$350 per year up to a maximum of \$450 per year depending on need and the tuition paid.

Scholar Incentive Program—New York State residents who demonstrate a capacity to pursue a degree and plan to attend college or graduate school, and those who are presently in college or graduate school and maintain satisfactory academic performance are eligible. The award ranges from \$100 to \$400 yearly for undergraduates; \$200 to \$600 for graduates depending on need and tuition paid.

State University Scholarship—This scholarship is available for those whose parental income falls in the net-taxable income bracket of \$1800 or less. Application is made at time of registration in the financial aids service line.

Candidates should seek directions from their high school principal and/or guidance counselor, or write: The University of the State of New York, The State Education Department, Regents Examination and Scholarship Center, Albany, New York 12224.

SCHOLARSHIPS

Scholarships are generally offered to students showing outstanding qualities of leadership, academic capability and performance, and potential for teaching. Evidence of financial need is usually important in the selection of scholarship winners. The College offers scholarships to entering freshmen and upperclassmen, administers scholarships offered by outside organizations and provides an information service on outside scholarships.

COLLEGE SCHOLARSHIP AWARD

Established in 1957, the first awards were made in 1959 to students evidencing outstanding teaching potential and financial need. A fund of approximately \$10,000 is available annually for grants of \$100 to \$500 depending on financial need. Though a majority of these awards are made to upperclassmen, several awards are made to entering freshmen. THIS AWARD IS THE ONLY

SCHOLARSHIP ASSISTANCE MADE AVAILABLE BY THE COLLEGE ITSELF TO ENTERING FRESHMEN. Letter of inquiry should be submitted to the Admissions Office at the time of application to the College.

OTHER SCHOLARSHIPS

Approximately twenty-five scholarships are awarded annually to upperclassmen. These awards range from \$25 to \$200 in value and usually are made to students for outstanding performance in their major field who show evidence of financial need. These and other scholarships of interest follow:

Alumni Scholarship—Established in 1962, by the Alumni Board, three scholarships are awarded annually at Moving-Up Day. Applications are received by the Alumni Board before May 1.

The Buffalo Council of Parents and Teachers Scholarship—Several scholarships of one hundred dollars each are awarded to students in an Education Curriculum annually by the Buffalo Council of Parents and Teachers. Candidates must be graduates of Buffalo Public High Schools and residents of Buffalo. Application is made through the Student Financial Aids Office.

Camp Lee Mar Scholarship—Awarded annually to a deserving Junior who is majoring in the area of Mental Retardation. Selection is made by an Exceptional Education Faculty Committee in conjunction with the Financial Aids Office.

College Club of Buffalo, Inc. Scholarship — This scholarship of \$800 is awarded to an entering freshman woman who is a commuter student. The award will be \$200 per year for four years providing the student maintains good academic standing. Inquiries should be directed to Dr. John Palmer in the Admissions Office.

Luella Chapman Scholarship — Alpha Tau Sigma Sorority awards an annual scholarship to a non-sorority woman who is judged to be of high character and leadership. This scholarship is made anonymously to a woman student who is in financial need. The person is selected by the faculty adviser of the Sorority and the Coordinator of Financial Aids.

Exceptional Education Scholarships—Grants of financial assistance to students majoring in mental retardation, physical handicap, speech pathology and audiology are often available through fraternal organizations such as the Elks, Lions, and National Association for Retarded Children. State and Federal monies awarded to the division are available for senior students in these fields. Contact the Director of the Division of Exceptional Children Education.

Raymond M. Fretz Scholarship—Established in 1952 by Delta Kappa Fraternity to honor the former Dean of Men. It is awarded annually to a man and a woman who are selected by the fraternity for their outstanding citizenship and scholarship.

Anna M. Gemmill Scholarship in Chemistry — This annual award of \$100 is contributed by Miss Margaret V. Dupré, Professor Emeritus of Chemistry, to the outstanding junior co-ed in Chemistry. Selection is made by the Department of Chemistry.

Blanche E. Kelsey Scholarship—Established in 1964 by the New York State Federation of Home Bureaus. This scholarship is awarded annually to a Home Economics student by a committee composed of members of the Home Economics Faculty and representatives of the New York State Federation of Home Bureaus. It consists of the income from an investment of \$3,000 given to the College by the New York State Federation of Home Bureaus. Application forms are available in the Office of the Director of Home Economics.

Methodist Mothers' Club Scholarship—An annual award that is open to all students. Selection is based on need with academic consideration and is made by the Club through the Financial Aids Office.

Nassau-Suffolk Home Economics Extension Service Scholarship—Established in 1960 by the Home Economics Extension Service in Nassau-Suffolk Counties on Long Island. This scholarship for Home Economics students is awarded every three years. It is made possible through donations by members of the Home Economics Extension Service in Nassau and Suffolk Counties on Long Island. Application forms are available in the office of the Director of Home Economics.

Ontario County Home Demonstration Scholarship—Home Economic majors from Ontario County (first choice) will be granted a scholarship on the basis of financial need, scholarship and leadership. For further information contact the Home Economics Office.

Pi Kappa Rho Scholarship—Awarded annually by the sorority, this scholarship is presented to a man or a woman selected on the basis of financial need, scholarship, and the potential for teaching.

Grace A. Powell—Home Bureau Scholarship—Established in 1953 by the New York State Federation of Home Bureaus. This scholarship is awarded annually to a Home Economics student by a committee composed of members of the Home Economics faculty and representatives of the New York State Federation of Home Bureaus. It consists of the income from an investment of \$5,000 given to the College by the New York State Federation of Home Bureaus. Application forms are available in the office of the Director of Home Economics.

Alma Roudebush—Phi Upsilon Omicron Scholarship—Created in 1966 by the Mu Alumnae Chapter of Phi Upsilon Omicron, this award is for Home Economics majors. For further information contact the Home Economics Division Office.

Mildred L. Sipp—Phi Upsilon Omicron Scholarship—Established in 1957 by the Mu Alumnae Chapter of Phi Upsilon Omicron. The scholarship is awarded

annually to a senior student who is majoring in Home Economics. Applications will be received from Juniors in the Home Economics Division during the month of April. Application forms are available in the Office of the Director of Home Economics.

Mary S. Switzer Scholarship—Established in 1962 by the Buffalo and Erie County Extension Service. This scholarship is awarded annually to a Home Economics student by a committee composed of members of the Home Economics faculty and representatives of the Buffalo and Erie County Extension Service. It consists of the income from an investment of \$5,000 given to the College by the members of the home demonstration units of the Buffalo and Erie County Extension Service. Application forms are available in the Office of the Director of Home Economics.

War Orphans' Educational Assistance Act of 1956—Educational benefits are provided to children of veterans who die in service or as a result of a disability received while in the service during World War I, World War II or the Korean Conflict. The educational allowance of \$110 per month for four years of college is paid to full-time students who are between the ages of 18 and 23 and under certain circumstances to children under 18 years of age. Students who believe they may be eligible for these benefits are urged to discuss the matter with the Coordinator of Financial Aids or a representative of Veterans Administration.

Wheelock Scholarship—Since 1931 a cash award is granted annually by the New York State Association of Secondary School Administrators to a male student in the Junior Class who shows promise of becoming an outstanding school teacher or administrator. The candidate is recommended by the Director of the Secondary Education Division.

Women Teachers Association of Buffalo Scholarship — Several scholarships are granted to upperclass women who are planning on entering the teaching profession. Applications are reviewed and selection is made by the Financial Aids Office. They are awarded once a year, usually in the Fall, and are based on need and academic excellence.

SCHOLARSHIP INFORMATION

Many scholarship funds have severely limiting geographical, religious, curricula, occupational, or other criteria. The outstanding student, however, who is willing to do the research required to find a foundation which does not restrict him from applying, and who is willing to write the necessary letters, **SHOULD BE ABLE TO GAIN SCHOLARSHIP ASSISTANCE**. Sources for this information are available in the Student Financial Aids Office. Entering freshmen will also find that their high school guidance counselors have information about scholarships awarded by organizations and foundations in their home communities.

EDUCATIONAL OPPORTUNITY GRANTS

Enacted late in 1965 this new program is designed to aid the student, for whom a college education is almost financially impossible to obtain. A grant of \$200 to \$800 (or one-half of his need, whichever is less) is given to a student in accordance to his total needs as seen in light of his family's resources. It is granted only to full-time undergraduate students who maintain good academic standing and who are citizens or permanent residents of the United States. Those students that maintain an average that places them in the upper 50 percent of their college class will receive an additional \$200 aid the following year. Application deadline dates are the same as those of the National Defense Student Loan.

LOANS

Loans are more generally available now than at any other time in the history of American higher education. In addition to evidence of financial need, students usually must be in good standing at the College and willing to take responsibility for the earliest possible repayment of the debt. In some cases, repayment may be delayed until the student has graduated from the College.

COLLEGE LOAN FUNDS

Short-Term "Emergency" Loans — The Financial Aids Office administers several small loan funds. Students may borrow as much as \$35.00 on short notice. All enrolled students are eligible for these interest-free loans. Loans must be repaid within three months.

Delta Kappa Clifford Braun Loan Fund — Established in 1959 by the Fraternity and the parents of Clifford Braun in his memory.

Faculty Wives Club Emergency Loan Fund — Established in 1951 and supported annually through generous contributions.

Memorial Student Aid Loan Fund — Established in 1954 by the Dean of Students Office from memorial gifts for students.

Morton R. Lane Fund — Established in 1964 in memory of Mr. Morton R. Lane, former Senior Financial Secretary of the College.

The Catherine E. Reed Loan Fund — Established in 1955 to honor the former Associate Dean of Students, Miss Catherine E. Reed. It has since had contributions made in her memory.

Spartans Club Loan Fund — Established in 1958.

LONG-TERM LOANS

The Financial Aids Office administers several long-term loans. Students may borrow as much as \$150. Only students who have been enrolled at the College for one semester and who are in good standing are eligible for these interest-free loans.

Alcoa Foundation Loan Fund — Established by the College from gifts received from the Alcoa Foundation of Pittsburgh, Pennsylvania.

Business and Professional Women's Club of Buffalo, Inc. Loan Fund — Established in 1959 to assist young women residents of Buffalo to meet unexpected expenses in connection with their college careers.

Hube Coyer Loan Fund — Established in 1956 to honor Professor Coyer, former coach of the basketball team.

Delta Kappa Gamma Emergency Loan Fund — Established in 1955 by Delta Kappa Gamma, the Honorary Women Teachers Organization.

Faculty Wives Club Loan Fund — Established in 1957, this fund has continued to grow in order to help meet the needs of students.

Alice Osgood Hamilton Loan Fund — Established in 1956.

The Harry J. Steel Loan Fund — Established in 1955 to honor the former Director of Education.

The Residence Center Council Loan Fund — Established in 1955 to grant loans to students who are living away from home.

Rita Viette Memorial Loan Fund — Established in 1958 from the contributions received in memory of Rita Viette by students, faculty and her parents.

OTHER LOAN FUNDS

National Defense Student Loan — Full-time college students and students carrying at least one-half the normal academic workload in good standing who are citizens or permanent residents of the United States, and who show evidence of financial need may borrow as much as \$500 per semester, \$1,000 per year and \$5,000 for their college career. Repayment begins nine months after leaving college and may be spread over ten years. Three per cent interest begins after leaving college. There is no interest while the student is enrolled full-time. Those who serve as full-time teachers in an elementary or secondary school in a non-depressed area and in institutions of higher education may have 10 percent of the loan cancelled for each year of full-time teaching up to 50 percent of the loan. Those that teach in a depressed area, as defined by the government, may have 15 percent of their loan cancelled per year of teaching up to 100 percent of the loan.

Applications are available and due at the dates noted below. Students applying

after the due dates listed below should consider a bank loan under the New York Higher Education Assistance Corporation.

<i>Semester</i>	<i>Application Available</i>	<i>Application Due</i>
Fall	January 3	April 30
Spring	October 1	November 30
Summer	January 3	April 10

New York Higher Education Assistance Bank Loans—Full-time and part-time students who are residents of New York State and show evidence of financial need may borrow under this plan from a local bank in amounts as follows: Freshman—\$750, Sophomore—\$1,000, Junior—\$1,250, Senior—\$1,500. Graduate—\$1,500, and Graduate (part-time)—\$750. Repayment begins sixty days after leaving college and may be spread over six years. There is no interest while attending college and three percent after leaving college. Applications may be secured from most banks or the Financial Aids Office. Usually the student must be a resident of a community considered by the bank to be in their lending area. Students should apply to a local bank where they, or their parents, have been customers or depositors. Application may be made at any time.

Alumni Association Loan Fund—Second semester Seniors in good standing are eligible for interest-free loans up to \$300, repayable within eighteen months after graduation.

Elizabeth C. Lange Loan Fund—Established in 1925 by the Alumnae of the Home Economics Division as a memorial to Miss Elizabeth C. Lange, the first director of the Home Economics Division. It is an interest-free loan fund for Home Economics students. Application forms are available in the Office of the Director of Home Economics.

New York State Home Economics Association Loan Fund—Established in 1962 by the New York State Home Economics Association. It is an interest-free loan fund for Home Economics students. Application forms are available in the Office of the Director of Home Economics.

Vocational Technical Education Certificate Program Alumni Organization Loan Fund—Established in 1964 by the Vocational Technical graduates of the teacher certificate program. It is an interest-free loan fund for Vocational Technical students. Information and application forms are available in the Office of the Director of Vocational Technical Education.

LOAN INFORMATION

The Coordinator of Financial Aids maintains contact with the following organizations which make loans to some students according to special criteria:

American Association of University Women
New York State Congress of Parents and Teachers, Inc.
Rotary Club of Buffalo

High school guidance counselors have information about loans made by organizations in the student's home community.

In regard to the payment of emergency loans, including deferred payments at the beginning of school, a student who is delinquent for more than 30 days in his repayment, will face the possibility of suspension from classes and a "hold" placed on his records until the debt is taken care of. (A hold on records prevents further registration, issuance of a transcript or graduation.) In terms of life's responsibility a student who allows himself to gain a bad credit rating in this manner should not expect further financial assistance until it is proven he can handle same.

PART-TIME AND SUMMER EMPLOYMENT

The Student Part-Time Employment Service assists students to meet some of their expenses through part-time work on the campus or in the community. Students seeking summer employment have an opportunity to study job opportunities at camps, resorts and in business and industry. The Service operates under the direction of the Student Employment Counselor.

PRELIMINARY CONSIDERATION

The experience of college students has proved the advisability of counting on part-time employment for only incidental and not essential expenses. The student is expected to give serious consideration to the additional demands which part-time employment will place on his time and energy. The College recommends fifteen hours of work a week as a maximum. Students should also make a realistic appraisal of their total financial situation prior to seeking employment. The Coordinator of Financial Aids will assist students in making a sound appraisal of their financial problems and suggest various solutions.

TYPES OF JOBS

Approximately twenty-five per cent of the students at the College earn one-quarter or more of their collegiate expenses. Since the opportunities are varied, it is possible only to list the major types of employment. They are: Campus Food Service—waitress and dishwasher; College Offices—clerk, typist, stenographer;

College Buildings—custodial and cleaning; College Library; Laboratory Assistants; Tutoring and Faculty Assistants.

Each job is a private arrangement between the student and the employer. On-campus wages vary from \$1.00 to \$2.00 per hour, depending on the skill or physical labor required. Off-Campus employment is available; however, travel time and transportation need to be taken into consideration in determining real income.

Most employer requests vary between twelve and fifteen hours of employment per week. Some openings occur which enable the student to work fewer or more hours per week.

The Work-Study Program under the Economic Opportunity Act became available in January, 1965 and has greatly increased student employment on campus. Inquiries concerning part-time employment should be addressed to:

Student Employment Office
State University College—College Union
1300 Elmwood Avenue
Buffalo, New York 14222

VETERANS AND MILITARY AFFAIRS

Disabled Veterans and War Orphans' Benefits—All disabled veterans and children of deceased veterans who plan to use their educational benefits under Public Laws 815 and 634 must register at the beginning of each academic year at the Financial Aids Office. In addition, those students who receive war orphans' benefits are required to submit monthly certifications of attendance to the Financial Aids Office. Those students who are planning to obtain benefits for the first time must make an application for educational benefits to the Veterans Administration. It is recommended that this application be made before registering at the College.

Educational Assistance for Cold War Veterans—This law is in effect as of June 1966 and is designed to aid all honorably discharged veterans (who have served 181 days or more of continuous active duty) since January 31, 1955.

The qualified veteran will receive one month's benefits for each month served up to a maximum of 36 months at the following rate:

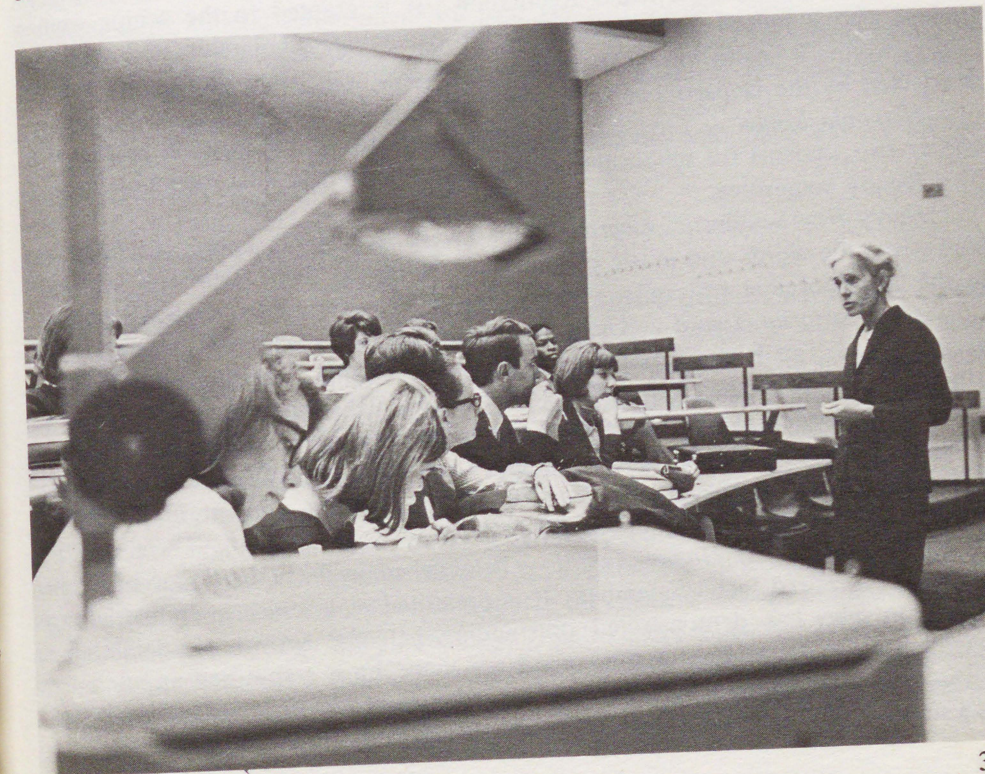
School:	No Dependents	One Dependent	Two or More Dependents
Full-Time	\$100	\$125	\$150
$\frac{3}{4}$ Time	75	95	115
$\frac{1}{2}$ Time	50	65	75
Less Than $\frac{1}{2}$ Time	Payment computed at the rate of the established charges for tuition and fees or \$100 per month for a full-time course, whichever is the lesser.		

For further information, contact your local Veterans Administration or the Coordinator of Financial Aids.

Platoon Leaders Class—Qualified undergraduates may enroll in the Platoon Leaders Class, United States Marine Corps, which consists of two summer training periods of six weeks each. Upon successful completion of the Bachelor's degree and this course, a student will be commissioned a Second Lieutenant in the United States Marine Corps Reserve. There is no military training during the academic year. Those who are enrolled in this program may be deferred from the draft.

Selective Service—Every man is required to register with a Selective Service Local Board within five days after he becomes 18 years of age. If a man is away from home at the time he must register, he need not return home. He must, however, register at the nearest Local Board office.

The law requires every registrant to keep his Local Board informed of changes of address, and of other changes in his individual situation within 10 days after they occur. The Registrar's Office in Rockwell Hall will, only at the written request of the student, submit information regarding his grades or rank in class to his Local Board. The Office will also assist students who have questions regarding selective service.



AWARDS

The College recognizes student excellence and achievement by conferring awards for outstanding scholarship, leadership, character and participation in various activity programs.

Bishop Honor Award — Given by Delta Sigma Upsilon to honor Dr. Elizabeth Bishop, a former member of the faculty. The award consists of a silver medal which is presented to a senior woman chosen by the sorority for outstanding scholarship, leadership and character.

Delta Kappa Athletic Award — First given in 1935 by Delta Kappa Fraternity. It is presented to a male senior student who is selected as the most outstanding individual in intramural and varsity sports by a Faculty Committee.

Delta Kappa Award for Character, Leadership and Scholarship — Established in 1935 by Delta Kappa Fraternity, this Gold Medal Award is presented to a male senior student who is chosen by a Faculty Committee for outstanding character, leadership and scholarship.

Ruth Elliott Houston Honor Award — Established in 1953 by the Women's Recreation Association in honor of the former chairman of the Department of Health, Physical Education and Recreation. It is granted to the senior woman student who is judged to be outstanding in leadership, scholarship and participation in women's health, physical education and recreation activities. The recipient is selected by the Department from nominations submitted by the Association.

Hispania Medal — First awarded at the College in 1952. It is presented to one or two students for scholastic achievement in Spanish. The selection is made by a faculty committee.

Harry Ray Scholastic Award — This award is given in honor of Harry Ray who wrote the words and music of the Alma Mater by Sigma Tau Rho Fraternity to the senior of that fraternity who has the highest cumulative average.

Arnie Schorno Award — Given in memory of Arnie Schorno, a former member of Sigma Tau Rho Fraternity, to the senior of this fraternity who has contributed the most to the College and to Sigma Tau Rho Fraternity.

Sigma Upsilon English Award — Established in 1932 by Alpha Delta Chapter of Sigma Upsilon, national honorary literary fraternity, and given to a graduating senior man who has been judged to be the outstanding student in English as selected by the Department of English.

Walter B. Weber Honor Award — Established in 1949 in honor of Walter B. Weber, a retired faculty member. It is presented to a senior in Industrial Arts Education who has demonstrated outstanding personal growth, leadership and scholarship. Nominations for this award are made by a committee appointed by Sigma Tau Rho Fraternity. The final selection is made by the Director of the Industrial Arts Education Division and the Sigma Tau Rho Committee.

Women's Recreation Association Awards — These awards, first established in 1943 by Ruth Houston, Gertrude Roach and a committee of students, are given for participation in the activities under the W.R.A. program. The first award, a gold bracelet and a small charm, is given for the accumulation of 500 points. The second award, a lavalier, is given for the accumulation of 1,000 points. The third award, a large charm, is given for the accumulation of 1,500 points. The fourth award, a gold "S" key, is given for the accumulation of 2,000 points. A W.R.A. Blanket is awarded for the accumulation of 3,000 points. Three special awards, besides the Ruth E. Houston award, are presented to a freshman, sophomore, and junior who have accumulated the most points and have been in a variety of activities.

Linus Pauling Award in Chemistry — This annual award honors Dr. Linus Pauling, double Nobel Laureate in Peace and Chemistry. The Anonymous Award is given to the outstanding senior in Chemistry. Selection is made by the Department of Chemistry.

Hube Coyer Award — Established in 1953 by the Athletic Council and the Alumni Varsity Club in honor of Hube Coyer, a former Director of Athletics who established the Varsity Athletic Program and The Block "S" Dinner. Awarded for outstanding athletic achievement for four years at Buffalo State.

Alumni Award — Athletic and Academic Achievement — Established in 1962. Awarded to the Senior man who has best combined outstanding athletic achievement with academic excellence.

President's Award — Presented to senior athletes who have earned six or more Varsity awards during their College career.

COLLEGE PLACEMENT SERVICE

The Placement Office assists graduates in securing positions they are best prepared to fill and to provide schools, business, and industry with competent, qualified personnel. The office maintains a folder of personal data and references for each candidate, thus providing a continual source of confidential information for use by employing officials. For students it maintains files of brochures on school systems, various companies and agencies.

The forms necessary for registration and information concerning procedures to follow are available in May for all juniors expecting to graduate in February, June, or August of the following year. It is advisable for all prospective graduates to assemble credentials regardless of whether they intend to seek employment immediately or not, through the placement service or independently. Most employers require references, and a candidate who does not have these is at a disadvantage, particularly in competition with other candidates who are supported by placement credentials.



ACADEMIC REGULATIONS

All College academic regulations shall apply to all students regardless of student status, program or college session.

Each student is entitled to a catalog and must retain it and apprise himself of its contents as they apply to him.

ATTENDANCE REGULATIONS

1. Attendance at classes and other College appointments is required. A student's schedule constitutes a series of obligated appointments.
2. Following an absence, the student must furnish a satisfactory explanation to his instructors. He should also recognize the educational loss to himself and supplement it by fulfilling all assignments that were missed.
3. Students absent for more than one week for personal illness must get a clearance statement from the Student Health Service Office before re-entering classes. This is not an excuse. Each instructor must initial this "clearance" as the student re-enters class. When signed by all the student's instructors the "clearance" must be returned to the Health Services Office.
4. Excessive or chronic tardiness will not be tolerated.
5. A student may be excluded from a course if the instructor considers absences and tardiness to be too frequent for acceptable achievement. Any recommendation to this effect must be forwarded to the student's Division Director who will upon review issue the necessary status change.

AUDITING OF COURSES

Any student wishing to audit a course must first secure, in order, the approval of his Division Director and the instructor. Such persons shall abide by all University regulations.

Course Auditor shall:

1. Not be charged any tuition or fees.
2. Not be enrolled and listed in Registrar's Office for such course.
3. Attend without credit.
4. Not be required to meet the requirements of the course.
5. Attend without formal recognition.

Exception — no person shall be allowed to be a course auditor in any foreign study program or course.

CREDIT FOR EDUCATIONAL EXPERIENCE IN MILITARY SERVICE

College credit may be granted for educational experience received in military service, specialty schools, technical training schools and basic training programs. Evaluation of such experience will be made in terms of its relation to the degree requirements of the College and the recommendations suggested by the American Council on Education Credit Manual. Request for such credit should be addressed *TO THE OFFICE OF ADMISSIONS AND RECORDS*. Accompanying such a request must be all documents which evidence completion of such courses or experiences.

In no case shall credit accepted from such a source exceed sixteen semester hours. Such credit as a transfer student may have received from any prior institution is subject to review and re-evaluation.

CREDIT FOR ADVANCED PLACEMENT EXAMINATIONS

1. Credit may be granted to students admitted to the College for a subject in which they present acceptable grades in the New York State College Proficiency Examinations, the College Entrance Examinations Board Advanced Placement Examinations, or other approved advanced placement examinations, provided such subjects meet the curricular requirements of the specialized divisions of the College.
2. Students receiving the lowest passing grade may be admitted to an advanced course but no credit will be granted for the beginning course thus exempted.
3. Matriculated students must receive advance approval from their Division Director before taking such examinations for credit.
4. No credit will be granted when the examination subject is the same as, or overlaps, a college course already credited.

GRADING SYSTEM

The following grades and status indications are used by the College to indicate the quality or status of student achievement:

Grades A—Superior work; B—Work above average; C—Average; D—Work below average, but passing; E—Failure or unofficial withdrawal from a course; S—Satisfactory; U—Unsatisfactory.

Status: W—Official withdrawal; I—No points, work incomplete.

INCOMPLETES

1. An Instructor may grant a status of "incomplete" only when:
 - a. The circumstances which have led to a student's failure to complete course requirements are known to be beyond the student's control, viz., serious illness; unavailability of material; has been planned for educational reasons; etc.
 - b. Chairman/Director of department/division involved has received notice of granting of incomplete containing a brief description of nature of unfinished work.
2. The dates before which an "incomplete" may be converted to a letter grade are:
 - a. April 1st for "incomplete" given at the end of the fall semester.
 - b. November 15th for "incomplete" given at the end of the spring semester and/or summer session.
3. The Registrar is authorized to record a grade of E for a student who has not, within the stipulated time period, fulfilled course requirements.
4. In the event the Instructor who had granted an "incomplete" is not available to evaluate the work done by the student in fulfillment of course requirements during the stipulated time period, any recommendation for change from the "incomplete" to a letter grade may be made by the Chairman/Director of the absent Instructor.
5. Appeals from any of these regulations may be made through the Office of the Vice President for Academic affairs, the latter being empowered to issue waivers.

REGISTRATION

All students are required to register on the date announced by the College Registrar. Registration after these dates must have the approval of the Director of the Division, and such approval may only be granted for requests involving medical reasons. Under no circumstances may a student be admitted after the close of the first week of classes. Students with outstanding financial obligations will not be permitted to register.

Students subject to possible dismissal under the Dismissal or Probation regulation may not register without permission of the Dean.

CHALLENGE OF COURSES

Any undergraduate student may challenge any required course or any prerequisite for such a course in the curriculum for which he is enrolled.

1. Credit for successful challenge of courses and for advanced credit may not exceed thirty-two semester hours for any student.
2. Advanced standing, (but not credit) will be granted for successful challenges of courses beyond the thirty-two semester hours of credit permitted above.
3. A student may not challenge a course more than once.

Successful Challenge of a Course. The passing of the examination administered as the result of a Challenge. A grade will be recorded for successful challenge for credit. A successful challenge for advanced standing will be recorded on a student's record.

Advanced Credit. Credit received as a result of scores on College Advanced Placement Examination or New York State Proficiency Examinations.

Advanced Standing. Exemption from a course without credit for that course and authorization to take in lieu of the exempted course a more advanced course.

CONTRACT

Students who are academically in good standing may be given by their instructors the option of undertaking courses beginning in their sophomore year by the usual method or by *contract*. In choosing the latter option a student will be provided with a course outline, bibliography and statement of his responsibilities and dates by which these are to be met. He is then free to pursue the course by independent study under the guidance of the faculty instructor. The number of conferences, the type of evaluation, the culminating activity will be determined by the faculty and student involved.

For freshmen one of the following guidelines is suggested:

1. Students who 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. Students who have successfully challenged the course preceding this in the sequence within that discipline.
3. Students who enter the college with an excellent secondary school record or significant achievement or who have honors work in secondary school in pertinent fields.

Each department or division will determine its own method for administering this activity.

PROJECT

Every upperclassman shall be permitted to undertake a project related to a course required of the student. A student may earn no more than 3 semester hours of credit per project. Each student will be limited to 2 projects during his enrollment as an undergraduate student.

INDEPENDENT STUDY

PURPOSE

Every junior and senior student shall be permitted to engage in independent study. The student shall have demonstrated his competence and shown that he is academically prepared to pursue this study in a direction or a depth not possible through enrollment in courses offered at the College.

STUDENT QUALIFICATIONS

- a. Junior or senior status as a student at this college.
- b. Satisfactory completion of the basic courses in the area of selected study or the equivalent.
- c. A minimum cumulative average of 2.00 and an average of at least 2.00 in the previous semester.
- d. A better than 2.00 average in the work completed in the area of selected study.
- e. Qualification (a) above may be waived for students who have successful advanced preparation in the selected areas.

LIMITATIONS

- a. No independent study may be undertaken for fewer than 3 semester credit hours.
- b. A maximum of 6 semester hours of independent study may be undertaken in any one area of study other than that which is the student's major or area of concentration during the student's career at the college.
- c. A maximum of 12 semester hours of independent study may be undertaken in his major or area of concentration during the student's career at the college.
- d. A maximum of 30 hours of independent study in all areas may be undertaken by a student.
- e. A student will be limited to no more than 2 independent studies and a total of 6 semester hours of credit for independent study in any one semester.

HONORS PROGRAMS

The College offers two types of Honors programs—*General Honors* and *Departmental or Divisional Honors*.*

ADMISSION

Admission to honors standing must be made before entering the last semester of the junior year. Admission to the program is determined by the Faculty Honors Committee. Freshmen will be invited to admission. Upperclassmen may apply for admission or be recommended by a faculty member. A candidate for Honors may be dropped from the program by the Faculty Honors Committee at any time if his performance shows that he is not responding fully to the opportunities offered to him.

PRIVILEGES

Honor candidate's faculty advisor may waive for honor students any breadth or department/division requirements not mandated for certification (teacher certification programs only). Honor candidates may request to have their evaluation in one course per semester, not in any area of concentration or major, recorded as *Satisfactory* or *Unsatisfactory* rather than the usual letter grade. Only Honor candidates may enroll in classes designated as honors classes.

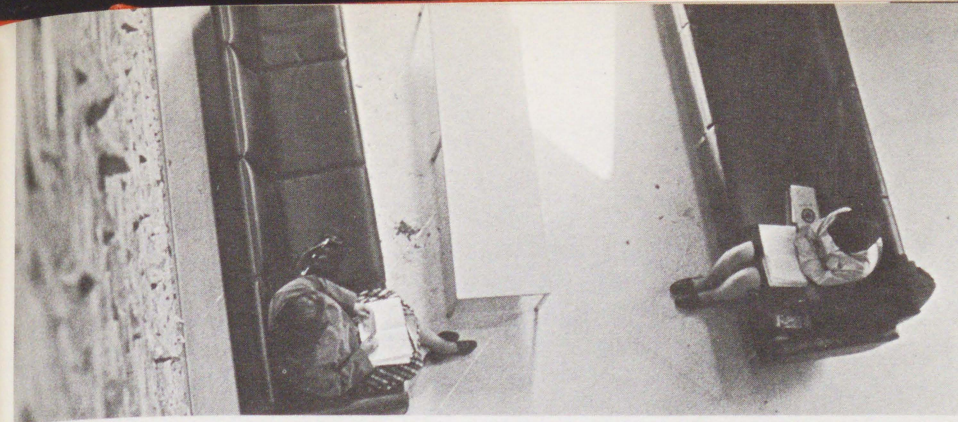
REQUIREMENTS FOR GRADUATION WITH HONORS

Honor students are bound by all college graduation requirements except where these are waived. Honors students must have an over-all point average of 3.2 and a minimum of 12 semester hours of credit for Independent Study, Senior Thesis, or Special Seminars. In addition, he must have earned at least 60 semester hours of credit at this college. Department or Divisions may have additional requirements for department or division honors.

SEMESTER HOUR LOAD

The normal semester hour load of a student is that indicated by the curriculum outline for each division for the specific semester. A student may register for additional or fewer hours than required by the curriculum only with the approval of the student's Division Director in advance of registration.

*More details are available at the Office for Individual Study.



UNIT OF CREDIT

The semester hour is the course unit of credit. It represents the satisfactory completion of one class period per week, with all required preparation, for one semester. A course having three class periods a week will, therefore, earn three semester hours credit. Studio, laboratory, and shop classes usually earn one credit for each two hours of attendance unless otherwise indicated. Two hours of student preparation for each class hour is the accepted minimum college standard. No undergraduate course may be offered or elected for less than or more than the number of credit hours as indicated in the registered course description.

QUALITY POINT SYSTEM

The following quality point system is used in determining averages:

For each hour of A—four quality points; B—three quality points; C—two quality points; D—one quality point; and E—no quality points. No other grades have quality point value. No point value for advance credit work completed at other institutions is included in the computation of the academic standing at this College. The quality point average is determined by dividing the total number of quality points earned by the total number of semester hours attempted. When a course is repeated, both the new and the original grades and hours are included in computing the semester average and the cumulative average. The grades of S and U and semester hour credits earned in student teaching will not be included in determining a student's quality point average, since they have no quality point value.

REPEATED COURSES

When a required course has been failed, it must be made up the following semester unless it is not offered or the faculty adviser in consultation with the Division Director deems it inadvisable.

PROBATION

Students are expected to maintain a "C" average. Probationary status indicates an unsatisfactory record of academic performance. If it is not removed, it subjects the students to dismissal from college. Students with less than a "C" average (2.00) will be placed on probation. Students on probation may have a semester, and one full summer, to regain a cumulative average of "C". Failure to do this will subject them to dismissal. First semester freshmen grades will not apply toward probation. Students having academic difficulty are expected to approach their Division Director for assistance and guidance.

SOCIAL PROBATION

A student violating accepted social practices of the campus will be placed on Social Probation and will receive special counseling services from the Office of Student Affairs. While on social probation he is ineligible to hold office in any campus organization, to serve as chairman of any committee, to play on a College team, or to represent the College in any public or intercollegiate activity.

A student involved in a minor social conduct offense will be placed on a Warning Status. This action will not be entered on his permanent record nor prevent him from participating in college activities if he improves in behavior and attitude.

DISMISSAL

A student may be dismissed from the College for:

1. Failing any subject for the third time.
2. Failing one-half or more of a semester's work as scheduled.
3. Failure to meet the probation regulations.
4. Failure to cooperate in carrying out the policies and regulations of the College.
5. Conduct of an unacceptable nature.
6. Unacceptable social and emotional adjustment.
7. Failure to satisfactorily complete student teaching.

WITHDRAWAL FROM COLLEGE AND HONORABLE DISMISSAL

Students finding it necessary to withdraw from College must do so officially to maintain good standing and eligibility for honorable dismissal and for possible readmission.



Withdrawal should proceed as follows.

1. Consult the Division Director and obtain a permit to withdraw.
2. File the permit with the Registrar and complete withdrawal procedure as outlined by that office.

Where it is impossible to do this in person, it must be done by a letter signed by the student or a parent. All students who officially withdraw from College with no outstanding obligations or commitments are in good standing and are entitled to honorable dismissal.

Refunds of tuition as are due will be made on a pro-rated basis up to the fourth week of classes of the semester upon written request and recommendation of the Director of the Division.

DROPPING A COURSE

Dropping a course means cancelling registration in one or more courses but short of full withdrawal from the College. A student may drop a course during the first nine weeks of a semester and receive a "W" for that course provided he has first consulted with the instructor concerned and the director of the division in which he is a student. The Division Director shall process the drop after ascertaining that the student has discussed the matter with the instructor.

A student who drops a course after the first nine weeks will receive the grade of "E" for that course. An exception may be made for unusual circumstances beyond the control of the student. In such cases, the student may petition the Vice President for Academic Affairs for permission to drop a course without penalty. After the Vice President for Academic Affairs consults with the Instructor involved, he may or may not approve the dropping of the course. If he approves a "W" will be entered on the record.

If a student does not process an official drop, and fails to continue with the course, his grade will be "E." This policy became effective with the Fall Semester, 1965-66.

ACADEMIC HONORS LIST

The Academic Honors List for students is maintained for students whose academic average for one semester (a minimum of fourteen semester hours) is 3.5 or higher. Semesters in which student teaching occurs are not used in preparing the list. No student with a grade of "U" is eligible.

HONORS CITATION

To be eligible for honors citation a student must have 3.5 or higher cumulative average for all work completed at this institution but in no case less than 60 semester hours. The designation Summa Cum Laude, Magna Cum Laude, and Cum Laude shall be respectively granted to the twenty per cent, thirty per cent and fifty per cent of the total number of students with an average of 3.5 or higher. No student with an "I" or "U" outstanding shall be considered for honors.

REQUIREMENTS FOR GRADUATION

All students must complete the prescribed curriculum of the division in which they are registered with an average grade of "C" or higher (a cumulative quality point average of 2.00). A grade of "S" in total number of curricular required hours of student teaching must be earned before a student will be recommended for graduation. The total hours for graduation in any curriculum shall be that number indicated by the particular program. A minimum of 32 semester hours, including the last 16 hours of the student's work, must be completed in residence.

APPLICATION FOR GRADUATION

Students expecting to qualify for a degree as of August or January must make application in the Registrar's Office by March 1 of the semester preceding completion of their requirements. Those expecting to qualify for a degree as of June must make similar application by November 1 of the preceding year.

In the next to last semester of each student's program a graduation check sheet is mailed to each student listing all remaining requirements. Any candidate for graduation must review this summary and report any errors to his Division Director. All obligations to the College must be met before qualifying for graduation.

TRANSCRIPTS OF RECORD

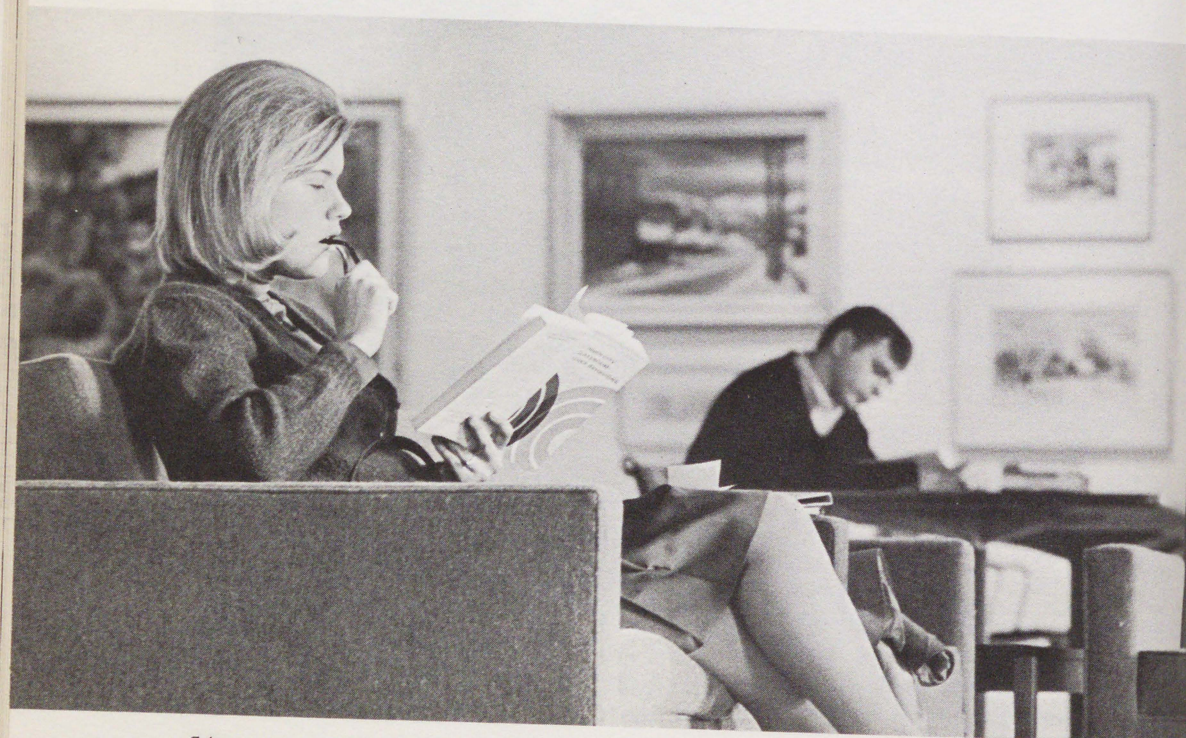
Official transcripts of record are not issued to students, either undergraduate or graduate, but will be forwarded upon request to educational authorities whom the students may designate. No charge is made for the first transcript. No charge is made to men and women in the armed services.

Unofficial student semester grade reports will be mailed to each student regularly at his last known place of residence.

SPECIAL REQUESTS

Requests for special privileges relating to academic matters are to be made to the student's Division Director.





EDUCATIONAL SERVICES

ALUMNI RELATIONS PROGRAM

The Alumni Association, a coordinating agency for Alumni affairs, maintains a record file of all graduates in its office. It regularly supports a Scholarship Fund, Student Loan Fund, and publishes Bulletins periodically during the year to keep the Alumni informed of Association activities and campus development.

In addition, it promotes an annual Homecoming Night, special performances of College plays and concerts, a June Reunion dinner and dance, and the Rockwell Memorial Fund and the Paul G. Bulger Lectureship Fund. It administers the Buffalo State Alumni Foundation Fund, Inc. Significant contributions to the College, the staff, the students and the College community are being made through this Foundation Fund.

The Association presents two Certificates of Recognition annually for outstanding service or contribution to the recipient's chosen profession. A Distinguished Alumnus Award for service to the Alumni Association is awarded at the annual Reunion dinner.

An award is given at the Block "S" Dinner to the Senior athlete who has won at least one major varsity award and has maintained the highest academic average; and three scholarship grants are awarded at the Moving Up Day Program.

BURCHFIELD CENTER

The Charles Burchfield Center is a gallery devoted to the exhibition of major works and memorabilia of Western New York's world famous watercolorist. It occupies the former library of the Buffalo State University College in Rockwell Hall. The Center features continuous exhibitions of significant works by the artist, including paintings and sketches as well as his journals and writings, together with publications concerning him and comprehensive photographic records of his work. Special exhibits are planned each year, each organized around a particular period of the artist's work, a special theme or specific collections lent by private owners or institutions. In the periods between the special exhibits, works from

the permanent collection in the Center will be featured, supplemented by loans from other sources. Items in the permanent collection will be available for viewing and study at all times. The Center's permanent collection is owned by the Buffalo State College Alumni Foundation, Inc., a non-profit, tax-exempt organization. The Foundation's collection will be increased by gifts and bequests so that many of the major works of Charles Burchfield will be made accessible for viewing and study in the artist's home community. Possibilities for adding to the collection may be discussed with the Curator of the Center.

CAMPUS SCHOOL

A new \$5,000,000 Campus School opened its doors in September 1967. As a teaching aid to the College, the school serves as a professional laboratory for college students to observe and participate in teaching under the guidance of expert teachers.

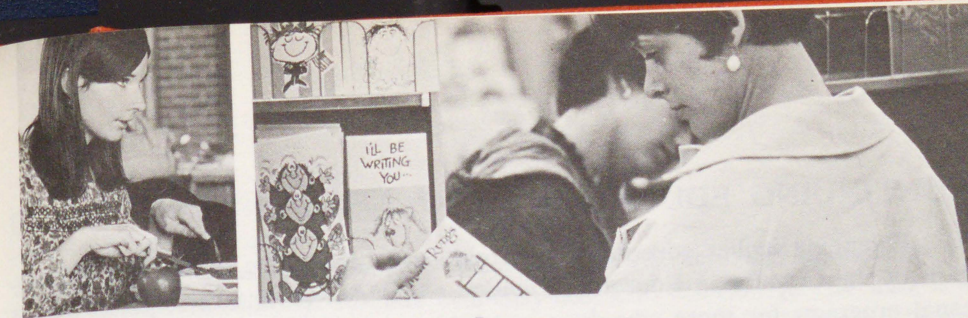
The Campus School complex is made up of five connected units. The school programs include: nursery, kindergarten, elementary, high school and a program for Exceptional Education. In addition, there is a Child Study Center housed on the second floor in the central building of the school. The maximum enrollment will eventually be 1,200 students. The staff is composed of educational specialists, College professors who are experienced teachers and experts in their particular phase of education.

The new school contains an elementary and a high school library. The combined libraries contain a collection in excess of 35 thousand volumes. Study carrels have been placed in both libraries to enable students to do independent study. Observation rooms with one-way vision glass are strategically placed throughout the entire school to allow observation of the classes by college students and professors.

A television system has been engineered into this building to allow for reception and broadcasting in every room and throughout the other buildings on this college campus. With special instructors and the latest equipment, the Campus School is adequately equipped to work as a research unit that ultimately may benefit all the schools in the state.

THE CENTER FOR ECONOMIC EDUCATION

The Center for Economic Education at the College is primarily a means of improving economics taught in local elementary and secondary schools as well as assisting various organizations and the public in combating economic illiteracy.



More specifically, the objectives of the Center are: to encourage schools to contribute to economic understanding; to encourage economic education in the preparation of teachers; to assist in the in-service training of educators in the area of economics; to aid organizations to promote the understanding of economic principles in our free and democratic society; to facilitate the use of materials, conferences, and radio and television so that the understanding of our free enterprise economy may be improved in all segments of the population; to encourage research and publications in economic education. The Center mobilizes College and community resources to support its wide variety of programs in the eight counties of Western New York as well as its research facilities which are available to educators, students, business, labor, etc. The Center cooperates with the New York State Education Department, and works closely with the New York State Council on Economic Education in the development of specific programs designed for this area. In addition, the Center cooperates with other state and national organizations involved in economic education. The Center's Newsletter is distributed to schools and agencies throughout Western New York and the nation. "Economic Viewpoint", a weekly radio series on WADV-FM (2:05-2:30 P.M., Sundays), is produced by the Center and hosted by the Director.

CHILD STUDY CENTER

The Child Study Center has research, service and educational responsibilities. Physical facilities include rooms where children can work, play, or be interviewed; observation space equipped with one-way vision screens through which students and faculty can observe children's behavior; and offices used for conferences and testing.

The major objectives of the Center are to conduct research related to children, assist with children who are referred for psychological testing or adjustment problems, and to supplement and illustrate the content of course work in child development. The Center maintains an extensive file of individual and group tests for faculty and student use, as well as mimeographed material about children and adolescents.

The Child Study Center Bulletin is edited and prepared in the Center. The Bulletin is distributed to faculty members and schools and agencies in Western New York.

CONTINUING EDUCATION

Extending higher education opportunities to the public at large is the concern of the Continuing Education Division. Included in this concept are educational programs for those who *have not* achieved initial educational objectives as well as lifelong learning — programs for those who *have* achieved initial educational objectives. Adults in the community will have opportunities for seeking technical, vocational and professional objectives including programs leading to the bachelor's degree through late afternoon, evening and Saturday courses. Part-time study may also be continued in the summer session. Further information and applications for non-matriculated students may be obtained from the Director of Continuing Education.

Students may also register for *The University of the Air* television programs through the Office of Continuing Education. Undergraduate credit courses in the History of Latin America and Astronomy have been offered in the past and will be included in future programing. Expanded offerings in the field of Humanities are being planned for the future. Persons may also register on a non-credit basis for a nominal cost of one dollar. In the Buffalo area the programs are broadcast two or three times a day over Station WNED-TV Channel 17.

The Continuing Education Division also has a concern for bringing the resources of the College to the community in such problem areas as economic development, community planning, problems of urbanization, race relations and service to local school systems. Such assistance may take the form of short courses, institutes, workshops, program planning, research and consultation services. To promote intellectual and aesthetic growth in the community the College also sponsors lecture series, plays, art exhibits, music concerts, festivals, dance recitals, and special events.

GRADUATE PROGRAM

The Graduate Program offers late afternoon, evening and Saturday morning classes on the College campus during the academic year. Students interested in attending full-time should consult the Director of Graduate Studies. Graduate programs are available in the areas of Art Education, Early Secondary and Secondary Education, Elementary Education, Elementary Principalship and Supervision, Exceptional Children Education, Home Economics Education, Industrial Arts Education and Vocational Technical Education. It is anticipated that new graduate programs in the Liberal Arts areas will be added during the current year.

Requirements for the master's degree in the several curricula are described in the Graduate Bulletin. Further information about graduate study may be obtained by writing to the Director of Graduate Studies.

GREAT LAKES LABORATORY

The Great Lakes Laboratory is located on a 7.9 acre site in the City of Buffalo at the foot of Porter Avenue with easy access to the College. Because it is at the confluence of Lake Erie and the Niagara River it offers innumerable advantages for research and teaching in the field of water resource management.

New York State's development has been dependent in a large part on its relationship with the Great Lakes. This tremendous body of water is an important waterway for domestic and international shipping; it is a vast reservoir of water for home and industrial uses; and it provides opportunities for recreation, including swimming, sailing, motor boating, and fishing.

The population explosion, the industrial expansion, and agricultural evolution are each having significant and extensive effects on the waters of the lakes. These factors have resulted in important and often detrimental changes in the quality of the water. As a consequence, water pollution has become one of the most alarming problems facing man today.

To help solve this problem, the Great Lakes Laboratory provides opportunities to study the basic factors of production and metabolism, at all trophic levels, in standing and running waters, both natural and artificially changed. At the Laboratory, undergraduate and graduate students find trained staff, specialized equipment and adequate space for advanced study in: Algology, Aquatic Entomology, Climatology, Ichthyology, Limnology, Marine Geology, Parasitology, Physiology of Aquatic Plants, Physiology of Fishes. In addition, there are opportunities for meaningful field and laboratory experiences as part of the regular class schedule in such basic courses as General Biology and Physical Science.

Research and training programs are also being carried on and include: aspects of the hydrologic cycle, conservation and best use of available supplies of water, economic, social, recreational, biological geographic, ecological, and other aspects of water problems.

INSTRUCTIONAL RESOURCES

The responsibilities for equipment, materials, and services supporting instruction rests here. Television, radio, media-materials integration, film and tape library, audio laboratory and special facilities such as the Communication Center are of primary concern. Instructional equipment of all kinds, available at convenient locations throughout the College, provide for the audio-visual needs of the instructional program. Films, slides, tapes and specialized equipment are distributed from the Communication Center which co-ordinates their movement, maintains a film library (1,200 titles), and provides advisory services. Limited

production facilities are available for development of slides, tapes, filmstrips, etc. Supplemental audio-visual materials are secured from museums, art galleries, industrial organizations and film libraries of other universities.

INTERNATIONAL EDUCATION

The Office of International Education works with all divisions and departments of the College in developing and coordinating a broad program to foster international understanding. The College works closely with the State University Center for International Studies and World Affairs at Planting Fields, Long Island.

Increasing numbers of foreign students are studying at the College and this year approximately 70 students representing over 30 countries will be enrolled. These students participate actively in all phases of the academic and social life of the College, bringing a significant new educational and cultural dimension to the campus. The Foreign Student Adviser is available at all times in the Office of International Education to assist foreign students and to help foreign students meet the community and get to know the campus.

The College directs several study abroad programs during the academic year and during the summer. Summer programs to Mexico and to Western Europe are currently offered. Each year the College directs a Semester in Siena program. Under this program, each semester 40 students, accompanied by two professors, take a wide range of courses in art, history, Italian, English literature, and sociology in Siena, Italy where they live with Italian families.

A similar program during the academic year provides opportunity for students who are majoring in Spanish or in Latin American Studies to live with families and to study at the University of Costa Rica. Study abroad programs for



England, Denmark, and for India are projected for the future. The College grants credit toward graduation for all studies undertaken in these programs, for which juniors and seniors are eligible.

The curriculum is being enriched and strengthened to include international area studies. Special attention is given to non-Western cultures. The study abroad program in Costa Rica is administered by the College in connection with a Latin American Area Studies Program which has been established to provide a concentration for both liberal arts and for teacher education students. Under the sponsorship of the African American Institute and the U. S. Agency for International Development, African Development Institutes are conducted during the summer.

Throughout the year, training and internship programs are conducted for visiting international students and educators in active cooperation with a number of governmental and private sponsoring agencies. A flow of international visitors is received and special programs are worked out to suit their individual needs and interests. A wide range of community organizations also is associated with the College's international program. The College is actively represented in significant national organizations related to international education.

LIBRARY FACILITIES

The collection of approximately 150,000 volumes is accessible on open shelves in the Edward H. Butler Library, now in process of enlargement to a capacity of 600,000 volumes, with reader accommodation for 2,000. The current annual rate of addition is about 30,000 volumes. Current periodical subscriptions number in excess of 1700. Recordings are available for music appreciation, speech classes, and recreational listening. The microfilm editions of *The New York Times* and *The Buffalo Evening News* and a microfilm collection of periodicals, out-of-print materials, and doctoral dissertations are available for reading with the necessary specialized equipment. A Xerox 914 photocopier and a Microfilm Reader-Printer are available for reproducing library materials, for individual use or for use in the reserve room, within the terms of existing copyright legislation. Additional books and materials from the State Library at Albany and elsewhere may be secured through inter-library loans for faculty and graduate use. Special exhibits featuring topics of general interest to the College community are prepared by the faculty and the librarians.

The Laboratory of Instructional Materials provides a variety of curricular materials of value to students in education, including story books, textbooks, slides, records, filmstrips, pictures, maps, and posters. There is also a notable collection of drawings and books by Lois Lenski and a small collection of books of historical interest.

Students are instructed in the use of the Library in the English 101-102 courses. Through special arrangements upperclass groups and graduate students are given advanced instruction in the use of the Library. Student teachers and participants are instructed in the use of the Laboratory of Instructional Materials.

OFFICE OF FEDERALLY AIDED PROGRAMS

The Office of Federally Aided Programs maintains and disseminates information to the faculty on program opportunities, policy, and administrative procedures concerning governmental, private and commercial sponsors of research, training, and related programs. The coordinator's responsibilities involve the analysis of all Federal legislation pertaining to education and its applicability to the College. This Office serves as a reference and consultation center for faculty members preparing applications for outside funded programs and acts as a liaison between The Research Foundation of State University of New York and the particular governmental or private agency concerned. The Coordinator helps to promote and coordinate College participation with other educational institutions and community programs toward cooperative projects designed to better serve the educational



needs of Western New York. The University Faculty Grants In Aid and Fellowship Program as well as active outside sponsored programs conducted by members of the College faculty are administered and coordinated by the Office. This office also maintains close communication with the State University of New York, Washington, D. C. Office.

OFFICE OF URBAN EDUCATION

The Office of Urban Education, under the direction of the Vice-President for Administration, has been established in order to provide the most effective liaison possible between the State University College at Buffalo and all public and private agencies engaged in the continued improvement of educational opportunity in the urban community.

It endeavors to develop ways and means by which both graduate and undergraduate students may secure more preparation and experience in working with the educational problems of urban areas. The research resources of the College are being applied to the study of these problems through the Office of Urban Education.

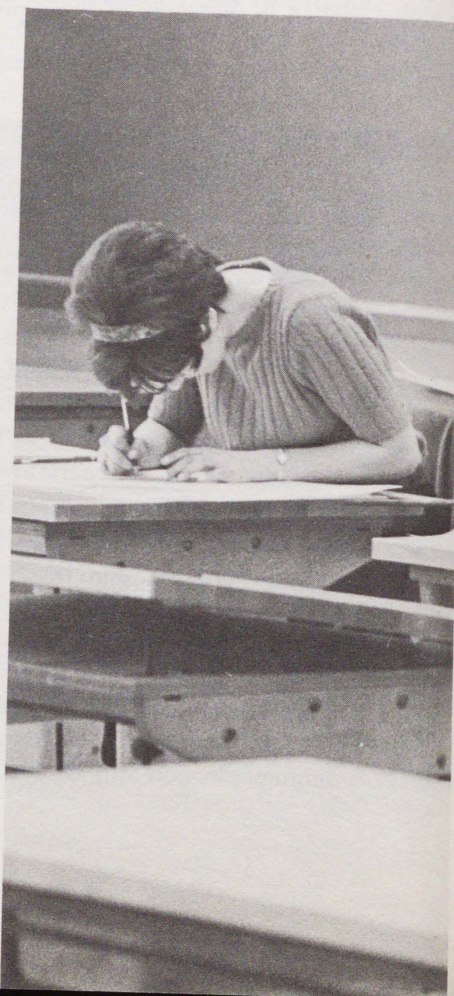
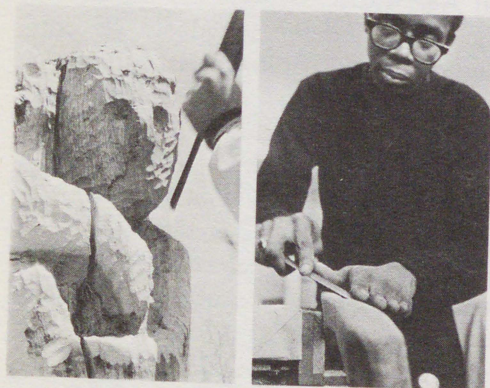
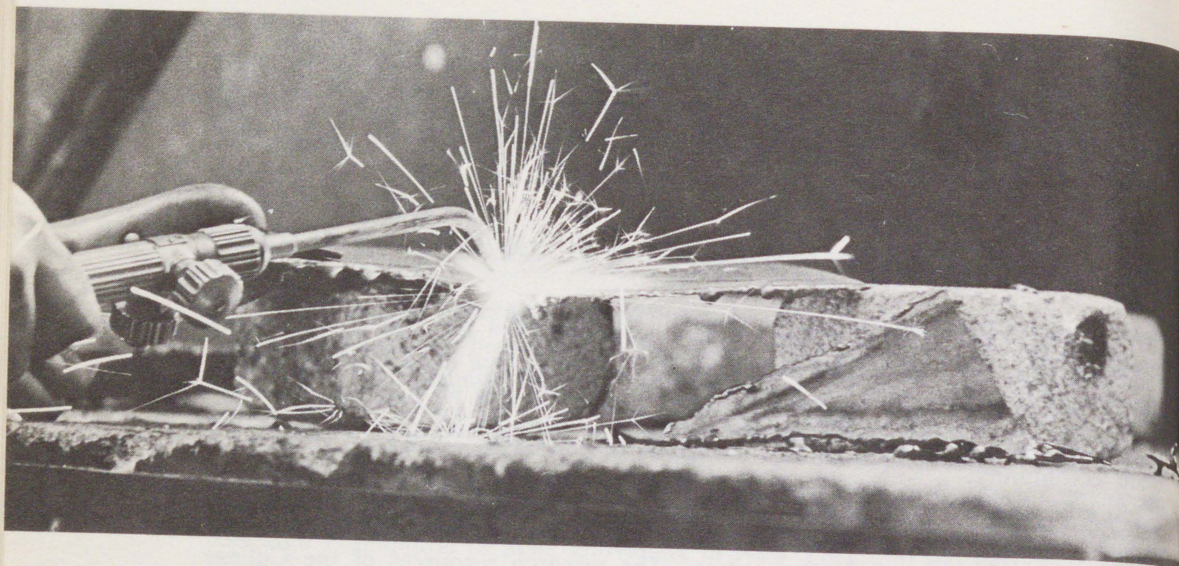
SUMMER SESSION

In 1967 over 3,500 students continued their education by attending classes in June, July or August. All of the College facilities, as described in this catalog, are available during the summer months. By attending one or more summer sessions any student may accelerate his date of graduation. Undergraduate students enrolling for twelve semester hours in Summer Sessions will receive, if otherwise eligible, a Scholar Incentive award on a refund basis. Inquiries in regard to the SIP should be directed to the Financial Aids Office.

Over 400 courses are available for graduate and undergraduate students. Several special workshops, seminars and studio courses are scheduled for two or three-week sessions. These courses are chosen to meet the needs of students completing degree requirements.

Tuition is \$13.50 a credit hour for undergraduate courses and \$20.00 a credit hour for graduate courses. In addition, all students pay a State University fee of \$.85 a credit hour and a Student Activity Fee of \$.25 a credit hour.

Undergraduate students who are in good standing at other colleges may attend the Summer Session on the recommendation from their college. Applications and course announcements may be obtained from the Director of Summer Session. The 1968 Summer Session will be held from June 3 to August 23.



ART EDUCATION DIVISION

Graduates of the Art Education Division receive the degree of Bachelor of Science in Education and are certified to teach art in the elementary, junior, and senior high schools of New York State. They may hold positions as teachers, supervisors, or consultants. A graduate curriculum leads to the degree of Master of Science in Education.

General requirements for admission are explained in the catalog section on Admissions. No particular pattern of high school art courses is required for admission to the art program, but candidates are expected to have special interest and ability in art as revealed by superior grades in high school art courses, a portfolio of art work, and participation in other creative activities. The portfolio of work is to contain examples of work done under one's own initiative as well as work done in school for class and extra-curricular projects. Photographs may be used to show objects too large to be included, or of a temporary nature like stage settings. This portfolio is to be presented at the personal interview, and after admission, to instructors for program planning.

The art curriculum develops expressive and creative powers, knowledge of the place of art in our society, an ability to teach, and a knowledge of the use of art in many daily aspects of living. It includes a broad program of general studies. Electives in the junior and senior years provide opportunity for individual specialization in the art field. The program takes the student into the Buffalo metropolitan community to participate in the solution of various problems such as those to be found in housing, communications, industry, recreation, and education. It encourages attendance at educational conferences where the student meets outstanding members of his profession and authorities on Art Education. A semester of full-time student teaching takes him into two schools in different parts of the State to teach under master teachers.

The Art Division staff is internationally known for its leadership in art education, and the professional art achievements of individual staff members.

Upton Hall contains specially designed equipment and features such as one-way view walls for observing selected groups in action, full-view windows from the halls into studios, and extensive display facilities to enrich learning through seeing as well as doing. Twenty-four studios provide for a wide variety of art activities including painting, photography, lithography, etching, sculpture, industrial design, theatre design, crafts, home planning and jewelry.

The nearby Albright-Knox Gallery with its permanent collection and exhibits from other cities and countries, affords first-hand opportunities to study original works of art. It houses one of the finest collections of contemporary art in this country. The Gallery's educational services and lecture series enable students to meet persons distinguished in art.

SEMESTER IN SIENA PROGRAM

Since September 1961, the State University College at Buffalo, in cooperation with the University of Siena and the Istituto Statale d'Arte, has conducted a semester of study in Siena, Italy. The program is for selected Junior and Senior students, as part of the regular four-year program. Students may live and study in this famous historic art center for a semester. Directed by a professor from this College, the classes are given by Italian professors and artists using both the English and Italian languages. During the Siena Semester, the students live with Italian families and take trips to Rome, Florence, Paris and other cities of art interest. For further information, write to the Director, International Studies, State University College at Buffalo.

ADVANCED STANDING AND CERTIFICATION

Applicants for admission to advanced standing will be informed of the course requirements for the degree after their transcripts and examples of art work are evaluated. A college graduate wishing to complete certification requirements only, should first send transcripts to the Division of Certification, State Education Department, Albany, New York, for evaluation.



ART EDUCATION CURRICULUM

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Music	3	3
Humanities		
English	12	12
Health, Physical Ed. & Rec.	2	2
Philosophy	3	3
	<u>20</u>	<u>20</u>
Mathematics & Sciences		
Mathematics Electives	3	3
Science Elective	6	6
	<u>9</u>	<u>9</u>
Social Sciences		
Social Science	6	6
History	3	3
	<u>9</u>	<u>9</u>
Free Electives	9	9
<i>Total Liberal Arts Hours</i>	<u>47</u>	<u>47</u>

COGNATE ELECTIVES

Advanced Studio Electives	10	20
Free Electives	5	10
<i>Total Cognate Hours</i>	<u>15</u>	<u>30</u>

MAJOR FIELD

Art 101	Symposium I	1/2	1
Art 102	Symposium II	1/2	1
Art 103	Object Drawing	2	4
Art 104	Figure Drawing	2	4
Art 105	Introductory Design	2	4
Art 106	Exploratory Design	2	4
Art 107	Mechanical & Perspective Drawing	2	4
Art 108	Fundamentals of Photography	2	4
Art 109	Contemporary Art	2	2
			<u>67</u>



Art 110	Design in Clay	2	4
Art 201	Introductory Painting	2	4
Art 202	Exploratory Painting	2	4
Art 203	Life Drawing	2	4
Art 204	Printmaking	2	4
Art 205	Design in Metal	2	4
Art 206	Design in Fibers	2	4
Art 207	Design in Wood	2	4
Art 208	Introduction to Sculpture	2	4
Art 209	Lettering & Typography	2	4
Art 210	Home Design	2	4
Art 211	History of Art I	2	2
Art 212	History of Art II	2	2
Total Major Hours		41	76

PROFESSIONAL REQUIREMENTS

Ed. 101-2	Human Growth & Development	6	6
Art 301	Child Art	3	4
Art 302	Adolescent Art	3	4
Art 303	Elementary Student Teaching & Seminar	8	—
Art 304	Secondary Student Teaching & Seminar	7	—
Total Professional Hours		27	14
Total Curriculum Hours		130	167

ART EDUCATION COURSES

ART 100. ESSENTIALS OF VISUAL ART

The nature of visual art; the creative process; aesthetic judgment; art's relation to contemporary culture; introductory creative-expressive experiences. *Classification:* Required of Elementary Education freshmen, Home Economics and Exceptional Education students, Liberal Arts Art majors, Art Concentrators; elective for others. *Credit:* Three semesters—three class hours.

ART 101. SYMPOSIUM

A coordinated series of programs, discussions, and presentations involving guest faculty members, visiting authorities, and students; presenting various points of view on the nature and function of the arts, education in the arts, and related areas of human experience. *Classification:* Required of Art Education freshmen. *Credit:* One-half semester hour—one class hour.

ART 102. SYMPOSIUM

A continuation of the series of programs, discussions, and presentations in Art 101. *Classification:* Required of Art Education freshmen. *Prerequisite:* Art 101. *Credit:* One-half semester hour—one class hour.

ART 103. OBJECT DRAWING

Fundamentals of freehand drawing, based primarily on the study and representation of objects and nature forms, with problems of analysis, response, visualization, composition, and technical standards; contour drawing; indications of surface texture, form, tone in various media. *Classification:* Required of Art Education freshmen, Liberal Arts Art majors, Art Concentrators. *Credit:* Two semester hours—four class hours.

ART 104. FIGURE DRAWING

Drawing from the draped and undraped figure, with an emphasis upon proportion, structure, gesture, movement, and compositional possibilities; contour and modeled drawings; memory drawings; long and short

poses; elements of anatomy; use of various media. *Classification:* Required of Art Education freshmen, Liberal Arts Art majors, Art Concentrators. *Prerequisite:* Art 103. *Credit:* Two semester hours—four class hours.

ART 105. INTRODUCTORY DESIGN

Fundamentals of design, including logical and intuitive approaches, as applied to pure form and natural sources in two and three dimensions; color in design; the role of feeling, emotion, and intellectual control in developing individual solutions. *Classification:* Required of Art Education freshmen, Liberal Arts Art majors, Art Concentrators. *Credit:* Two semester hours—four class hours.

ART 106. EXPLORATORY DESIGN

A continuation of the fundamentals of design in Art 105, with an emphasis on developing personal statements in various media. *Classification:* Required of Art Education freshmen, Liberal Arts Art majors, Art Concentrators. *Prerequisite:* Art 105. *Credit:* Two semester hours—four class hours.

ART 107. MECHANICAL AND PERSPECTIVE DRAWING

Basic principles in drafting, including orthographic and isometric projections, and perspective drawing; as an aid in visualizing and constructing original products and in interpreting creative interior and exterior designs for the home, school, and community. *Classification:* Required of Art Education freshmen. *Credit:* Two semester hours—four class hours.

ART 108. FUNDAMENTALS OF PHOTOGRAPHY

Fundamentals of the photographic processes; use of equipment, film development and printing with an emphasis on experimental possibilities, aesthetic considerations, and the use of the camera in developing sensitive awareness of subject, composition, form, texture, and value. *Classification:* Required of Art Education freshmen. *Credit:* Two semester hours—four class hours.

ART 109. CONTEMPORARY ART

Major trends, artists, and works of our time, with an emphasis on historical, artistic, judgmental, and cultural meanings as they reflect the twentieth century and past civilizations; including painting, sculpture, architecture, and other areas. *Classification:* Required of Art Education freshmen; elective for others. *Credit:* Two semester hours — two class hours.

ART 110. DESIGN IN CLAY

An exploration of clay as a medium for expression, sketching, figure modeling, and functional object design, with some elementary experience in the preparation of clay bodies and glazes; basic methods in forming, glazing, and firing of ceramic sculpture and pottery. *Classification:* Required of Art Education freshmen. *Credit:* Two semester hours—four class hours.

ART 111. ESSENTIALS OF DESIGN

The nature of visual art; the creative process; aesthetic judgment; art's relation to contemporary culture; foundation experience in the development of understanding and skills in design in various materials with emphasis on organization and presentation of design concepts, principally in two-dimensional media; exploration of elements of design as they relate to expressive creative, and functional applications. *Classification:* Required of Industrial Arts sophomores. *Credit:* Three semester hours—six class hours.

ART 112. ESSENTIALS OF INDUSTRIAL ARTS DESIGN

Exploration of design problems in various materials related to Industrial Arts and the development of expressive, creative, and functional forms, primarily in three dimensions; refinement of skills in organization and presentation of design concepts; analysis and evaluation of historic and contemporary forms of design. *Classification:* Required of Industrial Arts sophomores. *Prerequisite:* Art 111. *Credit:* Three semester hours—six class hours.

ART 201. INTRODUCTORY PAINTING

An introduction to the methods and techniques of the painter, exploring color, line, form, texture, and compositional problems; using objects, nature, the figure, and abstract imagery as subject matter; employing various media such as watercolor, casein, gouache, tempera, and oil colors. *Classification:* Required of Art Education sophomores. *Credit:* Two semester hours—four class hours.

ART 202. EXPLORATORY PAINTING

A continuation of exploratory problems in painting, using a variety of methods, materials, and subjects; searching for personal symbolism and expression, increasing control of compositional matters, and a growing mastery of the media selected; related studies. *Classification:* Required of Art Education sophomores. *Prerequisite:* Art 201. *Credit:* Two semester hours—four class hours.

ART 203. LIFE DRAWING

A continuation of figure drawing, using the draped and undraped model, with a variety of media; figure portraits and group studies; increasing emphasis on anatomy and composition; insertion and articulation of bones, joints, and muscles; related study of anatomy. *Classification:* Required of Art Education sophomores. *Prerequisite:* Art 104. *Credit:* Two semester hours — four class hours.

ART 204. INTRODUCTION TO PRINTMAKING

An introduction to basic techniques of printmaking, involving discussions and dimensions of relief, intaglio, planographic, and serigraphic processes; with studio experience in one or more press-pulled graphic arts areas such as lithography, etching, and woodcutting. *Classification:* Required of Art Education sophomores. *Credit:* Two semester hours—four class hours.

ART 205. DESIGN IN METAL

Exploratory experiences in metalsmithing as a medium for sculptural expression and

object design, utilizing the unique qualities of various metals and alloys; raising, forging, welding, soldering, riveting, casting, and other forming methods; surfacing treatments for metal. *Classification:* Required of Art Education sophomores. *Credit:* Two semester hours—four class hours.

ART 206. DESIGN IN FIBERS

An exploration of traditional and experimental techniques, using natural, synthetic, and created fibers in original textile design; weaving and related processes; selected experiences in creative stitchery, rug-hooking, resist dyeing, block printing, stencil printing, and other processes. *Classification:* Required of Art Education sophomores. *Credit:* Two semester hours — four class hours.

ART 207. DESIGN IN WOOD

Exploratory experiences in wood as a medium for sculptural expression and object design, stressing sensitivity to the unique qualities in various woods and the appropriate use of hand and simple power tools; finishing processes; discussions on technical and aesthetic problems. *Classification:* Required of Art Education sophomores. *Credit:* Two semester hours—four class hours.

ART 208. INTRODUCTION TO SCULPTURE

Sculpture as a means of individual expression; a general introduction to the theories and practices involved in the additive, subtractive, and constructive approaches to sculpture, with selected experiences using such materials as clay, plaster, wood, stone, and metal. *Classification:* Required of Art Education sophomores. *Credit:* Two semester hours—four class hours.

ART 209. LETTERING AND TYPOGRAPHY

A study of basic letter forms, with practice in the use of the brush, pen, and instrument, and related to problems of layout; creative design in lettering; elements of typography and the design of printed publications, with an introductory experience

in the use of type. *Classification:* Required of Art Education sophomores. *Credit:* Two semester hours—four class hours.

ART 210. HOME DESIGN

The home as a unique design for personal and family living; the design and furnishing of the home as a functional aesthetically-satisfying unit, suited to its location, and appropriate for its special purpose; redesigning old homes and interiors; related consideration of school design. *Classification:* Required of Art Education sophomores. *Credit:* Two semester hours — four class hours.

ART 211. HISTORY OF ART

The development of art from prehistoric times to the Renaissance, emphasizing the major styles, artists, and monuments of western art; the relation of sculpture, architecture, painting, and other expressions to living. *Classification:* Required of Art Education sophomores; elective for other students. *Credit:* Two semester hours — two class hours.

ART 212. HISTORY OF ART

The development of Art from the Renaissance to 1900, emphasizing the major styles, artists, and monuments of western art; the relation of sculpture, architecture, painting, and other expressions to living. *Classification:* Required of Art Education sophomores; elective for others. *Prerequisite:* Art 211. *Credit:* Two semester hours — two class hours.

ART 213. PHOTOGRAPHY

Photography as a communications art; the making of documentary, pictorial, and creative compositions in black-and-white, in color, and in combination with other communication media; exploration of photographic processes and their use in self-expression and educational activities. *Classification:* Elective for all students except Art Education majors. *Credit:* Three semester hours—four class hours.

ART 214. DRAWING

Drawing as used in lecturing and teaching; development of visual aids, object and arrangement planning; selection of drawing content and treatment according to individual fields of interest. *Classification:* Elective for all students except Art Education majors. *Credit:* Three semester hours—four class hours.

ART 215. ARTS IN LIVING

A study of contemporary and historic art forms as they apply to everyday living. An analysis of the individual significance and interrelatedness of architecture, industrial design, the graphic arts, painting, sculpture, music and the theatre arts. Participation in a variety of creative activities. *Classification:* Elective for all non-art majors. *Credit:* Three semester hours—three class hours.

ART 216. CREATIVE ART WORKSHOP

Individual exploration of various media. *Classification:* Required of Arts Concentrators; elective for other students except Art Education majors. *Prerequisite:* Art 100 or Art 111. *Credit:* Three semester hours—four class hours.

ART 217. WORKSHOP IN CRAFTS I

Creative experience in a variety of crafts such as leather, metal, ceramics, and jewelry; individual projects. *Classification:* Elective for all students except Art Education majors. *Credit:* Three semester hours—four class hours.

ART 218. WORKSHOP IN CRAFTS II

Individual projects to be undertaken beyond work covered in Art 217. Elective for all students except Art Education majors. *Credit:* Three semester hours—four class hours.

ART 300. ESSENTIALS OF ART

Art in human development. Art experiences toward a variety of objectives; important differences between adult and child art; children's drawing, coloring, and creative construction activities, including the

exploratory, symbolic, realistic; style, proportion and color related to degree of importance as well as relationship to natural appearance, relationship of creative art activities to the intellectual and emotional growth of children. *Classification:* Required of Elementary Education juniors. Elective for all students except Art Education majors. *Prerequisite:* Art 100 or Art 111. *Credit:* Two semester hours—three class hours.

ART 301. CHILD ART

Children's intellectual, emotional, physical, perceptual, and creative growth; implications for developing art experiences and programs for children; observation and participation in organized activities with children. *Classification:* Required of Art Education juniors. *Credit:* Three semester hours—four class hours, including supervised participation.

ART 302. ADOLESCENT ART

Adolescents' intellectual, emotional, physical, perceptual, and creative growth; implications for developing art experiences and programs for adolescents; observation and participation in organized activities with adolescents. *Classification:* Required of Art Education juniors. *Credit:* Three semester hours—four class hours, including supervised participation.

ART 303. ELEMENTARY TEACHING AND SEMINAR

Supervised student teaching at assigned levels from kindergarten through sixth grade, in various types of schools and communities; conferences devoted to planning and evaluating teaching experiences; seminar discussions on professional problems of the beginning teacher. *Classification:* Required of Art Education majors; juniors or seniors. *Credit:* Seven semester hours—full-time, one-half semester.

ART 304. SECONDARY TEACHING AND SEMINAR

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. *Classification:* Required of Art Education majors; juniors or seniors. *Credit:* Eight semester hours—full-time, one-half semester.

ART 401. WATERCOLOR PAINTING

An introduction to the transparent watercolor medium as a form of pictorial representation and self-expression; exploration of the unique qualities of the medium and techniques employed; investigation of stylistic possibilities, compositional problems. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 202. *Credit:* Two semester hours—four class hours.

ART 402. TEMPERA PAINTING

An introduction to opaque aqueous materials such as casein, gouache, and egg tempera as a form of self-expression and representation; exploration of the unique qualities of these media and techniques employed; investigation of stylistic possibilities, compositional problems. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 202. *Credit:* Two semester hours—four class hours.

ART 403. ADVANCED STUDIO IN PAINTING

Advanced painting, with media, style, and content based on individual needs; personal preparation and exploration of paints, grounds; concentration on individually-selected area of development in painting. *Classification:* Elective for Art Education upperclassmen. *Prerequisites:* Art 202; Art 401 or Art 402 desirable. *Credit:* Two semester hours—four class hours. *Special Note:* May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 404. ADVANCED STUDIO IN DRAWING

Advanced drawing, with media and content based on individual needs; exploration of various media; concentration on individu-

ally-selected area of development in drawing; use of model. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 203. *Credit:* Two semester hours—four class hours. *Special Note:* Requires approval of instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 405. FIGURE MODELING

Figure and portrait modeling as a basic sculptural discipline and means of expression; interpretation and portrayal of human form; practice in making armatures and building up with clay and plaster. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 208. *Credit:* Two semester hours—four class hours.

ART 406. ADVANCED STUDIO IN SCULPTURE

Advanced sculpture, using a wide variety of materials and techniques; concentration on individually-selected area of development in sculpture based on personal interests and needs. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 208. *Credit:* Two semester hours—four class hours.

ART 407. RELIEF PROCESSES IN PRINTMAKING

An exploration of the relief process in the making of prints, including such possibilities as linoleum and wood blocks, wood engravings; emphasis upon personal expression and creative possibilities. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 204. *Credit:* Two semester hours—four class hours.

ART 408. INTAGLIO PROCESSES IN PRINTMAKING

An exploration of the intaglio process in the making of prints, including such possibilities as etching, dry point, and engraving; emphasis upon personal expression and creative possibilities. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 204. *Credit:* Two semester hours—four class hours.

ART 409. PLANOGRAPHIC PROCESSES IN PRINTMAKING

An exploration of the planographic processes in the making of prints, including such possibilities as the use of stone and metal in lithography, various media; emphasis upon personal expression. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 204. *Credit:* Two semester hours—four class hours.

ART 410. SERIGRAPHIC PROCESSES IN PRINTMAKING

An exploration of the serigraphic processes in the making of prints, including such possibilities as silk screen and substitutes, with stencils of paper, film lacquer, tusche-glue, and other materials. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 204. *Credit:* Two semester hours—four class hours.

ART 411. ADVANCED STUDIO IN PRINT MAKING

Advanced printmaking, using a wide variety of materials and techniques according to the needs and interests of the student; including such possibilities as lithography, wood engraving, etching, and silk screen; experimental prints, color exploration, mixed media. *Classification:* Elective for Art Education upperclassmen. *Prerequisites:* Art 204; Art 407, Art 408, Art 409, Art 410 desirable. *Credit:* Two semester hours — four class hours. *Special Note:* Requires approval of the instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 412. POTTERY MAKING

A study of ceramic materials and processes with an emphasis on pottery making; design and expression in ceramics; study of form and space, mass and volume in vessels; the effects of glaze, color, and texture, techniques of forming, glazing, and firing. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 110. *Credit:* Two semester hours—four class hours.

ART 413. CERAMIC SCULPTURE

Exploration of clay as a plastic sculptural medium; basic methods of forming, glazing, and firing ceramic sculpture; relief, free standing, and moving sculpture; architectural sculpture; cast making for reproduction; consideration of form and space, design. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 110. *Credit:* Two semester hours—four class hours.

ART 414. CERAMIC MATERIALS

A study of ceramic raw materials, their origin and properties; selection and preparation of clay bodies; glaze calculation and preparation; development of original and experimental glazes, test firings and applications. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 110. *Credit:* Two semester hours — four class hours.

ART 415. ADVANCED STUDIO IN CERAMICS

Advanced study of design and expression through the clay medium based on the needs and interests of the student; continued exploration in clay bodies and glazes; individual concentration on the potter's wheel, slip casting, ceramic sculpture, and firing practice. *Classification:* Elective for Art Education upperclassmen. *Prerequisites:* Art 110; Art 413 and Art 414 desirable. *Credit:* Two semester hours — four class hours. *Special Note:* Requires approval of instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 416. ADVANCED STUDIO IN WOOD DESIGN

The design and creation of a major project in wood, approached as a designer-craftsman; utilizing a range of techniques, hand, power, and machine tools as needed; accompanied by parallel studies selected by the student from such areas as archetypes, human engineering, and furniture; designers and their influences; aesthetic implications of mechanical processes. *Classification:* Elec-

tive for Art Education upperclassmen. *Prerequisite:* Art 207. *Credit:* Two semester hours — four class hours. *Special Note:* Requires approval of instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 417. WEAVING PROCESSES IN TEXTILES

Advanced study and experience in textile fabrication for specific uses; designing for hand and machine processes in weaving; additional study in fibers; expressive and controlled design in woven fabrics; aesthetic considerations. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 206. *Credit:* Two semester hours—four class hours.

ART 418. PRINTING PROCESSES IN TEXTILES

Advanced study and exploration of textile design for specific uses, with an emphasis on such printing techniques as silk screen and block printing on cloth; aesthetic and practical considerations in the design of printed textiles. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 206. *Credit:* Two semester hours—four class hours.

ART 419. APPLIQUE PROCESSES IN TEXTILES

Advanced exploration in such applied textile techniques as creative stitchery and embroidery, appliqued forms, knotting and hooking, and combinations of these; for both utilitarian and expressive purposes; experience in the making of wall hangings, room dividers, special fabrics. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 206. *Credit:* Two semester hours—four class hours.

ART 420. ADVANCED STUDIO IN TEXTILE DESIGN

Exploration of various design techniques on an advanced level; concentration in individually-selected projects or areas of textile design; weaving, printing, applique, and

other traditional and experimental techniques according to student interest and need. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 206; Art 417; Art 418; Art 419 desirable. *Credit:* Two semester hours—four class hours. *Special Note:* Requires approval of instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 421. METALSMITHING

Advanced experience in metalsmithing as a continuation of the forming techniques introduced in Art 205, with the addition of others, including the possibility of metal spinning; concentration in metalworking areas of special interest to the student; enameling on metals. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 205. *Credit:* Two semester hours—four class hours.

ART 422. ADVANCED STUDIO IN METALSMITHING

Advanced experiences in metalworking techniques and design, based on the needs, interests, and background of the student; individual projects in such areas as raising, welding, casting, spinning, and so on; enameling and other surface enrichment. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 205; Art 421 desirable. *Credit:* Two semester hours—four class hours. *Special Note:* Requires approval of instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 423. JEWELRY MAKING

Exploration of materials and processes in jewelry making, emphasizing creative design; stressing basic working techniques in the fabrication of jewelry from sheet and wire, sawing, shaping, hard soldering, and so on; introductory experiences in stone setting, gem polishing, combinations with exotic woods. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 205. *Credit:* Two semester hours—four class hours.

ART 424. CAST JEWELRY

Exploration of materials and processes used in casting jewelry in silver and gold, including one-piece open-mold casting, and cuttlefish casting, as well as lost wax processes utilizing steam casting and centrifugal casting techniques; finishing procedures; design implications. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 205; Art 423 desirable. *Credit:* Two semester hours—four class hours.

ART 425. GEM POLISHING

Lapidary techniques in sawing, grinding, sanding, and polishing semi-precious stones; drilling, tumbling; emphasis on cabochon and free-form shapes; hand as well as machine processes; acquaintance with various kinds of gem stones, degrees of hardness, and suitability for various uses. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 423. *Credit:* Two semester hours—four class hours.

ART 426. ADVANCED STUDIO IN JEWELRY

Advanced exploration of materials and processes used in jewelry making, with increasing emphasis on design aspects; concentration on individually-selected projects and areas of special interest; possibilities for individual experimentation and the use of unusual techniques. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 423; Art 424 and Art 425 desirable. *Credit:* Two semester hours — four class hours. *Special Note:* Requires approval of instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 427. ADVERTISING DESIGN

Principles of advertising design as communication, motivation, and visual persuasion; problems in advertising and publication design; illustration media and techniques; topographic design and reproduction processes; preparation of material for various methods of reproduction. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 209. *Credit:* Two semester hours—four class hours.

ART 428. GRAPHIC DESIGN

Advanced problems in advertising, publication, display, and packaging design; materials, techniques and processes used in the preparation of visuals, design presentations, and mechanicals; stress on individual solutions to problems encountered by the graphic designer. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 427. *Credit:* Two semester hours—four class hours.

ART 429. ILLUSTRATION

Advanced problems in advertising, editorial, and technical illustration, in black and white and color, and carried out in various media; color separation; photo-retouching; photo-mechanical techniques; a study of various techniques used in illustration today; development of personal style. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 427. *Credit:* Two semester hours—four class hours.

ART 430. WORKSHOP IN GRAPHIC ARTS PRODUCTION

A cooperative program of practical problems in the design and production of printed matter, including typographic design, paper selection, composition, camera and plate-making operations, letterpress and photolithographic processes. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours — four class hours. *Special Note:* Open to a limited group of Industrial Arts and Art Education students by permission of the instructors.

ART 431. CREATIVE PHOTOGRAPHY

Photography as an art medium and as an educational tool; creative and expressive use of photographic equipment, material and process; technical camera and dark room processes and their application in pictorial composition and expression; the creative camera as a teaching asset. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 108. *Credit:* Two semester hours—four class hours.

ART 432. ADVANCED STUDIO IN PHOTOGRAPHY

Advanced photographic techniques with a continuing emphasis on sensitive individual expression in the medium; the application of photographic processes to the needs of the student, future teacher and artist; concentration on individually-selected areas of special interest. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 431. *Credit:* Two semester hours—four class hours. *Special Note:* Requires approval of instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 433. PRODUCT DESIGN

Design for individual and mass production of useful products, considering the qualities of the natural or man-made material utilized and the processes to be used in producing it, as well as functional and aesthetic problems; development of designs through sketches, scale drawings and prototypes. *Classification:* Elective for Art Education and Industrial Arts upperclassmen. *Prerequisite:* Art 107 or 315. *Credit:* Two semester hours—four class hours.

ART 434. ADVANCED STUDIO IN PRODUCT DESIGN

Advanced study of product design, custom design for specific uses and settings; experiments with recently-developed materials as well as established ones; individual projects in such areas as tools, housewares, appliances, and so on; emphasis on ingenuity in the design solution. *Classification:* Elective for Art Education and Industrial Arts upperclassmen. *Prerequisite:* Art 433. *Credit:* Two semester hours — four class hours. *Special Note:* Requires approval of instructor, and scheduled studio hours. May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 435. EXHIBITION TECHNIQUES

Problems in the organization of school and community art exhibitions; preliminary planning, arrangements for loans; transportation,

insurance, protection arrangements; designing, handling, lighting, and related problems; school room and hall displays; developing display units; experience with college exhibits. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours — four class hours.

ART 436. INTERIOR DESIGN

Design problems related to the interiors of homes and public buildings; selection and arrangement of furniture and accessories; built-in and custom-made items; the making of sketches, floor plans, and models as needed; visits to shops and manufacturers; practical design solutions for existing situations. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 210. *Credit:* Two semester hours — four class hours.

ART 437. COMMUNITY DESIGN

The design of the modern community related to problems of residential areas, the needs of business and industry, the location of public buildings and schools, recreation needs, transportation problems; the greenbelt concept; redevelopment problems of the city; research and suggested solutions for existing problems. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours—four class hours.

ART 438. CREATIVE LEATHERWORK

Design applied to the making of products in leather, approached from the viewpoint of the contemporary designer-craftsman; the adaptation of traditional techniques and invention of new solutions in construction methods; leather in combination with other materials; research and experiment in the area. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours—four class hours.

ART 439. RESEARCH IN ART EDUCATION

Readings, reports and discussion of basic and current research activity in art education; exploration of simple experimental techniques, with students developing and carrying out aspects of research as a part

of class requirement; research on specific local situations as well as universal professional problems. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours—two class hours. *Special Note:* May be repeated or taken simultaneously for a maximum of six semester hours with administrative approval.

ART 440. ART PROGRAMS FOR ADULTS

Special psychological and creative problems of the adult; community programs in art and art education sponsored by the schools and other agencies; cultural and leisure-time needs of adults; government programs in the arts; developing local art programs, including the crafts. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours — two class hours.

ART 441. ORIENTAL ART

The major styles, artists, and monuments of Islam, India, China, and Japan; oriental architecture, painting, sculpture, prints; textiles, pottery, costume jewelry, gardens, with related reference to music, poetry, dancing, and the theater. *Classification:* Elective for all students. *Credit:* Three semester hours—three class hours.

ART 442. SCENOGRAPHY

Design for the stage; philosophy, theory, practices in design for the dramatic arts; the relationship of scenery, costume, makeup, lighting and allied stage crafts; function of the designer; development of theater design problems from the design concept to working drawings and the making of models. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours—four class hours.

ART 443. ADVANCED SCENOGRAPHY

Advanced theater design; how the different elements of the stage function in various scenes; individualized study and research in the poetry of the stage setting; practical

work in the design, construction, and painting of stage settings related to actual performances. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 442, or special permission. *Credit:* Two semester hours — four class hours. *Special Note:* May be repeated or taken simultaneously with administrative approval.

ART 444. TECHNICAL PLAY PRODUCTION

Introduction to the various visual aspects of theater production; technical organization, stage design, stage mechanics, lighting, costumes, make-up; play production problems for proscenium, arena, and flexible staging; practical experience in technical production, including crew work. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours — four class hours.

ART 445. ADVANCED TECHNICAL PRODUCTION

Advanced study and experience in technical play production introduced in Art 444; leadership and responsibility in one or several areas of technical production for plays in rehearsal and during performances; special projects and research in one or several areas of technical direction. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 444, or special permission. *Credit:* Two semester hours—four class hours. *Special Note:* May be repeated or taken simultaneously for a maximum of four semester hours with administrative approval.

ART 446. DESIGN WITH LIGHT

Color light as a design medium in personal and group expression; theory, processes, and techniques in the use of light as an art form and as an aspect in design; two-dimensional expression in projection; three-dimensional expression in space; various uses of light from simple display to the theater. *Classification:* Elective for Art Education upperclassmen. *Credit:* Two semester hours—four class hours.

ART 447. STAGE LIGHTING

Theory and practice in lighting the stage; the creation of special effects and illusions; the metaphor of color light; stage lighting equipment and electrical control; developing light plots for various kinds of productions; practical experience in plays under production, including required crew work. *Classification:* Elective for Art Education upperclassmen. *Prerequisite:* Art 446, or special permission. *Credit:* Two semester hours—four class hours.

ART 453. MASTERWORKS OF PAINTING AND SCULPTURE

An introduction to master-works of painting and sculpture for non-art majors; emphasizing outstanding examples of art selected from various periods, cultures, styles, and movements from early civilizations to the present; the artist as an interpreter and as a culture-maker; extra class assignments. *Classification:* Elective for all students except art majors, with prerequisite. *Credit:* Two or three semester hours—two or three class hours.

ART 454. MASTERWORKS OF ARCHITECTURE

An introduction to masterworks of architecture for non-art majors; emphasizing architecture as a living organism; selected from various periods, cultures, and styles, from early civilizations to the present; places of worship and interment, public buildings, private residences; extra class assignments. *Classification:* Elective for all students except art majors, without prerequisite. *Credit:* Two or three semester hours—two or three class hours.

ART 456. LATIN AMERICAN ART: PRE-COLUMBIAN

A comprehensive study of the arts, artifacts, and architecture of the pre-Columbian civilizations from Mexico to Peru; including prehistoric Americas and significant medieval American cultures such as the Aztec, Mayan, Nazca, and Inca; lectures, discussions, extra class assignments. *Classification:* Electives for all students, without prerequisite. *Credit:* Two or three semester hours—two or three class hours.

ART 457. LATIN AMERICAN ART: FROM COLONIAL PERIOD

Painting, architecture, and sculpture in Middle America and South America as they reflect Renaissance and Baroque arts of Spain and Portugal; as they reassert pre-Colonial concepts in monumental arts; Naturalism and Romanticism in nineteenth century, impact of social concepts. European influences, Nativist painting. *Classification:* Elective for all students, without prerequisite. *Credit:* Two or three semester hours—two or three class hours.

ART 469. ART OF THE ANCIENT NEAR EAST

A concentrated study of the art and monuments of Mesopotamia and Persia from the Sumerian culture of ca. 3500 B.C. to the Persian Domination and conquest of Alexander the Great; relation to the art of Egypt and the Aegean area; lectures, discussions, extra class assignments. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 470. ART OF THE CLASSICAL WORLD

A concentrated study of the architecture, sculpture, and painting of Greece and Rome; from the Minoan and Mycenaean civilizations in the third millennium B.C. through the Age of Constantine and the fall of Rome in the fifth century A.D.; impact of the Classical World on Western art and thought; lectures, discussions, extra class assignments. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 471. EARLY MEDIEVAL ART

A concentrated study of the art and architecture of Western Europe, in relation to the arts of the Classical World and Byzantine art, from the eighth through the eleventh century; emphasizing historical and religious means of the art, architecture, manuscript illuminations, and jeweled arts of the period; lectures, extra class assignments. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 472. ROMANESQUE AND GOTHIC ART

A comprehensive study of architecture, sculpture, painting, and decorative arts of the Romanesque period through the Gothic era; Pilgrimage churches to the late Gothic cathedrals; eleventh century illuminated manuscripts and the Bayeux Tapestry to precursors of the van Eycks; sculpture from S. Sornin in Toulouse, portals of Vezelay and Autun through the work of Claus Sluter at Dijon. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 473. ITALIAN RENAISSANCE ART

A comprehensive study of the arts of Florence, Venice, Northern Italy, Umbria, and Rome, in relation to man's discovery of himself and his world; consideration of the social and political milieu of the time, with emphasis on an understanding of the major monuments of architecture, sculpture, and painting. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 474. NORTHERN RENAISSANCE ART

A study of artistic production, including illuminated manuscripts, in the Netherlands, France, Germany, and England, from the latter part of the fourteenth century through the sixteenth century; including works of Melchior Broederlam, the Limbourg Brothers, the van Eycks, Roger van der Weyden, Petrus Christus, Hugo van der Goes, Bosch; graphic art of Martin Schongauer and Al-



brecht Durer. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 475. BAROQUE ART

A study of the great monuments in art of the seventeenth and eighteenth centuries in Western Europe; considered both as works of value in themselves and as reflections of the religious, political, and intellectual climate of the period; lectures, discussions, extra class assignments. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 476. NINETEENTH CENTURY ART

A concentrated study of architecture from the 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; nineteenth century American painting; sculpture from Houdin and Canova to Rodin and Augustus St. Gaudens; in relationship to the social, political, economic, and intellectual climate of the times; lectures; discussions, extra class assignments. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 477. TWENTIETH CENTURY ART

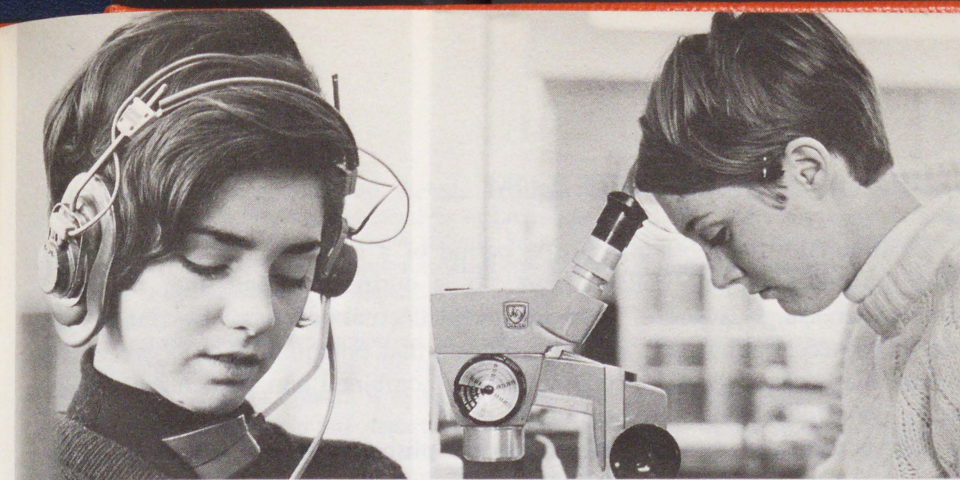
A study of the major trends, artists, and works of the twentieth century, with an emphasis on historical, artistic, judgmental, and cultural meanings as they reflect the twentieth century and past civilizations; including painting, sculpture, architecture, and other areas; extra class assignments. *Classification:* Elective for all students. *Credit:* Two or three semester hours—two or three class hours.

ART 495. PROJECT

(See Project under Academic Regulations)

ART 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)



ARTS AND SCIENCES

The Arts and Sciences are organized into three academic divisions: Arts and Humanities, Social Sciences, and Mathematics and Science. The Arts and Humanities include the Departments of English, Foreign Language, Health, Physical Education and Recreation, Music, Philosophy, and Speech and Theatre Arts. The Social Sciences include the Departments of History, Geography, Political Science-Economics, Psychology, and Sociology-Anthropology. The Mathematics and Science area includes the Departments of Biology, Chemistry, Geology, Mathematics, Physics and General Science.

A Bachelor of Arts degree is offered with majors in the various departments and is described in detail under the Liberal Arts Curriculum.

All curricula of the College require a basic content of liberal arts. Specific course requirements are shown under the specialized division of the College i.e. Art Education, Home Economics, Industrial Arts, Vocational Technical Education, Exceptional Children.

The Departments of English, Foreign Language, Mathematics, Science, and Social Studies provide content courses for programs of study under the Bachelor of Science of Education degree for the certification of secondary school teachers. These programs are listed under the Secondary Education Division.

Elementary Education students will elect courses to complete their area of Liberal Arts concentration from offerings by the English, Foreign Language, Geography, Mathematics, Music, Science, and Social Studies departments. Such programs are listed under the Elementary Education Division.

In addition, all of the Arts and Sciences Departments offer a wide variety of elective courses which may be selected by students in all Divisions of the College.

LIBERAL ARTS CURRICULUM

Traditionally the most liberalizing period of a student's academic life comes during the undergraduate college years. It is during this time that the student becomes increasingly aware of his potential intellectual development, and is able to move at an accelerating pace toward achieving that potential. The liberal arts encompass the basic academic disciplines whose combined aim is to teach a student how to live a fuller and more meaningful life.

The Liberal Arts program seeks to accomplish its aims by putting the student in touch with the most enduring products of civilization—those achievements which reflect man's intellectual and moral capabilities. To experience the human legacy enables a student to begin to approach wisdom and to have a meaningful relationship with his physical, social, and moral environment. He becomes ever more able to achieve a perception of knowledge as connected and capable of being grasped as an intellectual entity. The ideal liberal arts graduate is an individual who is equipped to meet the exigencies of life with intelligence, integrity, and creativity.

LIBERAL ARTS CURRICULUM

I. The degree of Bachelor of Arts:

A. Entrance Requirement:

1. High School diploma or equivalent

B. Requirements for Graduation:

1. Total hours 124
 - a. Breadth 60
 - b. Major Program 24-40
 - c. Electives 20-36
 - d. Physical Education 4
 - e. Competence in a Foreign Language

II. Distribution of Breadth Requirements:

A. A minimum of 14 hours in each of the following academic divisions:

THE ARTS	HUMANITIES	SOCIAL SCIENCE	MATH. & SCIENCE
Music	Eng. Lit.	History	Mathematics
Art	Philosophy	Economics	Biology
Speech &	Communication	Sociology	Chemistry
Theatre Arts	Foreign Lang.	Political Sci.	Geology
Dance		Geography	Physics
Radio & TV		Anthropology	General Science
		Psychology	

1. *The Arts*—Courses must be elected from at least three of the following areas: Area 1. Dance; Area 2. Music; Area 3. Speech and Drama; Area 4. Visual and Plastic Arts.

2. *Humanities*—Courses must include English 101-2, Effective Communication or its equivalent (6 hours); and electives in Literature (6 hours); and Philosophy (3 hours).
3. *Social Science*—Courses must include S.S. 101-2; Introduction to Social Sciences (6 hours); and electives in American History (3 hours); Non-American History (3 hours); and a Social Science (3 hours).
4. *Mathematics and Science*—Courses must include a minimum of one semester of mathematics and two semesters of science. Courses designated by the departments as sequential must be taken for two semesters.

No course taken for breadth is to be also counted as part of the major.

Breadth requirements in any department may be waived (so that a student can fulfill his breadth requirements from offerings of other departments) with the consent of the divisional director and the department offering the course in question.

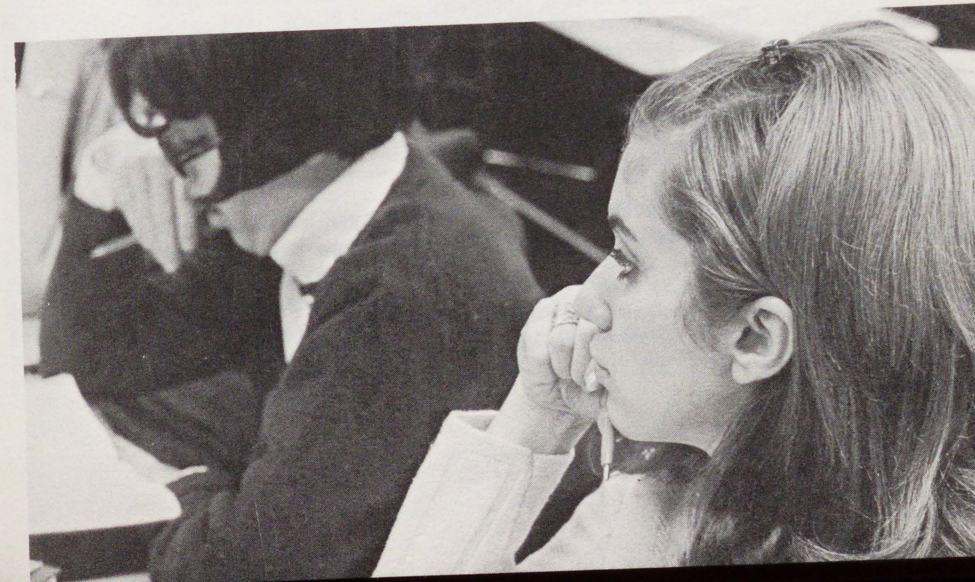
III. Major Programs

A. Types of major:

1. *Divisional*—The Arts, Humanities, Social Sciences.
2. *Departmental*—Art, Biology, Chemistry, English, Foreign Language, Geography, Geology, History, Mathematics, Music, Philosophy, Physics, Sociology, Speech and Theatre Arts.
3. *Inter-Divisional*—American Studies, Latin American Studies.

B. Requirements for Divisional Majors:

1. *The Arts*—30 hours with at least one course from each area of Art, Dance, Music, Speech and Theatre Arts, and a minimum of 6 hours in three of the areas.
2. *Humanities*—36 hours to include Philosophy (6 hours); English (9 hours); Foreign Language (6 hours); Seminar (3 hours); and Electives in Humanities (12 hours).
3. *Social Science*—39 hours:
 - a. Three courses (9 hours) from Economics, Political Science, Anthropology, Sociology, and Geography.
 - b. Three additional courses in one of the above areas. (An area of concentration) (9 hours).
 - c. Two upper Division Social Sciences outside area of concentration (6 hours).
 - d. History: Four courses of which at least one must be American, one Non-American, and two courses in the area of other History (12 hours).
 - e. Seminar in Social Sciences (3 hours).



C. Requirements for Departmental Majors:

1. *Art*—40 hours
 - a. Courses in theory, such as essentials of design, object and figure drawing, art history, contemporary art, visual communication, and philosophy of art (21 hours).
 - b. Studio courses, at least two, in painting, sculpture, ceramics, photography (4 hours).
 - c. Electives in Art (15 hours).
2. *Biology*—36 hours
 - A. Required courses:

Biol. 111-112, General Biology (or equivalent)	Semester Hours
Biol. 203, Genetics (Prereq. Biol. 111-112 or equivalent)	6-8 4
Biol. 301, General Physiology (Prereq. Biol. 111-112, Chem. 111-112) (Organic Chem. recommended)	3
Biol. 401, Ecology (Prereq. Biol. 111-112, or equivalent)	4
Biol. 405, Organic Evolution (Prereq. Biol. 401, Biol. 203)	3
	20-22
	16-14
	36
 - B. Elective courses in biology under faculty advisement
3. *Chemistry*—38 hours

Required Courses	Semester Hours
Chem. 111-112, Gen. Chemistry	8
Chem. 201-202, Organic Chemistry (Prereq. Chem. 111-112)	8
Chem. 210, Literature of Chemistry (Prereq. Chem. 111-112)	1
Chem. 301, Analytical Chemistry (Prereq. Chem. 111-112)	3
Chem. 403, Instrumental Chemistry (Prereq. Chem. 301, Chem. 405)	3
Chem. 405-406, Physical Chemistry (Prereq. Chem. 202, Chem. 301, Phy. 112, Math 108)	8
Chem. 400, Inorganic Chemistry (Prereq. Chem. 202, Chem. 405)	3
Chem. 401, Biochemistry (Prereq. Chem. 405)	4
	38
4. *English*—36 hours
 - a. Courses in general literature: Survey of English Literature, (Eng. 107, 108) (6), American Literature (3), World Literature (6), Contemporary Literature (3)
 - b. A course in speech
 - c. A course in advanced writing
 - d. A course in Chaucer, Shakespeare or Milton
 - e. English electives

5. *Foreign Language*—36 hours of which a maximum of 6 hours may be in closely related fields or in languages.

- a. French—30 hours from the following:

Fr. 201	Intermediate French	Semester Hours
Fr. 202	Intermediate French	3
Fr. 301	French Composition & Conversation	3
Fr. 302	French Composition & Conversation	3
Fr. 303	Classical French Drama	3
Fr. 304	Nineteenth Century French Drama	3
Fr. 306	French Civilization	3
Fr. 307	History of French Literature	3
Fr. 308	History of French Literature	3
Fr. 401	Contemporary French Literature	3
Fr. 403	Backgrounds of Modern French	3
Fr. 404	French Novel	3
- b. Spanish—30 hours from the following:

Span. 201	Intermediate Spanish	Semester Hours
Span. 202	Intermediate Spanish	3
Span. 301	Spanish Composition & Conversation	3
Span. 302	Spanish Composition & Conversation	3
Span. 303	Modern Spanish Masterpieces	3
Span. 306	Hispanic Civilization	3
Span. 307	History of Spanish Literature	3
Span. 308	History of Spanish Literature	3
Span. 401	Cervantes	3
Span. 402	Spanish Classical Drama	3
Span. 403	Background of Modern Spanish	3
Span. 404	19th Century Literature	3
Span. 405	Survey of Latin American Literature	3

6. *Geography*—36 hours

- a. Required Geography courses:

Geog. 101	Elements of Physical Geog.	Semester Hours
Geog. 102	Elements of Cultural Geog.	3
Geog. 207	Conservation of Nat. Resources	3
Geog. 305	World Economic Geography	3
Geog. 3—	Cartography	3
Geog. 303	World Climatology	3
Geog. 406	Urban Geography	3
Geog. 401	Development of Geog. Thought and Methodology (a seminar)	3
	Any regional course	3
		27

Students transferring into Geography who had taken Geog. 201 and/or 301 would be permitted to substitute those courses for the two elements courses listed above.

- b. Required Science course:

Geol. 201	Geomorphology	3
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- c. Required Social Studies courses:

Anth. 201	General Anthropology	3
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Soc. 201	The American Community	
or		
Ec. 201	Principles and Problems of Economics Part I, Macro-Economics	3
7	Geology—32-33 hours	6
a.	Required Courses:	
	Geol. 101 or 112, Physical Geology	
	Geol. 102 Historical Geology	3-4
	Geol. 201 Geomorphology	3
	Geol. 301 Stratigraphy	3
	Geol. 302 Paleontology	3
	Geol. 303 Mineralogy	3
	Geol. 304 Petrology	3
b.	Elective from the following:	
	Geol. 400 Geology of New York State	3
	Geol. 401 Structural Geology	
	Geol. 402 Geology of North America	
	Geol. 403 Glacial Geology	
	Geol. 404 Advanced Oceanography	
c.	Required Mathematics Courses:	24-25
	Math. 107-108 Analytic Geometry and Calculus	8
8.	History—33 hours	32-33
a.	One basic Social Studies course	
b.	Two basic American History courses, one being 20th Century United States	3
c.	Two basic European History courses	6
d.	Two courses of Non-American or Non-European Hist.	6
e.	Two upper Division History courses in American, European or other History	6
f.	One course in area of other History (Non-American or Non-European) or Social Science Elective	6
g.	Seminar in History	3
9.	Mathematics—30 hours	
	Completion of Math. 107, 108, 109, and 202. Fifteen hours of mathematics from the following with at least one course from each of the four groups.	
	Group I.	
	Math. 304 Differential Equations	
	Math. 309 Advanced Calculus I	3
	Math. 403 Applied Analysis	3
	Math. 407 Advanced Calculus II	3
	Math. 406 Numerical Analysis	3
	Group II.	
	Math. 301 Introduction to Modern Algebra	
	Math. 302 Linear Algebra	3
	Math. 307 Elementary Theory of Numbers	3
	Math. 412 Mathematical Logic	3

Group III.		
Math. 308	Modern Geometry I	3
Math. 401	Modern Geometry II	3
Math. 311	Introduction to Topology	3
Group IV.		
Math. 305	Probability and Statistics I	3
Math. 405	Probability and Statistics II	3
Math. 404	Mathematical Methods in Applied Mathematics	3
10.	Music—33 hours	Semester Hours
a.	Harmony I and II (including sight-singing and dictation)	8
b.	Counterpoint	3
c.	Form and Analysis	3
d.	Introduction to Music Literature	3
e.	Choice of one of the following:	
	1. Antiquity Through Baroque	3
	2. Classical Through Romantic	3
	3. Contemporary	3
f.	Conducting	3
g.	Applied Music	10
11.	Philosophy—27 hours	
	A major in philosophy will be required to take courses in the field totalling at least 27 hours. The department requires its majors to take the following courses:	
		Semester Hours
Phil. 302	Ethics	3
or		
Phil. 203	Aesthetics	3
Phil. 202	Logic	3
or		
Phil. 307	Philosophy of Science	3
Phil. 205	History of Philosophy I	3
Phil. 206	History of Philosophy II	3
		12
	Plus 15 hours from the following:	
Phil. 201	Problems of Philosophy	3
Phil. 204	Philosophy of Religion	3
Phil. 301	American Philosophy	3
Phil. 303	Philosophy of History	3
Phil. 304	Social and Political Philosophy	3
Phil. 305	Contemporary Philosophy I	3
Phil. 306	Contemporary Philosophy II	3
Phil. 308	Philosophy of Existentialism	3
Phil. 309	Metaphysics	3
Phil. 310	Epistemology	3
Phil. 401	Seminar in Philosophy	3
Phil. 402	Philosophy of Psychology	3
Phil. 403	17th-18th Century Rationalists	3
Phil. 404	British Empiricism	3

- Phil. 405 Plato and Aristotle
 Phil. 406 Theory of Logic and Mathematics
 Phil. 407 Theory of Value

12. Physics—35 hours

a. Required Courses

- Phy. 111-112, General Physics (or equivalent)
 and Phy. 105, Physics Problem Course
 Phy. 205, Modern Atomic Physics
 (Prereq. Phy. 111-112, Calculus)
 Phy. 414, Introduction to Theoretical Physics I
 (Prereq. Phy. 111-112, Math. 108)
 Phy. 416, Classical Mechanics I
 (Prereq. Phy. 111-112, Math. 202, Phy. 414)
 Phy. 410, Advanced Physics Laboratory
 (Prereq. Phy. 111-112)
 Phy. 418, Electricity and Magnetism I
 (Prereq. Phy. 111-112, Phy. 414, Math. 202)
 Phy. 406, Introduction to Quantum Physics
 (Prereq. Phy. 205, Phy. 414)

b. Elective Courses in Physics selected under faculty advisement

13. Sociology—30 hours

a. Required Courses:

- Soc. 305 Methods in Social Research
 Soc. 306* Social Statistics
 Soc. 403** Contemporary Sociological Theory
 or
 Soc. 405** Foundations of Sociological Thought
 Soc. 409 Seminar for Sociology

Total required courses

b. Electives within major program

Any courses designated: "Sociology" as well as Social Science 401—Political Behavior and Public Opinion, and Anth. 402—Cultural Anthropology may be elected.

14. Speech and Theatre Arts—30 hours

a. Speech Arts Emphasis

- Sp. and T.A. 105 Introduction to Speech Arts
 Sp. and T.A. 106 Introduction to Theatre Arts

*Mathematics 305 and 405 may be substituted with the approval of the department chairman. If the mathematics substitute is selected, 3 hours of credit will be applied toward 30 hour sociology requirement and 3 hours of credit will be applied toward the free elective.

**Both courses may be taken toward meeting the 30 hour requirement of the major but only one must be taken.

- Sp. and T.A. 202 Public Speaking
 Sp. and T.A. 320 Oral Interpretation
 Sp. and T.A. 209 Public Discussion
 Sp. and T.A. 309 Argumentation and Debate
 Sp. and T.A. 322 Rhetorical Types and Principles
 Seminar
 Electives in Theatre Arts
 Electives in Speech Arts

b. Theatre Arts Emphasis

- Sp. and T.A. 105 Introduction to Speech Arts
 Sp. and T.A. 106 Introduction to Theatre Arts
 Sp. and T.A. 208 Technical Theatre
 Sp. and T.A. 317 or 318 History of the Theatre
 Sp. and T.A. 320 Oral Interpretation
 Sp. and T.A. 326 Acting: Theory and Practice
 Sp. and T.A. 450 Directing
 Sp. and T.A. 496 Seminar in Speech and Theatre Arts
 Elective in Speech or Theatre Arts
 Elective in Speech Arts

D. Interdivisional Majors—36 hours

1. American Studies

a. American History and Literature.

1. American History: History 201, Social and Intellectual History of the United States to 1900, plus two elective courses in this area, at least one of which must be at the 300-400 course level. 9 hours
 2. American Literature: English 104, Survey of American Literature, plus two selected from English 404 American Novel before 1900, English 414 Realism in American Literature and English 212 Romantic Movement in American Literature. 9 hours

b. Behavioral Sciences and Geography: Free choice of courses in this area, except that they must deal with the American experience. 6 hours

c. Arts: Free choice of courses in this area, basically the Fine Arts and Music, again pertaining to American Culture. 6 hours

d. Seminar in American Culture: Regarded as the culminating experience, this comes during the senior year. This course is not currently offered. Until the student enrollment justifies it, the members of the faculty interested in, and chiefly responsible for, the development of the American Studies program have agreed to perform this task of integration through individual tutorial study.

2. Latin American Studies

- Course
 History 313-Hist. of L. A.: Colonial Era
 History 314-Hist. of L. A.: The National Era
 Geography 203 or 302
 Anthro. 302 or 303
 Latin American Art or Music
 L.A. Lit. (Spanish 405)
 20th Century L.A. Problems

Plus fifteen semester hours of electives chosen from at least three of the following disciplines:

History	Music	Literature
Geography	Ethnology	Science
Art	Archaeology	

The Latin American Studies major will fulfill his Liberal Arts foreign language requirement in either Spanish or Portuguese.

IV. Electives—20-36 hours

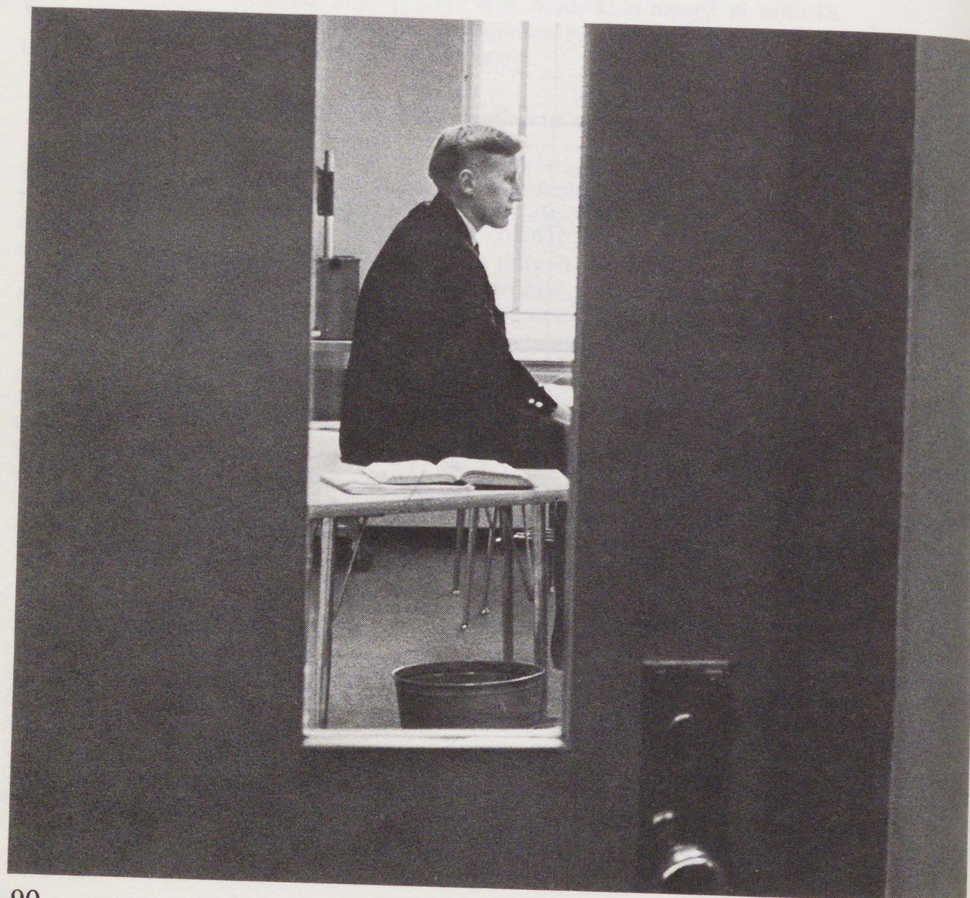
Any College course, for which the student has prerequisites, may be considered an elective.

V. Physical Education Requirement:

- | | |
|--|---------|
| 1. Physical Education activities | 2 hours |
| 2. Physical Education theory | 2 hours |

VI. Competence in a Foreign Language

Each student is expected to demonstrate competence in a foreign language equivalent to the successful completion of the first four semesters (college level) in that language. Each unit of a high school language is equivalent to one semester of a college language.



ARTS AND HUMANITIES

ENGLISH DEPARTMENT

ENG. 101. EFFECTIVE COMMUNICATION

Materials and purposes of effective communication; symbolic nature of communication devices; mastery of the tools (spelling, enunciation, punctuation, vocal inflection, grammar, pronunciation, interpretation of visual and aural media); analysis of techniques used to evaluate mass media. *Classification:* Required of all freshmen. *Credit:* Three semester hours—three class hours.

ENG. 102. EFFECTIVE COMMUNICATION

Materials and purposes of effective communication; symbolic nature of communication devices; mastery of the tools (spelling, enunciation, punctuation, vocal inflection, grammar, pronunciation, interpretation of visual and aural media); analysis of techniques used to evaluate mass media. *Classification:* Required of all freshmen. *Prerequisite:* Eng. 101. *Credit:* Three semester hours—three class hours.

ENG. 103. ENGLISH LITERATURE

English prose and poetry from the beginnings through the nineteenth century. *Classification:* Required of Secondary Social Studies sophomores; elective for others. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 103 may not receive credit for 107 or 108.

ENG. 104. AMERICAN LITERATURE

American prose and poetry from the beginnings through the nineteenth century. *Classification:* Required of Secondary English sophomores and Secondary Social Studies students; elective for others. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 104 may not receive credit for 109 or 110.

ENG. 107. LITERATURE OF ENGLAND

English prose and poetry from the beginnings to 1700. *Classification:* Required of Secondary English freshmen; elective for others. *Prerequisite:* Eng. 101-102, except for Secondary English freshmen. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 107 may not receive credit for 103.

ENG. 108. LITERATURE OF ENGLAND

English prose and poetry from 1700 through the Nineteenth Century. *Classification:* Required of Secondary English freshmen; elective for others. *Prerequisite:* Eng. 101-102, except for Secondary English freshmen. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 108 may not receive credit for 103.

ENG. 109. AMERICAN WRITERS I

A survey of American literature from the beginning to the Civil War. *Classification:* Required of Secondary English sophomores; elective for others. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 109 may not receive credit for 104.

ENG. 110. AMERICAN WRITERS II

A survey of American literature from the Civil War to the present. *Classification:* Required of Secondary English sophomores; elective for others. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 110 may not receive credit for 104.

ENG. 201. ADVANCED COMPOSITION

Usage and the art of writing; practice with long and short papers; readings in con-

temporary prose. *Classification:* Required of Secondary English juniors who may substitute Eng. 220 or 325; elective for others. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours.

ENG. 203. MODERN DRAMA

Chief modern dramatist of Continental Europe, England and America from Ibsen to the present time. *Classification:* Elective. *Prerequisite:* Eng. 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 205. WORLD LITERATURE

Literary masterpieces of Western civilization: translations from the Greek, Latin, French, German, Italian, and Russian. *Classification:* Required of Secondary English sophomores; elective for others. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 205 and 214 may not receive credit for 301 and 302.

ENG. 208. GENERAL FOLKLORE

Nature, forms, and meaning of folklore; functions in society. *Classification:* Elective. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours.

ENG. 210. CHILDREN'S LITERATURE

Types of children's literature; folklore, informative material, fiction, biography, and poetry; principles of book selection; illustration, format; reading interests of children; story telling; bibliography. *Classification:* Required of Elementary Education sophomores. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours.

ENG. 211. MODERN BRITISH AND AMERICAN POETRY

Major poets and significant trends in poetry from 1912 to the present time. *Classification:* Elective. *Prerequisite:* Eng. 103, 104, 107, 108, 301 or 302. *Credit:* Three semester hours—three class hours.

ENG. 212. ROMANTIC MOVEMENT IN AMERICAN LITERATURE

Nature of Romanticism; English and Continental European backgrounds; nineteenth-century American writers including the Transcendentalists, Hawthorne, the Cambridge Poets, Melville, and Whitman. *Classification:* Elective. *Prerequisite:* Eng. 104, 109, 110, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 213. SECONDARY SCHOOL LITERATURE

Literature appropriate to grades 7-12; fiction, biography, informative material, folklore; poetry, drama; criteria of book selection; bibliography. *Classification:* Required of Secondary English sophomores. *Prerequisite:* Eng. 107 or 108. *Credit:* Three semester hours—three class hours.

ENG. 214. WORLD LITERATURE

A continuation of Eng. 205. *Classification:* Required of Secondary English sophomores; elective for others. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 205 and 214 may not receive credit for 301 and 302.

ENG. 217. MASS COMMUNICATION MEDIA

Historical development, present patterns, potentialities in a climate of freedom and responsibility; standards of critical analysis, aesthetic discrimination, and intelligent selection in using media; responsibility of relevant groups for media development. *Classification:* Elective. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours.

ENG. 220. CREATIVE WRITING

Individual writing projects to suit interests and abilities of students. *Classification:* Elective. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours.

ENG. 301. IDEAS OF MAN AND HIS WORLD IN LITERATURE

Development of man's ideas as seen in writings of the past and present in English and in translations from other languages. *Classification:* Required according to divisional curricula. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 301 and 302 may not receive credit for 205 and 214.

ENG. 302. IDEAS OF MAN AND HIS WORLD IN LITERATURE

A continuation of Eng. 301. *Classification:* Required according to divisional curricula. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours. *Special Note:* Students taking 301 and 302 may not receive credit for 205 and 214.

ENG. 304. SURVEY OF DRAMA

Representative playwrights of Western European culture: Sophocles, Plautus, Jonson, Moliere, de Vega, Sheridan, Chekhov, Ibsen, Shaw, and O'Neill. *Classification:* Elective. *Prerequisite:* Eng. 103, 104, 205, 214, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 305. THE ESSAY

Readings in major and selected minor essayists. *Classification:* Elective. *Prerequisite:* Eng. 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 307. ROMANTIC MOVEMENT IN ENGLISH LITERATURE

Romantic prose and poetry: Burns, Wordsworth, Coleridge, Scott, Byron, Shelley, Keats; critics of the period. *Classification:* Elective. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 308. THE SHORT STORY

Development of the short story in England and America. *Classification:* Elective. *Prerequisite:* Eng. 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 312. CONTEMPORARY LITERATURE

British and American literature of the twentieth century; poetry, fiction, drama. *Classification:* Required of Secondary English students; elective for others. *Prerequisite:* Eng. 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 315. SHAKESPEARE

Representative comedies and tragedies. *Classification:* Required of Secondary English students; elective for others. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 316. SHAKESPEARE

A similar study of another group of plays. *Classification:* Elective. *Prerequisite:* Eng. 103, 107, 108, 301 or 302. *Credit:* Three semester hours—three class hours.

ENG. 319. THE MOTION PICTURE

An examination of the film as an art form. *Classification:* Elective. *Prerequisite:* Eng. 101-102, and 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 325. JOURNALISM

News, feature, and editorial writing; copy reading; makeup; advertising; public relations. *Classification:* Elective. *Prerequisite:* Eng. 101-102. *Credit:* Three semester hours—three class hours.

ENG. 330. COMPARATIVE LITERATURE

Principles, history, methods and purposes are applied practically to various problems in European and American literature. *Classification:* Elective. *Prerequisite:* 103, 104, 107, 108, 301 or 302. *Credit:* Three semester hours—three class hours.

ENG. 331. LITERATURE OF FRANCE IN TRANSLATION

Selected masterpieces of French literature

in translation: novels, poetry, plays, and essays. *Classification:* Elective except for French majors who must have approval of their department chairman and the course instructor. *Prerequisite:* Eng. 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 340. AMERICAN FOLKLORE

Introduction to folklore with emphasis upon American folklore; collecting techniques; evaluations and interpretive procedures; literary uses of folklore. *Classification:* Elective. *Prerequisite:* Eng. 104, 109, 110, 301, or 302. *Credit:* Three semester hours—three class hours.

ENG. 401. LITERATURE OF THE BIBLE

Selected writings of the Old and New Testaments studied as literature; Biblical poetry and prose; influence of Bible translations on the English language. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours — three class hours. *Special Note:* May be elected by graduate students.

ENG. 402. THE EARLY ENGLISH NOVEL

Origins of the English novel; major eighteenth century novelists such as Defoe, Richardson, Fielding, Sterne. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 403. WORLD NOVEL

Major figures in the development of the novel during the past three centuries: Fielding, Balzac, Flaubert, Dostoevski, Tolstoi, the Brontës, Hardy, Hawthorne, and James. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 404. AMERICAN NOVEL BEFORE 1900

Cooper, Hawthorne, Clemens, James, and Howells. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 104, 109, 110, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 405. CHAUCER AND HIS AGE

Representative works of Chaucer; supplemental readings in the early drama, romance, and popular ballad. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 406. THE LATER ENGLISH NOVEL

Great English novels of the nineteenth century as art and as a manifestation of social interests. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 407. MODERN NOVEL

Great English and American novels of the twentieth century; their artistic and social significance. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, 302, or 312. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 409. MILTON

Prose and poetry of Milton, with emphasis on Paradise Lost; the background of Milton's writings. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 411. SEVENTEENTH CENTURY POETRY

Lyric and dramatic poetry: Shakespeare, Donne, Herrick, Jonson, Milton, and others.

Classification: Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 413. SEMINAR—TOUR IN AMERICAN LITERATURE

Study of major American writers before 1900, including a tour of locales associated with their lives and work. Study, four weeks; tour, two weeks. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 104, 109, or 110. *Credit:* Three semester hours. *Special Note:* May be elected by graduate students.

ENG. 414. REALISM IN AMERICAN LITERATURE

Realistic writers of the late nineteenth century: Howells, James, Clemens, S. Crane, Norris, and others. *Classification:* Elective. *Prerequisite:* Eng. 104, 109, 110, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 415. PHILOSOPHY IN LITERATURE

Major philosophical viewpoints in general literature; literary masterpieces with strong philosophic import. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 416. STUDY-TOUR OF WESTERN EUROPE

Six-weeks study-tour including Holland, Germany, Austria, Italy, Switzerland and France. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 205, 214, 301, 302, 304, or 403. *Credit:* Eight semester hours. *Special Note:* May be elected by graduate students.

ENG. 422. VICTORIAN POETRY

Tennyson, Browning, Arnold and others; social, political, and intellectual background

of the times. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 423. VICTORIAN PROSE

Major Victorian essayists with reference to the intellectual background of nineteenth century England: Carlyle, Newman, Macaulay, Mill, Ruskin, Arnold, Huxley, and Pater. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 424. LATE NINETEENTH CENTURY ENGLISH LITERATURE

English literature from the Pre-Raphaelite Movement to the end of the nineteenth century. *Classification:* Elective for juniors and seniors. *Prerequisites:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 426. EIGHTEENTH CENTURY ENGLISH LITERATURE

Poetry, essay, novel, and drama of the eighteenth century. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 103, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 427. FOUNDATIONS OF LANGUAGE

Origin of language, language families and their relationships, alphabets and the history of writing, word formation, changes in the form and meaning of words, and the scientific study of language. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 101-102, 201, or equivalent. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students who may not then elect Eng. 600.

ENG. 430. LITERATURE OF IRELAND

Influence of Irish history and geography on literature; Irish prose and poetry in English translation; Irish contributions to English literature; Yeats, Synge, and other writers since 1889. *Classification:* Elective. *Prerequisite:* Eng. 103, 107, 108, 301, 302, or 312. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 440. WRITING FOR THE PROFESSIONS

Technical and semi-technical exposition; articles, report writing, technical editing. *Classification:* Elective. *Prerequisite:* Eng. 101-102, 201, 220, or 325. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 441. COMPARATIVE DRAMA: TRAGEDY

Nature of tragic drama in theory and practice from Aeschylus to the present. *Classifi-*

cation: Elective for juniors and seniors. *Prerequisite:* Eng. 103, 104, 107, 108, 301, or 302. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 455. CHILDREN'S LITERATURE AND MASS MEDIA

Survey and analysis of the aesthetic experiences of children through other media than the book; study of the media, the quality of the experiences they transmit, and potentialities for improvement. *Classification:* Elective for juniors and seniors. *Prerequisite:* Eng. 210 or 514. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ENG. 495. PROJECT

(See Project under Academic Regulations).

ENG. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).



FOREIGN LANGUAGE DEPARTMENT

F.L. 100. ENGLISH AS A FOREIGN LANGUAGE

English taught as a second language designed to complement the international student's previous studies of English. Does not take the place of regular English courses but deals specifically with difficulties unique to the foreign born. Emphasis placed on understanding spoken English, correcting pronunciation, improving reading comprehension and developing skill in writing. *Classification:* Required of foreign students whose score is inadequate in a diagnostic test. Open only to foreign born. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

F.L. 101. ENGLISH AS A FOREIGN LANGUAGE

English taught as a second language designed to complement the international student's previous studies of English. Does not take the place of regular English courses but deals specifically with difficulties unique to the foreign born. Emphasis placed on understanding spoken English, correcting pronunciation, improving reading comprehension and developing skill in writing.

FRENCH

FR. 101. ELEMENTARY FRENCH

Fundamentals of the French language, with particular emphasis on the spoken language. Reading and writing exercises of gradually increasing difficulty. For students with no previous knowledge of French. *Classification:* Elective. *Credit:* Three semester hours — three class hours, with a minimum of one hour per week in the language laboratory.

FR. 102. ELEMENTARY FRENCH

Continued study of the fundamentals of the French language with emphasis on the

Classification: Required of foreign students whose score is inadequate in a diagnostic test. Open only to foreign born. *Prerequisite:* F.L. 100. *Credit:* Three semester hours — three class hours, with a minimum of one hour per week in the language laboratory.

F.L. 300. FOREIGN LANGUAGE IN THE ELEMENTARY GRADES

The place of modern foreign language in the elementary school curriculum; how a child learns a foreign language; teaching aids and materials; observation of foreign language classes in the elementary school; preparation of sample lessons. *Classification:* Elective. *Prerequisite:* Ed. 101, 102; and twelve hours of a single foreign language. *Credit:* Two semester hours — two class hours.

F.L. 495. PROJECT

(See Project under Academic Regulations).

F.L. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

spoken language. Reading and writing exercises also continued for the development of progressively greater ability in the language. *Classification:* Elective. *Prerequisite:* Fr. 101 or the equivalent. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

FR. 201. INTERMEDIATE FRENCH

Review of the work of Fr. 101-102 and further development of speaking, reading, and writing ability, with continuing emphasis on the use and comprehension of

the spoken language. *Classification:* Elective; required for Secondary French majors. *Prerequisite:* At least two years of high school French or completion of French 101-102. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

FR. 202. INTERMEDIATE FRENCH
Further development and reinforcement of the four skills; comprehension, speaking, reading, and writing for greater mastery of the language and for enough control to facilitate the study and discussion of literature later. *Classification:* Elective; required for Secondary French majors. *Prerequisite:* Fr. 201 or the equivalent. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

FR. 301. FRENCH COMPOSITION AND CONVERSATION
Intensive practice in speaking and writing French effectively. *Classification:* Elective; required for Secondary French majors. *Prerequisite:* Fr. 201-202 or the equivalent. *Credit:* Three semester hours—three class hours.

FR. 302. FRENCH COMPOSITION AND CONVERSATION
Continued intensive practice in speaking and writing French effectively. *Classification:* Elective; required for Secondary French majors. *Prerequisite:* Fr. 301 or permission of instructor. *Credit:* Three semester hours—three class hours.

FR. 303. CLASSICAL FRENCH DRAMA
Reading of the major plays of Corneille, Molière, and Racine and of other representative dramatists. *Classification:* Elective. *Prerequisite:* Fr. 201-202. *Credit:* Three semester hours—three class hours.

FR. 304. NINETEENTH CENTURY FRENCH DRAMA
Reading and discussion of plays which illustrate Romanticism, Realism, and Sym-

bolism in nineteenth century French drama. *Classification:* Elective. *Prerequisite:* Fr. 201-202. *Credit:* Three semester hours—three class hours.

FR. 305. SPOKEN FRENCH
Remedial work to help improve the student's understanding of the structural system of French with special emphasis on the control of the French sound system, including correct articulation and intonation of the spoken language. Introduction to French phonetics and applied linguistics. *Classification:* Required for Secondary French majors; elective with approval of instructor. *Prerequisite:* Fr. 301-302. *Credit:* Three semester hours—three class hours.

FR. 306. FRENCH CIVILIZATION
Contributions of France to present-day civilization; historical development of French culture; chief aspects of contemporary French life. *Classification:* Elective; required for Secondary French majors. *Prerequisite:* Fr. 201-202. *Credit:* Three semester hours—three class hours.

FR. 307. HISTORY OF FRENCH LITERATURE
Chronological and artistic development of French literature from its origin up to the eighteenth century. Reading and discussion of representative selections from the major authors. *Classification:* Elective; required for Secondary French majors. *Prerequisite:* Fr. 201-202. *Credit:* Three semester hours—three class hours.

FR. 308. HISTORY OF FRENCH LITERATURE
Chronological and artistic development of French literature in the nineteenth and twentieth centuries. Reading and discussion of representative selections from the major authors. *Classification:* Elective; required for Secondary French majors. *Prerequisite:* Fr. 201-202. *Credit:* Three semester hours—three class hours.

FR. 309. NINETEENTH CENTURY FRENCH POETRY
A study of the development of 19th Cen-

tury French poetry: lyric-romantic, Parnasian and, Symbolist poetry. *Classification:* Elective. *Prerequisite:* Fr. 202. *Credit:* Three semester hours—three class hours.

FR. 310. CONTEMPORARY FRENCH NOVEL
Reading of representative French novels published since 1900. *Classification:* Elective. *Prerequisite:* Fr. 202. *Credit:* Three semester hours—three class hours.

FR. 404. SURVEY OF THE FRENCH NOVEL
Reading of representative French novels from the seventeenth through the nineteenth century. *Classification:* Elective. *Prerequisite:* Fr. 307-308. *Credit:* Three semester hours—three class hours.

FR. 406. LITERATURE OF THE MIDDLE AGES
A study of the major trends in early French literature; the origin and development of the major genres; consideration of major linguistic change in the early language. *Classification:* Elective. *Prerequisite:* Fr. 307-308. *Credit:* Three semester hours—three class hours.

FR. 407. THE FRENCH ENLIGHTENMENT
Transition between the "siècle classique" and the "siècle philosophique" with Fon-

tenelle, Marivaux, and Prevost. *L'Esprit des Lois* of Montesquieu. Voltaire as the outstanding representative of the XVIIIth century. The encyclopedists, with Diderot and d'Alembert. The anticlimax of the "siècle philosophique", with Rousseau and his return to Nature. *Classification:* Elective. *Prerequisite:* Fr. 202. *Credit:* Three semester hours—three class hours.

FR. 408. CONTEMPORARY FRENCH THEATER
A study of the chief literary trends and the major authors of the drama from the early part of the twentieth century to the current period. *Classification:* Elective. *Prerequisite:* Fr. 202. *Credit:* Three semester hours—three class hours.

FR. 415. ADVANCED GRAMMAR AND COMPOSITION
Systematic study of the more difficult topics of French grammar. Intensive work in French composition to develop facility in self-expression. *Classification:* Elective. *Prerequisite:* Fr. 301-302. *Credit:* Three semester hours—three class hours.

FR. 421. STRUCTURE OF MODERN FRENCH
A study in French of general linguistics and an analysis of the French language based on the principles of structural linguistics. *Classification:* Elective. *Prerequisite:* Fr. 305. *Credit:* Three semester hours—three class hours.

GERMAN

GERM. 101. ELEMENTARY GERMAN
Fundamentals of the German language, with particular emphasis on the spoken language. Reading and writing exercises of gradually increasing difficulty. For students with no previous knowledge of German. *Classification:* Elective. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

GERM. 102. ELEMENTARY GERMAN
Continued study of the fundamentals of the German language with emphasis on the spoken language. Reading and writing exercises also continued for the development of progressively greater ability in the language. *Classification:* Elective. *Prerequisite:* Germ. 101 or the equivalent. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

GERM. 201. INTERMEDIATE
GERMAN

Review of the work of Germ. 101-102, and further development of speaking, reading, and writing ability, with continuing emphasis on the use and comprehension of the spoken language. Reading of introductory selections from German literature. *Classification:* Elective. *Prerequisite:* At least two years of high school German or completion of Germ. 101-102. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

GERM. 202. INTERMEDIATE
GERMAN

Further development and reinforcement of the four skills; comprehension, speaking, reading, and writing for greater mastery of the language and for enough control to facilitate the study and discussion of literature later. *Classification:* Elective. *Prerequisite:* Germ. 201 or the equivalent. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

GERM. 301. GERMAN COMPOSITION
AND CONVERSATION

A systematic approach to the writing and speaking of German in order to facilitate comprehension and fluent self-expression. *Classification:* Elective. *Prerequisite:* Germ. 201-202 or the equivalent. *Credit:* Three semester hours—three class hours.

GERM. 302. GERMAN COMPOSITION
AND CONVERSATION

Continuation of Germ. 301. *Classification:* Elective. *Prerequisite:* Germ. 301 or permission of instructor. *Credit:* Three semester hours—three class hours.

GERM. 303. THE GERMAN NOVELLE

A study of the development of the German Novelle; the origin of the genre, the romantic, realistic, and contemporary Nov-

elle. *Classification:* Elective. *Prerequisite:* Germ. 202. *Credit:* Three semester hours—three class hours.

GERM. 304. GERMAN DRAMA

A study of the chief literary trends and the major authors of German drama during the period 1750 to 1870. *Classification:* Elective. *Prerequisite:* Germ. 202. *Credit:* Three semester hours—three class hours.

GERM. 306. GERMAN CIVILIZATION

Study of the growth of German civilization, with emphasis on the artistic and intellectual contributions to the Western world. *Classification:* Elective. *Prerequisite:* Germ. 201-202. *Credit:* Three semester hours—three class hours.

GERM. 307. HISTORY OF GERMAN
LITERATURE

Chronological study of German literature from the Middle Ages through the eighteenth century. Readings of representative selections from major authors. *Classification:* Elective. *Prerequisite:* Germ. 201-202. *Credit:* Three semester hours—three class hours.

GERM. 308. HISTORY OF GERMAN
LITERATURE

Continuation of Germ. 307. Reading of representative selections from the major authors of the Classical period and the nineteenth and twentieth centuries. *Classification:* Elective. *Prerequisite:* Germ. 201-202. *Credit:* Three semester hours—three class hours.

GERM. 401. TWENTIETH CENTURY
GERMAN LITERATURE

A study of the chief literary trends and the major authors of German literature in the twentieth century. *Classification:* Elective. *Prerequisite:* Germ. 202. *Credit:* Three semester hours—three class hours.

ITALIAN

ITAL. 101. ELEMENTARY ITALIAN

Fundamentals of the Italian language, with particular emphasis on the spoken language. Reading and written exercises of gradually increasing difficulty. For students with no previous knowledge of Italian. *Classification:* Elective. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

ITAL. 102. ELEMENTARY ITALIAN

Continued study of the fundamentals of the Italian language with emphasis on the spoken language. Reading and writing exercises also continued for the development of progressively greater ability in the language. *Classification:* Elective. *Prerequisite:* Ital. 101 or the equivalent. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

ITAL. 201. INTERMEDIATE ITALIAN

Review of the work of Ital. 101-102, and further development of speaking, reading, and writing ability, with continuing emphasis on the use and comprehension of the

spoken language. *Classification:* Elective. *Prerequisite:* At least two years of high school Italian or completion of Ital. 101-102. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

ITAL. 202. INTERMEDIATE ITALIAN

Further development and reinforcement of the four skills; comprehension, speaking, reading, and writing for greater mastery of the language and for enough control to facilitate the study and discussion of literature later. *Classification:* Elective, required for Secondary Spanish majors. *Prerequisite:* Ital. 201 or the equivalent. *Credit:* Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

ITAL. 310. CONTEMPORARY
ITALIAN LITERATURE

Italian novel and drama from the 1930's to the present. Given in Italian. *Classification:* Elective. *Prerequisite:* Ital. 202 or the equivalent. *Credit:* Three semester hours—three class hours.

LATIN

LAT. 101. ELEMENTARY LATIN

Fundamentals of the Latin language. Essentials of Latin grammar; reading of simple prose selections; the Latin element in the vocabulary of English and the modern languages. *Classification:* Elective. *Credit:* Three semester hours—three class hours.

LAT. 102. ELEMENTARY LATIN

Fundamentals of the Latin language. Essentials of Latin grammar, reading of simple prose selections; the Latin element in the vocabulary of English and the modern languages. *Classification:* Elective. *Prerequisite:* Lat. 101. *Credit:* Three semester hours—three class hours.

LAT. 201. LATIN PROSE AND
POETRY

Reading from such prose writers as Aulus Gellius, Nepos, Sallust, or Livy and such poets as Virgil, Catullus, Ovid and Martial; grammar review and vocabulary study; principles of Latin meter. *Classification:* Elective. *Prerequisite:* At least two years of high school Latin. *Credit:* Three semester hours—three class hours.

LAT. 202. LATIN PROSE AND
POETRY

Reading from such prose writers as Aulus Gellius, Nepos, Sallust, or Livy and such poets as Virgil, Catullus, Ovid and Martial;

grammar review and vocabulary study; principles of Latin meter. *Classification*: Elective. *Prerequisite*: Lat. 201. *Credit*: Three semester hours—three class hours.

LAT. 301. SILVER AGE PROSE

Reading of selections from representative authors of the post Augustan period. *Classification*: Elective. *Prerequisite*: Lat. 201 and

PORTUGUESE

PORT. 101. ELEMENTARY PORTUGUESE

Fundamentals of the Portuguese language, with particular emphasis on the spoken language. Reading and writing exercises of gradually increasing difficulty. For students with no previous knowledge of Portuguese. *Classification*: Elective. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

RUSSIAN

RUSS. 101. ELEMENTARY RUSSIAN

Fundamentals of the Russian language, with particular emphasis on the spoken language. Reading and writing exercises of gradually increasing difficulty. For students with no previous knowledge of Russian. *Classification*: Elective. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

RUSS. 102. ELEMENTARY RUSSIAN

Continued study of the fundamentals of the Russian language with emphasis on the spoken language. Reading and writing exercises also continued for the development of progressively greater ability in the language. *Classification*: Elective. *Prerequisite*: Russ. 101 or the equivalent. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

202. *Credit*: Three semester hours—three class hours.

LAT. 305. LATIN DRAMA

Reading of representative comedies of Plautus and Terence. Studies in the technique of the Roman theater. *Classification*: Elective. *Prerequisite*: Lat. 201 and 202. *Credit*: Three semester hours—three class hours.

PORT. 102. ELEMENTARY PORTUGUESE

Continued study of the fundamentals of the Portuguese language with emphasis on the spoken language. Reading and writing exercises also continued for the development of progressively greater ability in the language. *Classification*: Elective. *Prerequisite*: Port. 101 or the equivalent. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

RUSS. 201. INTERMEDIATE RUSSIAN

Review of the work of Russ. 101-102 and further development of speaking, reading, and writing ability, with continuing emphasis on the use and comprehension of the spoken language. *Classification*: Elective. *Prerequisite*: At least two years of high school Russian or completion of Russ. 101-102. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

RUSS. 202. INTERMEDIATE RUSSIAN

Further development and reinforcement of the four skills; comprehension, speaking, reading, and writing for greater mastery of the language and for enough control to facilitate the study and discussion of literature later. *Classification*: Elective. *Prerequisite*: Russ. 201 or the equivalent. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

SPANISH

SPAN. 101. ELEMENTARY SPANISH

Fundamentals of the Spanish language, with particular emphasis on the spoken language. Reading and writing exercises of gradually increasing difficulty. For students with no previous knowledge of Spanish. *Classification*: Elective. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

SPAN. 102. ELEMENTARY SPANISH

Continued study of the fundamentals of the Spanish language with emphasis on the spoken language. Reading and writing exercises also continued for the development of progressively greater ability in the language. *Classification*: Elective. *Prerequisite*: Span. 101 or the equivalent. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

SPAN. 201. INTERMEDIATE SPANISH

Review of the work of Span. 101-102 and further development of speaking, reading, and writing ability, with continuing emphasis on the use and comprehension of the spoken language. *Classification*: Elective; required for Secondary Spanish majors. *Prerequisite*: At least two years of high school Spanish or completion of Span. 101-102. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

SPAN. 202. INTERMEDIATE SPANISH

Further development and reinforcement of the four skills; comprehension, speaking, reading, and writing for greater mastery of the language and for enough control to facilitate the study and discussion of literature later. *Classification*: Elective; required for Secondary Spanish majors. *Prerequisite*: Span. 201 or the equivalent. *Credit*: Three semester hours—three class hours, with a minimum of one hour per week in the language laboratory.

SPAN. 301. SPANISH COMPOSITION AND CONVERSATION

Exercises to facilitate comprehension and fluent self-expression, with particular emphasis on the spoken language and accuracy of written expression. *Classification*: Elective. *Prerequisite*: Span. 201-202. *Credit*: Three semester hours—three class hours.

SPAN. 302. SPANISH COMPOSITION AND CONVERSATION

Continued intensive practice in speaking and writing Spanish effectively. *Classification*: Elective; required for Secondary Spanish majors. *Prerequisite*: Span. 301 or permission of instructor. *Credit*: Three semester hours—three class hours.

SPAN. 303. MODERN SPANISH MASTERPIECES

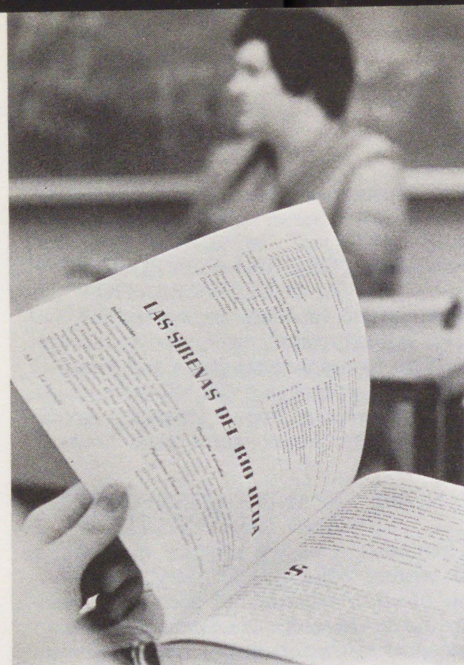
Representative genres of recent Spanish literature; the novel, drama, literary criticism and modern poetry. *Classification*: Elective. *Prerequisite*: Span. 201-202. *Credit*: Three semester hours—three class hours.

SPAN. 305. SPOKEN SPANISH

Remedial work to help improve the student's understanding of the structural system of Spanish with special emphasis on the control of the Spanish sound system, including correct articulation and intonation of the spoken language. Introduction to Spanish phonetics and applied linguistics. *Classification*: Required for Secondary Spanish majors; elective with approval of instructor. *Prerequisite*: Span. 301-302. *Credit*: Three semester hours—three class hours.

SPAN. 306. HISPANIC CIVILIZATION

A survey of Hispanic civilization from its beginnings in the Iberian Peninsula to its spread in the Spanish possessions in the Western Hemisphere and elsewhere; emphasis on the artistic and intellectual currents in Spain and Latin America. *Classification*: Elective; required of Secondary Spanish majors. *Prerequisite*: Span. 201-202. *Credit*: Three semester hours—three class hours.



SPAN. 307. HISTORY OF SPANISH LITERATURE

Chronological and artistic study of Spanish literature from its beginning through the Golden Age. Reading and discussion in Spanish of representative selections from major authors. *Classification:* Elective; required for Secondary Spanish majors. *Prerequisite:* Span. 201-202. *Credit:* Three semester hours—three class hours.

SPAN. 308. HISTORY OF SPANISH LITERATURE

Chronological and artistic study of Spanish literature from the Golden Age to the present. Reading and discussion in Spanish of representative selections from major authors. *Classification:* Elective; required for Secondary Spanish majors. *Prerequisite:* Span. 201-202. *Credit:* Three semester hours—three class hours.

SPAN. 309. TWENTIETH CENTURY SPANISH LITERATURE: NOVEL, SHORT STORY, AND ESSAY

Study in the appreciation, analysis, and criticism of the major trends in the development of the Spanish novel, short story, and essay from 1898 to the present. *Classification:* Elective. *Prerequisite:* Span. 307-308. *Credit:* Three semester hours—three class hours.

SPAN. 321. LATIN AMERICAN LITERATURE OF THE NINETEENTH AND TWENTIETH CENTURIES: NOVEL, SHORT STORY, ESSAY

Study of major trends in these genres in context of cultural diversity of the hemisphere. *Classification:* Elective. *Prerequisite:* Span. 202. *Credit:* Three semester hours—three class hours.

SPAN. 322. LATIN AMERICAN LITERATURE OF THE NINETEENTH AND TWENTIETH CENTURIES: THEATER, POETRY

Study of major trends in Latin American drama and poetry in context of cultural diversity of the hemisphere. Romanticism, Modernism, Contemporary literary movements. *Classification:* Elective. *Prerequisite:* Span. 202. *Credit:* Three semester hours—three class hours.

SPAN. 401. CERVANTES

Critical study of the "Quixote" with collateral reading from the minor works of Cervantes. *Classification:* Elective. *Prerequisite:* Span. 307-8. *Credit:* Three semester hours—three class hours.

SPAN. 402. SPANISH CLASSICAL DRAMA

Readings from the plays of Lope de Vega and Calderon and their contemporaries. *Classification:* Elective. *Prerequisite:* Span. 307-8. *Credit:* Three semester hours—three class hours.

SPAN. 404. 19TH CENTURY LITERATURE

The principal movements in Spanish literature of the nineteenth century: Romanticism, Realism, Naturalism. Representative readings and class discussions in Spanish on the development of major genre within the context of the cultural background of the period. *Classification:* Elective. *Prerequisite:* Span. 201-2. *Credit:* Three semester hours—three class hours.

SPAN. 405. SURVEY OF LATIN AMERICAN LITERATURE

Highlights of principal literary movements in major Latin American nations. Assigned and collateral readings chosen to illustrate literary developments and to facilitate an insight into the parallel historical, social and cultural developments. Reading and discussion in Spanish. *Classification:* Elective. *Prerequisite:* Span. 201-2. *Credit:* Three semester hours—three class hours.

SPAN. 407. MEDIEVAL SPANISH LITERATURE

Origins of Hispanic language and literature. Theories on early developments in major genre and study of examples. Some readings in original texts. *Classification:* Elective. *Prerequisite:* Span. 307-308. *Credit:* Three semester hours—three class hours.

SPAN. 408. TWENTIETH CENTURY SPANISH LITERATURE: POETRY AND THEATER

Study in the appreciation, analysis, and criticism of the major trends in the development of the Spanish poetry and theater of the twentieth century. *Classification:* Elective. *Prerequisite:* Span. 307-308. *Credit:* Three semester hours—three class hours.

SPAN. 415. ADVANCED GRAMMAR AND COMPOSITION

Systematic study of the more difficult topics of Spanish grammar. Intensive work in Spanish composition to develop facility in self-expression. *Classification:* Elective. *Prerequisite:* Span. 301-302. *Credit:* Three semester hours—three class hours.

SPAN. 421. STRUCTURE OF MODERN SPANISH

A study in Spanish of general linguistics and an analysis of the Spanish language based on the principles of structural linguistics. *Classification:* Elective. *Prerequisite:* Span. 305. *Credit:* Three semester hours—three class hours.



HEALTH, PHYSICAL EDUCATION AND RECREATION DEPARTMENT

The following activities may be taken to satisfy the College requirement in physical education—2 credit hours; one credit each of two semesters. Freshmen must take the swimming classification test scheduled during orientation week prior to registration. The content of each activity course includes instruction in fundamentals and basic rules. Written and skill examinations are given in each course.

PHYSICAL EDUCATION

ADAPTED PHYSICAL EDUCATION

P.ED. 101—Adapted Physical Education, modified activities for physically handicapped students.

COED PHYSICAL EDUCATION

P.ED. 102—Archery (Beginning)
P.ED. 103—Badminton
P.ED. 104—Bowling (Beginning)
P.ED. 105—Fencing
P.ED. 106—Folk Dance
P.ED. 107—Skiing
P.ED. 108—Social Dance
P.ED. 109—Volleyball

WOMEN'S PHYSICAL EDUCATION

P.ED. 120—Archery (Beginning)
P.ED. 121—Badminton
P.ED. 122—Bowling (Beginning)
P.ED. 123—Fencing
P.ED. 124—Field Hockey
P.ED. 125—Folk Dance
P.ED. 126—Golf
P.ED. 127—Gymnastics
P.ED. 128—Modern Dance
P.ED. 129—Paddleball
P.ED. 130—Physical Fitness
P.ED. 131—Rhythmic Movement
P.ED. 132—Skiing
P.ED. 133—Swim—Non Swimmers
P.ED. 134—Swim—Beginner
P.ED. 135—Swim—Intermediate
P.ED. 136—Swim—Advanced
P.ED. 137—Swim—Life Saving
P.ED. 138—Tennis

WOMEN'S PHYSICAL EDUCATION: COMBINATION

P.ED. 150—Badminton—Golf
P.ED. 151—Badminton—Tennis

P.ED. 152—Field Hockey—Physical Fitness
P.ED. 153—Gymnastics—Paddleball
P.ED. 154—Gymnastics—Volleyball
P.ED. 155—Gymnastics—Physical Fitness
P.ED. 156—Paddleball—Golf
P.ED. 157—Paddleball—Physical Fitness
P.ED. 158—Paddleball—Tennis

MEN'S PHYSICAL EDUCATION: COMBINATION

P.ED. 170—Badminton—Softball
P.ED. 171—Basketball—Touch Football
P.ED. 172—Bowling—Paddleball
P.ED. 173—Bowling—Soccer
P.ED. 174—Bowling—Softball
P.ED. 175—Handball—Paddleball
P.ED. 176—Physical Fitness—Wrestling
P.ED. 177—Swim—Non Swimmers
P.ED. 178—Swim—Beginning
P.ED. 179—Swim—Aquatics
P.ED. 180—Tennis—Squash
P.ED. 181—Volleyball—Speedball
P.ED. 182—Weight Training—Speedball
P.ED. 183—Weight Training—Track and Field
P.ED. 184—Badminton—Paddleball

Note: Students who have taken one activity of a combination should register for a course involving other activities. Activities may not be repeated.

P.ED. 201. RHYTHMIC ANALYSIS AND DANCE

Awareness and perception of rhythm. Analysis of rhythm in relation to music and movement, and to various forms of dance. Rhythmic devices utilized in dance. Study and application of percussion instruments as accompaniment for movement and dance.

Classification: Elective. *Credit:* Three semester hours—three class hours.

P.ED. 202. TECHNIQUES AND THEORIES OF SOCCER

Basic instruction in the fundamental techniques of coaching soccer. Emphasis on coaching philosophy, methods, organization, administration, individual and team skills and strategy with specific reference to soccer. Equipment purchase and care, training and conditioning procedures and treatment of common injuries. *Classification:* Elective for sophomore, junior, and senior men. *Prerequisite:* none. *Credit:* Three semester hours—three class hours.

P.ED. 203. TECHNIQUES AND THEORIES OF FOOTBALL

Basic instruction in the fundamental techniques of coaching football. Emphasis on coaching philosophy, methods, organization, administration, individual and team skills and strategy with specific reference to football. Equipment purchase and care, training and conditioning procedures and treatment of common injuries. *Classification:* Elective for sophomore, junior, and senior men. *Prerequisite:* none. *Credit:* Three semester hours—three class hours.

P.ED. 204. TECHNIQUES AND THEORIES OF TRACK AND FIELD

Basic instruction in the fundamental techniques of coaching track & field. Emphasis on coaching philosophy, methods, organization, administration, individual and team skills and strategy with specific reference to track & field. Equipment purchase and care, training and conditioning procedures and treatment of common injuries. *Classification:* Elective for sophomore, junior and senior men. *Prerequisite:* none. *Credit:* Three semester hours—three class hours.

P.ED. 205. THEORY IN WOMEN'S SPORTS

Special methods for teaching techniques, skill and lead-up games in archery, badminton, basketball and volleyball. Special emphasis given to interpretation of rules,

officiating, organization of tournaments. Play Day, Sport Days, and use of the various sports in a recreational program. *Classification:* Elective for sophomore, junior, and senior women. *Prerequisite:* Upperclassmen may take only two of the three techniques' courses offered. *Credit:* Three semester hours—three class hours.

P.ED. 206. THEORY IN WOMEN'S SPORTS

Special methods for teaching techniques, skills and lead-up games in softball, speedball, swimming, and track and field. Special emphasis given to interpretation of rules, officiating, organization of tournaments, Play Days, Sport Days, and use of these sports in a recreational program. *Classification:* Elective for sophomore, junior, and senior women. *Prerequisite:* Upperclassmen may take any two of the three techniques' courses offered. *Credit:* Three semester hours—three class hours.

P.ED. 207. TECHNIQUES AND THEORIES OF BASEBALL

Basic instruction in the fundamental techniques of coaching baseball. Emphasis on coaching philosophy, methods, organization, administration, individual and team skills and strategy with specific reference to baseball. Equipment purchase and care, training and conditioning procedures and treatment of common injuries. *Classification:* Elective for sophomore, junior and senior men. *Prerequisite:* none. *Credit:* Three semester hours—three class hours.

P.ED. 208. TECHNIQUES AND THEORIES OF SWIMMING

Basic instruction in the fundamental techniques of coaching swimming. Emphasis on coaching philosophy, methods, organization, administration, individual and team skills and strategy with specific reference to swimming. Equipment purchase and care, training and conditioning procedures and treatment of common injuries. *Classification:* Elective for sophomore, junior and senior men. *Prerequisite:* none. *Credit:* Three semester hours—three class hours.

P.ED. 209. TECHNIQUES AND THEORIES OF BASKETBALL

Basic instruction in the fundamental techniques of coaching basketball. Emphasis on coaching philosophy, methods, organization, administration, individual and team skills and strategy with specific reference to basketball. Equipment purchase and care, training and conditioning procedures and treatment of common injuries. *Classification:* Elective for sophomore, junior and senior men. *Prerequisite:* none. *Credit:* Three semester hours—three class hours.

P.ED. 210. LIFE SAVING AND WATER SAFETY

A course in the knowledge and techniques of life saving and water safety: skills in self-rescue, rescuing others; skin diving; scuba diving; surfboard riding; water skiing; recognition and avoidance of hazardous water conditions and practices; and passing the American Red Cross Life Saving requirements. *Classification:* Elective for sophomore, junior and senior men and women. Consent of instructor required. *Prerequisite:* P.ED. 100. *Credit:* Three semester hours—four class hours.

P.ED. 301. PRINCIPLES OF PHYSICAL EDUCATION

Principles of physical education: physical education in the elementary and early secondary school; teaching motor skills; fundamental play, relays, lead-up games; rhythms,

HEALTH EDUCATION

H.ED. 204. PERSONAL AND COMMUNITY HEALTH

Personal hygiene, alcohol and narcotics, mental health, control of communicable diseases, environmental sanitation and health

RECREATION

REC. 204. ORGANIZATION AND LEADERSHIP IN RECREATION

Problems and practices in organization and leadership of school and/or community recreation programs; history; principles;

stunts and classroom games; selection of activities; safety in physical education. *Classification:* Elective. *Prerequisite:* P.ED. 100. *Credit:* Two semester hours—three class hours.

P.ED. 302. DANCE TECHNIQUE AND PRESENTATION

Designed for elementary dance production and experimentation. Fundamental principles of movement in relation to dynamics, rhythm and space; development of original movement patterns: elementary dance composition. Philosophy and theory of scenography for the dance. *Classification:* Elective. *Prerequisite:* One semester of Modern Dance or equivalent. *Credit:* Three semester hours—three class hours. *Special Note:* It is recommended that students elect P.ED. 201 and Art 444.

P.ED. 303. DANCE COMPOSITION

Research in individual and group composition; experimentation with various approaches to dance composition; evaluation of original compositions. *Classification:* Elective. *Prerequisite:* One semester of Modern Dance or equivalent. *Credit:* Three semester hours—three class hours.

P.ED. 495. PROJECT

(See Project under Academic Regulations).

P.ED. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

services, healthful school living, and health instruction. *Classification:* Required of Elementary Education and Exceptional Children Education juniors. *Credit:* Two semester hours—two class hours.

conducting specific activities; area and facilities; programming; modern trends. *Classification:* Elective for sophomore, junior and senior men and women; also consent of instructor. *Credit:* Three semester hours—three class hours.

MUSIC DEPARTMENT

MUS. 100. THE LISTENER'S ORIENTATION TO MUSIC

An introductory course in Music. Discussion of music elements, their recognition and development in musical masterpieces. Directed listening activities. Attendance at prescribed concerts. *Classification:* Required of Art, Elementary Education, and Exceptional Education Divisions. *Credit:* Three semester hours—three class hours.

MUS. 104. RUDIMENTS OF MUSIC

Fundamentals of music notation: clefs, key signatures, scales, intervals, meter, note values. *Classification:* Required of Music Majors. *Credit:* None. *Special Note:* May be waived by examination.

MUS. 105. APPLIED MUSIC

Individual lessons in voice, piano, organ, strings, wind and percussion instruments. Lessons are adapted to the individual needs of the student. *Classification:* Required of Music Majors. *Credit:* One semester hour—one lesson per week.

MUS. 106. SYMPHONY ORCHESTRA*

Full symphonic instrumentation; standard and contemporary orchestral literature; opportunity for concerto playing; performances include convocations, Christmas and spring concerts and off-campus concerts; audition or special arrangement with conductor. *Classification:* Elective. *Credit:* One semester hour.

MUS. 107. WOMEN'S GLEE CLUB*

Membership selected at beginning of each semester; performances include convocations, Christmas and spring programs, community and campus programs. *Classification:* Elective. *Credit:* One semester hour.

*One semester hour of credit maximum in any one semester for participation in musical organizations.



MUS. 108. BAND*

Full uniformed band; performances include convocations, spring concert, moving-up day, civic parades, and off-campus concerts; College-owned instruments available; audition or special arrangement with conductor. *Classification:* Elective. *Credit:* One semester hour.

MUS. 109. HARMONY

Elementary written, aural, and keyboard harmony. Diatonic triads, non-harmonic tones, and the dominant seventh chord. *Classification:* Required of Music Majors; elective for others. *Prerequisite:* Mus. 104 or special permission. *Credit:* Three semester hours—three class hours.

MUS. 110. HARMONY

Continuation of written, aural, and keyboard harmony. Secondary triads and altered chords. *Classification:* Required of Music Majors; elective for others. *Prerequisite:* Mus. 109. *Credit:* Three semester hours—three class hours.

MUS. 112. A CAPPELLA CHOIR*

Sponsored in concerts by Buffalo Kiwanis and others. Choir tour. (Students selected through an examination emphasizing intonation, tone quality and musical ability.) *Classification:* Elective. *Credit:* One semester hour.

MUS. 113. MEN'S GLEE CLUB*

Participation in college and off-campus functions. (Members selected by audition.) *Classification:* Elective for all students. *Credit:* One semester hour.

MUS. 115. SIGHT-SINGING AND EAR-TRAINING

Sight singing, melodic and rhythmic dictation; scale patterns and intervals, note and rest values; rhythm patterns. *Classification:* Required of Music Majors; elective for others. *Credit:* One semester hour— one class hour.

MUS. 116. SIGHT-SINGING AND EAR-TRAINING

Sight singing, harmonic dictation; major and minor chords and their variations; cadences and progressions; metric structures. *Classification:* Required of Music Majors; elective for others. *Prerequisite:* Mus. 115. *Credit:* One semester hour—one class hour.

MUS. 201. HARMONY

Advanced harmony. Written, aural and keyboard activities. *Classification:* Elective. *Prerequisite:* Mus. 109, 110. *Credit:* Three semester hours—three class hours.

MUS. 202. BASIC MUSICIANSHIP

A working knowledge of theory rhythmic notation, terminology, scales, simple har-

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mony, transposition. A working knowledge of activities: singing, playing piano and recorder, rhythmic for singing games and conducting. *Classification:* Required for Concentration in Music in Elementary Education; elective for others. *Prerequisite:* Mus. 100. *Credit:* Three semester hours—three class hours.

MUS. 203. COUNTERPOINT

A general course in counterpoint ranging from strict counterpoint in the five species 16th Century style, to the 18th Century inventions and figures of Bach. *Classification:* Required of Music Majors; elective for others. *Prerequisite:* Mus. 110. *Credit:* Three semester hours—three class hours.

MUS. 204. MUSIC FOR CHILDREN I

Music experiences for the nursery, kindergarten and primary grades; activities: singing, rhythms, listening, creating, playing and making instruments, song stories; broad use of all types of materials and equipment. *Classification:* Elective. *Credit:* Three semester hours—three class hours.

MUS. 205. MUSIC FOR CHILDREN II

Music experiences for intermediate grades; activities: unison and part singing, folk dances, rhythms, listening, creating, playing instruments, music reading; enrichment of other areas of elementary school curriculum; broad use of all types of materials and equipment. *Classification:* Elective. *Credit:* Three semester hours—three class hours.

MUS. 206. INTRODUCTION TO MUSIC LITERATURE

Introduction to music from antiquity to present; musical forms and styles; vocal and instrumental music. *Classification:* Required of Music Majors; elective for others. *Credit:* Three semester hours—three class hours. *Special Note:* To precede Mus. 407, 408, 409.

MUS. 301. FORM AND ANALYSIS

A general course in the structural, harmonic and contrapuntal analysis of the

various musical forms of all styles and periods. *Classification:* Required of Music Majors; elective for others. *Prerequisite:* Mus. 110, 203. *Credit:* Three semester hours—three class hours.

MUS. 302. FOUNDATIONS OF MUSIC

Continued development of musicianship; introduction to music experiences in the elementary school; activities: singing rhythms, listening, creating, playing and making instruments, music reading; use of materials and equipment suitable for elementary school music. *Classification:* Required for Concentration in Music in Elementary Education; elective for others. *Prerequisite:* Mus. 100, 202. *Credit:* Three semester hours—three class hours.

MUS. 314. ELEMENTARY VOCAL METHODS

Vocal music program in the elementary school surveying basic music texts, recordings, rhythm and melodic instruments used to develop singing, rhythmic, creative, playing, listening, and music reading activities. *Classification:* Required of Music Education Majors; elective for others. *Credit:* Three semester hours—three class hours.

MUS. 315. JUNIOR-SENIOR HIGH VOCAL METHODS

Vocal music program in junior-senior high; particular concern for needs and characteristics of adolescents. *Classification:* Required of Music Education Majors; elective for others. *Prerequisite:* Mus. 314 or by advisement. *Credit:* Three semester hours—three class hours.

MUS. 316. VOCAL TECHNIQUES

Class voice procedures, elementary, junior-senior high choral groups, materials, rehearsal techniques. *Classification:* Required of Music Education Majors—vocal emphasis. *Prerequisite:* Mus. 314, 315. *Credit:* Two semester hours—two class hours.

MUS. 317. INSTRUMENTAL TECHNIQUES

Materials and literature for wind, string, and percussion instruments; organization

and management of materials and equipment in the public school instrumental music programs, e.g., budget, library, etc. *Classification:* Required of Music Education Majors—instrumental emphasis. *Prerequisite:* Mus. 314, 315. *Credit:* Two semester hours—two class hours.

MUS. 400. AMERICAN FOLK MUSIC

Folk music developed in the U. S.: the colonial period, the frontier, the pioneer, the Indian, the cowboy, the Negro, the sailor, and the lumberman. Regional and popular music. Music of ethnic groups in the U. S. Art music as influenced by folk music. *Classification:* Elective. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 401. ARRANGING—VOCAL

A study of voice ranges, vocal writing, accompaniments, and styles of choral arrangements. Practical experience in arranging music for the choral groups used in public schools. *Classification:* Elective for Music Education Majors. *Prerequisite:* Mus. 110, 203, 301. *Credit:* Three semester hours—three class hours.

MUS. 402. ARRANGING—INSTRUMENTAL

A study of tone qualities, ranges, and transpositions of standard band and orchestral instruments. Practical experience in arranging music for various large and small instrumental combinations. *Classification:* Elective for Music Education Majors. *Prerequisites:* Mus. 110, 203, 301. *Credit:* Three semester hours—three class hours.

MUS. 403. DRAMATIC MUSIC

Dramatic works of music for choral organizations; the cantata, oratorio, and opera; history and development of these forms; attendance at churches and concert halls; representative works to be heard from records or actual performances; special readings and discussions of radio operatic presentations. *Classification:* Elective. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 404. THE ART OF ENJOYING MUSIC

The symphony orchestra; the understanding and enjoyment of the masterpieces of Classic, Romantic and Contemporary composers; attendance at selected concerts. *Classification:* Elective. *Credit:* Three semester hours — three class hours. *Special Note:* May be elected by graduate students.

MUS. 405. MUSIC LITERATURE FOR YOUNG LISTENERS

Music listening for elementary grades; responding to and understanding of music literature of periods and styles appropriate for elementary grades; varied approaches to discriminative, and perceptive listening as associated with the related arts; the role of the teacher in the listening experience. *Classification:* Elective. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 407. MUSIC HISTORY (ANTIQUITY THROUGH BAROQUE)

Emphasis on Medieval, Renaissance, and Baroque styles. *Classification:* Required of Music Majors; elective for others. *Prerequisite:* Mus. 206. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 408. MUSIC HISTORY (CLASSICAL THROUGH ROMANTIC)

The 19th Century opera, oratorio, solo song, chamber music, symphony and other forms. *Classification:* Required of Music Majors; elective for others. *Prerequisite:* Mus. 206. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 409. MUSIC HISTORY (CONTEMPORARY)

Musical pioneers of 20th Century music; leading styles and compositional techniques. *Classification:* Required of Music Majors; elective for others. *Prerequisite:* Mus. 206. *Credit:* Three semester hours—three class

hours. *Special Note:* May be elected by graduate students.

MUS. 410. AFRO-AMERICAN MUSIC

Spirituals, minstrelsy, ragtime, blues, jazz popular music, traditional music, Negro music in Latin America; relationship with African music practice. *Classification:* Elective. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 411. CONDUCTING

Choral and orchestral conducting; use of the baton; reading and observation; attendance at selected concerts. *Classification:* Required of Music Majors; elective for others. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 412. COMPOSITION

Creative work in small and large forms. Composition of entire movements for instrumental or choral groups. *Classification:* Elective for Music Education Majors. *Prerequisite:* Mus. 110, 203, 301, and 401 or 402. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 413. VOICE CULTURE AND REPERTORY

Diction; breath control; tone coloring, voice problems; program making. *Classification:* Elective. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 414. ADVANCED CHORAL CONDUCTING

A continuation and advanced study of the art of choral conducting: co-ordination of hand technique; breathing, voice control, articulation, balance, and interpretation of the score; i.e., dynamics, legato line, rhythm, etc. *Classification:* Required of Music Education Majors—vocal emphasis. *Prerequisite:* Mus. 411. *Credit:* Two semester hours — two class hours. *Special Note:* May be elected by graduate students.

MUS. 415. ADVANCED INSTRUMENTAL CONDUCTING

A continuation and advanced study of the art of instrumental conducting: the work emphasizes baton techniques, rehearsal and interpretative problems, and examination of scores. *Classification:* Required of Music Education Majors — instrumental emphasis. *Prerequisite:* Mus. 411. *Credit:* Two semester hours—two class hours. *Special Note:* May be elected by graduate students.

MUS. 416. PRACTICUM IN TEACHING MUSIC

Off-campus teaching in two situations in approved public schools with experiences in the vocal and instrumental fields and on the elementary and junior-senior high school levels. *Classification:* Required of Music Education Majors. *Prerequisite:* Required Professional Courses. *Credit:* Fourteen semester hours—daily for one semester.

MUS. 417. PRINCIPLES OF MUSIC EDUCATION

Nature and philosophy of music education; consideration of current issues and

problems on all levels of teaching music. *Classification:* Required of Music Education Majors. *Prerequisite:* Mus. 416. *Credit:* Two semester hours—two class hours.

MUS. 418. LATIN AMERICAN MUSIC

A survey of the ethnic and European heritage of Latin American music from early aboriginal sources to contemporary composition. Historical, anthropological and sociological considerations. *Classification:* Elective for Latin American Studies majors and for students electing this area for 24-hour concentration. *Prerequisite:* Music 100 or equivalent. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

MUS. 495. PROJECT

(See Project under Academic Regulations).

MUS. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

NON-CREDIT ACTIVITIES

The Music Department sponsors a wide variety of musical organizations for students: Madrigal Singers, Women's Quartet, Male Quartet, String Quartet, Wood-Wind Quintet, Brass Ensemble, Majorettes and Pep Band.



PHILOSOPHY DEPARTMENT

PHIL. 104. INTRODUCTION TO PHILOSOPHY

The more important ways of answering the question, "How do you know?"; intuition; revealed truth, or mystic experience; consistency with common sense and ideas previously accepted; authority; and the scientific methods of inquiry. Methodological problems: the functions of concepts, or propositions, and of evidence for propositions. *Classification:* General Introduction. *Credit:* three semester hours—three class hours.

PHIL. 201. PROBLEMS OF PHILOSOPHY

An analysis of selected problems in epistemology, metaphysics, ethics and of certain movements in contemporary philosophy. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 202. INTRODUCTION TO LOGIC

An introduction to symbolic logic and the traditional logic of categorical sentences. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 203. AESTHETICS

An analysis of the basic concepts presupposed in any critical examination of the arts, including painting, literature, and music. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 204. PHILOSOPHY OF RELIGION

An analysis of certain ideas relevant to philosophy of religion. The course will focus on classroom discussion of religious

ideas and on the philosophical problems raised by certain of these ideas. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 205. HISTORY OF ANCIENT AND MEDIEVAL PHILOSOPHY

A survey of philosophy from the Pre-Socratics through the Medieval Period. The philosophies of such figures as Socrates, Plato, Aristotle, Augustine, Aquinas and William of Occam will be studied. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 206. HISTORY OF MODERN PHILOSOPHY

A survey of philosophy from the Renaissance period through Hegel. The philosophies of Hobbes, Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant and Hegel will be studied. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 301. AMERICAN PHILOSOPHY

An examination of the development of the major movements and issues in American Philosophy, from colonial times to the present. Including Royce, Peirce, James, Dewey, Santayana, and Whitehead. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 302. ETHICS

An examination of principal ethical theories, including objectivism, subjectivism, and emotivism. The use of such terms as good and evil, right and wrong, moral and immoral, justice and injustice will be examined. Special attention will be given to

the problems of the justification of ethical statements and of ethical disagreements. *Classification:* Elective. *Prerequisite:* Phil. 205-06. *Credit:* Three semester hours—three class hours.

PHIL. 303. PHILOSOPHY OF HISTORY

An analysis of leading classical and contemporary philosophies of history. A study of selected philosophical problems connected with the various types of historical discourse. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 304. SOCIAL AND POLITICAL PHILOSOPHY

An analysis of the major classical and contemporary social and political philosophies. A philosophical analysis of such concepts as "state," "liberty," "law," and "justice". *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 305. CONTEMPORARY PHILOSOPHY I

An analysis of the major movements in 20th Century Philosophy (up to World War II) including Existentialism, Linguistic Analysis, Logical Positivism, Pragmatism, and Marxism. *Classification:* Elective. *Prerequisite:* Phil. 205-06. *Credit:* Three semester hours—three class hours.

PHIL. 306. CONTEMPORARY PHILOSOPHY II

An analysis of the major movements in 20th Century Philosophy (from World War II to the present) including Existentialism, Linguistic Analysis, Logical Positivism, Pragmatism, and Marxism. *Classification:* Elective. *Prerequisite:* Phil. 205-06. *Credit:* Three semester hours—three class hours.

PHIL. 307. PHILOSOPHY OF SCIENCE

An examination of science as a human enterprise, of its purposes and methods, of

its persistent problems as well as its successes, and of its relations to other human enterprises such as the arts and the humanities. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 308. PHILOSOPHY OF EXISTENTIALISM

A critical analysis of certain ideas relevant to existential phenomenology; including the writings of Heidegger, Jaspers, Marcel, Merleau-Ponty, and Sartre. *Classification:* Elective. *Prerequisite:* Phil. 104 or by consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 309. METAPHYSICS

An inquiry into the nature, function, and possibility of metaphysical thinking. A philosophical analysis of such topics as free will and determinism; fate; causation; the self and God; space and time; mind and body; "ultimate" reality. *Classification:* Departmental requirement. *Prerequisite:* Phil. 205-06. *Credit:* Three semester hours—three class hours.

PHIL. 310. EPISTEMOLOGY (THEORY OF KNOWLEDGE)

A critical analysis of the major traditional and contemporary theories of knowledge, including, rationalism, empiricism, skepticism, idealism, intuitionism, etc. An examination of knowledge-claims about past and future events, about the material world, about oneself, and about other minds. *Classification:* Departmental requirement. *Prerequisite:* Phil. 205-06. *Credit:* Three semester hours—three class hours.

PHIL. 401. SEMINAR IN PHILOSOPHY

Intensive analysis of selected topics in philosophy. *Classification:* Elective. *Prerequisite:* Consent of department. *Credit:* Three semester hours—three class hours.

PHIL. 402. PHILOSOPHY OF
PSYCHOLOGY

A philosophical analysis of conceptual problems in current psychology; Analytic Philosophy and Phenomenology will be utilized. *Classification:* Elective. *Prerequisite:* Phil. 104, or by consent of department. *Credit:* three semester hours—three class hours.

PHIL. 403. 17TH-18TH CENTURY
RATIONALISTS

An investigation of the 17th and 18th century rationalists; including Descartes, Spinoza, Leibnitz, and Hobbes. Emphasizing their metaphysical and epistemological theories. *Classification:* Elective. *Prerequisite:* Phil. 205-206. *Credit:* Three semester hours—Three class hours.

PHIL. 404. BRITISH EMPIRICISM

An investigation of the classical British Empiricists including Locke, Berkeley, Hume and Reid. Emphasizing their epistemological and linguistic theories. *Classification:* Elective. *Prerequisite:* Phil. 205-206. *Credit:* Three semester hours—three class hours.

PHIL 405. PLATO AND ARISTOTLE

A detailed study of the major writings of Plato and Aristotle, with special emphasis on textual interpretations and philosophical criticism. Their principal doctrines on Logic, Epistemology, Metaphysics, Ethics,

INTERDEPARTMENTAL

I.D. 410. TWENTIETH CENTURY
LATIN AMERICAN
PROBLEMS

Interdisciplinary seminar on contemporary Latin American problems: Latin American Values, the Nativist Complex, Social Change and the Revolution of Rising Expectations. *Classification:* Required for Lib-

Psychology, Political Theory, and Theory of Value. *Classification:* Elective. *Prerequisite:* Either metaphysics or epistemology. *Credit:* Three semester hours—three class hours.

PHIL. 406. THEORY OF LOGIC AND
MATHEMATICS

The Theory of Deductive Systems: Formal developments and the Philosophy of Logic after Frege. *Classification:* Elective. *Prerequisite:* Logic 202 or suitable substitute. *Credit:* Three semester hours — three class hours.

PHIL. 407. THEORY OF VALUE

A topical examination of some traditional and contemporary general theories of value and their criticisms. Including naturalistic and non-naturalistic theories relating to such problems as the definition of value and value of the social sciences. *Classification:* Elective. *Prerequisites:* Ethics or Aesthetics. *Credit:* Three semester hours—three class hours.

PHIL. 495. PROJECT

(See Project under Academic Regulations)

PHIL. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)

eral Arts Majors in Latin American Studies. Elective for seniors in all Divisions. *Prerequisites:* Nine hours in Latin American Studies. *Credit:* three semester hours. *Special Note:* (Elementary Education concentrators may elect I.D. 410 or SCI. 4— (Public Health of Latin America). May be taken for graduate credit.

SPEECH & THEATRE ARTS DEPARTMENT

SP. & T.A. 105 INTRODUCTION TO
THE SPEECH ARTS

A study of the total speech process through the introduction to speech physiology and the applied skills of public speaking, discussion, and oral interpretation. *Classification:* Elective: not to be taken after advanced speech courses. *Prerequisite:* none. *Credit:* three semester hours — three class hours.

SP. & T.A. 106. INTRODUCTION TO
THEATRE ARTS

A study of theatre and its relationship to society; analysis of dramatic structure, acting methods, technical procedures. *Classification:* Elective for all students. *Prerequisite:* none. *Credit:* three semester hours — three class hours.

SP. & T.A. 200. VOICE AND DICTION

A comprehensive study of the speech mechanism with emphasis on phonation articulation and applied phonetics. *Classification:* Elective. *Prerequisite:* SP. & T.A. 105. *Credit:* three semester hours—three class hours.

SP. & T.A. 202. PUBLIC SPEAKING

Organization, delivery, and evaluation of the public speech. *Classification:* Required of Secondary English sophomores; elective for others. *Credit:* three semester hours—three class hours.

SP. & T.A. 207. PLAY PRODUCTION

Play selection and analysis, casting, rehearsals, student productions. *Classification:* Required of Secondary English students with minor in speech; elective for others. *Credit:* three semester hours—three class hours.

SP. & T.A. 208. TECHNICAL
THEATRE

Establishes the relationship of the play to

the various aspects of technical production; practical experience in all aspects of technical theatre. *Classification:* All college elective. *Prerequisite:* SP. & T.A. 106, or consent of department. *Credit:* three semester hours—three class hours.

SP. & T.A. 209. DISCUSSION

An inter-disciplinary approach to discussion, with emphasis upon group dynamics. Special consideration given to the nature and analysis of the discussion process and its function in the high-school and college classroom. *Classification:* Required for all majors in Speech and Theatre Arts. *Prerequisites:* SP. & T.A. 105 or 202. *Credit:* three semester hours—three class hours.

SP. & T.A. 216. RADIO AND
TELEVISION IN
EDUCATION

Broadcasting and its history; program evaluation; recordings; radio and television in the classroom; tours of broadcasting facilities. *Classification:* Elective. *Credit:* three semester hours—three class hours.

SP. & T.A. 218. CREATIVE
DRAMATICS

History, philosophy, methods, and materials of informal playmaking with children; observation and participation. *Classification:* Elective. *Credit:* three semester hours—three class hours.

SP. & T.A. 219. SPEECH ACTIVITIES
IN THE
ELEMENTARY
SCHOOL

Speech as an integrative and developmental activity of elementary school children; conversation; story telling, oral reports, creative dramatics. *Classification:* Elective. *Credit:* three semester hours — three class hours.

SP. & T.A. 306. SECONDARY SCHOOL SPEECH ACTIVITIES

Speech activities as they pertain, to curricular and co-curricular speech programs. *Classification:* Elective. *Prerequisite:* SP. & T.A. 105 or 202. *Credit:* three semester hours—three class hours.

SP. & T.A. 309. ARGUMENTATION AND DEBATE

The format and procedure of debate with practice in preparing and delivering cases. *Classification:* All college elective. *Prerequisite:* SP. & T.A. 105, or 202. *Credit:* three semester hours—three class hours.

SP. & T.A. 310. ADVANCED TECHNICAL PROBLEMS

Examination of special problems; theories and trends in technical theatre; independent projects in advanced technical theatre. *Classification:* All college elective. *Prerequisite:* SP. & T.A. 208. *Credit:* three semester hours—three class hours.

SP. & T.A. 311. COSTUME FOR THE THEATRE

Costuming as an integral element of theatre art: nature, function, and history of costume; practical problems of costuming. *Classification:* Elective for all students. *Prerequisite:* SP. & T.A. 106 or consent of department. *Credit:* three semester hours—three class hours.

SP. & T.A. 317. HISTORY OF THE THEATRE: ANCIENT TO RENAISSANCE

An examination of the originals and development of the physical theatre; the consideration of dramatic literature in its theatrical context. *Classification:* All college elective. *Credit:* three semester hours—three class hours.

SP. & T.A. 318. HISTORY OF THE THEATRE: RENAISSANCE TO MODERN

The examination of the emergence of

the modern theatre; the consideration of dramatic literature in its theatrical context. *Classification:* All college elective. *Credit:* three semester hours—three class hours.

SP. & T.A. 319. PLAYWRITING

Development of critical capacities in reference to the student's own work and that of his classmates; productive work in playwriting. *Classification:* Elective. *Prerequisite:* SP. & T.A. 106 or consent of department. *Credit:* three semester hours—three class hours.

SP. & T.A. 320. ORAL INTERPRETATION OF LITERATURE

Oral reading of prose, poetry, and drama; selection and arrangement of material for formal and informal audiences. *Classification:* Required of all English and Speech and Theatre majors; elective for others. *Credit:* three semester hours—three class hours.

SP. & T.A. 321. ORAL INTERPRETATION: SPECIAL TYPES

The selection and adaptation of literary forms for choral interpretation, the lecture-recital, readers' theatre and chamber theatre. *Classification:* All college elective. *Prerequisite:* SP. & T.A. 320. *Credit:* three semester hours—three class hours.

SP. & T.A. 322. RHETORICAL TYPES AND PRINCIPLES

A study of the chief theories of public address; reading and analysis of major ceremonial, political, religious, and legal speeches drawn from historical and contemporary sources. *Classification:* Elective for all students. Required of Speech and Theatre Arts majors, emphasis Speech. *Prerequisites:* SP. & T.A. 105 or 202 or consent of department. *Credit:* three semester hours—three class hours.

SP. & T.A. 326. ACTING: THEORY AND PRACTICE

An examination of the actor's art, its contribution to culture, the relationship of theory to practice. *Classification:* All college elective. *Prerequisite:* SP. & T.A. 106 or consent of department. *Credit:* three semester hours—three class hours.

SP. & T.A. 450. DIRECTING

An examination of the responsibilities of the play director; development of the student's ability to achieve the goals of good play production. *Classification:* All college elective. *Prerequisite:* SP. & T.A. 326, Acting; SP. & T.A. 208, Technical Theatre. *Credit:* three semester hours—three class hours.



SP. & T.A. 495. PROJECT

(See Project under Academic Regulations).

SP. & T.A. 496. SEMINAR IN SPEECH AND THEATRE ARTS

Examination of attitudes; sharpening of critical capacities; productive scholarly and creative works. *Classification:* Required for all majors in Speech and Theatre Arts. *Prerequisites:* 24 hours completed in Speech and Theatre Arts. *Credit:* three semester hours—three class hours.

SP. & T.A. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)

MATHEMATICS AND SCIENCE

MATHEMATICS DEPARTMENT

MATH. 102. GENERAL MATHEMATICS

Number; processes; formulas; equations; graphs; functions, exponents; radicals, precision and accuracy in measurement; applications and problems. *Classification:* Required of all Industrial Arts students. *Credit:* Three semester hours—three class hours.

MATH. 103. MATHEMATICS IN MODERN LIFE

Mathematics as a deductive science; sets and relations; classification of number; structure of a number system; mathematical operations and their relations; interpretation and use of statistical data. *Classification:* Elective for Art and Home Economic students, secondary majors in English, French, Spanish, Social Studies, and non-mathematics major in Liberal Arts. *Credit:* Three semester hours—three class hours.

MATH. 104. APPLIED MATHEMATICS

Problems related to the technical work of industrial arts; interpretation and derivation of formulas; linear and quadratic equations; primary trigonometric functions; graphs; analysis and solution of problems; interpretation and use of statistical data. *Classification:* Required of all Industrial Arts students. *Prerequisite:* Math. 102. *Credit:* Three semester hours—three class hours.

MATH. 105. PLANE TRIGONOMETRY

Functions of the general angle; solution of triangles; application of logarithms; identities; inverse functions; graphs of the functions; trigonometric equations; DeMoivre's theorem; miscellaneous problems. *Classification:* Elective. *Credit:* Three semester hours—three class hours.

MATH. 106. COLLEGE ALGEBRA

Functions; graphs, variation; progressions; complex numbers; mathematical induction;

theory of equations; logarithms; permutations; combinations; probability; determinants. *Classification:* Elective. *Credit:* Three semester hours—three class hours.

MATH. 107. ANALYTIC GEOMETRY AND CALCULUS

Real numbers; analytic geometry of linear and quadratic forms, functions; limits; continuity; differentiation of algebraic functions; applications of the derivative; the definite integral; fundamental theorem of calculus. *Classification:* Required of Secondary Mathematics majors. Elective for others with permission of instructor. *Credit:* Four semester hours—four class hours.

MATH. 108. ANALYTIC GEOMETRY AND CALCULUS

The definite integral; differentiation of transcendental functions; techniques of integration; applications of integration; parametric equations. *Classification:* Required of Secondary Mathematics majors. Elective for others with permission of instructor. *Prerequisite:* Math. 107. *Credit:* Four semester hours—four class hours.

MATH. 109. SETS AND LOGIC

Basic set theory, operations on sets, principle of duality, relations and functions, denumerable and non-denumerable sets; cardinality; the statement calculus, rules of inference, types of proofs; the restricted predicate calculus, rules of inference. *Classification:* Elective. Required as a prerequisite for Math. 301, 302, 305, 308, 309 and 311. *Credit:* Three semester hours—three class hours.

MATH. 153. ANALYTIC GEOMETRY

Coordinate geometry of the straight line, circle, parabola, ellipse, and hyperbole; general equation of the second degree, transla-

tion and rotation of axes; general loci; rectangular and polar coordinates. *Classification:* Elective for other than mathematics majors. *Prerequisite:* Permission of instructor. *Credit:* Three semester hours — three class hours.

MATH. 202. ANALYTIC GEOMETRY AND CALCULUS

Further study of continuous and differentiable functions; infinite series; elements of solid analytic geometry; vectors; partial differentiation; multiple integration. *Classification:* Required of Secondary Mathematics majors. Elective for others with permission of instructor. *Prerequisite:* Math. 108. *Credit:* Four semester hours — four class hours.

MATH. 203. FUNDAMENTAL PRINCIPLES OF MATHEMATICS

Nature of mathematics; set theory; integers; operations; systems of numeration; rational numbers, operations; number theory. *Classification:* Required of all Elementary Education students and Exceptional Education students. *Credit:* Three semester hours — three class hours.

MATH. 204. FUNDAMENTAL PRINCIPLES OF MATHEMATICS

Properties of real numbers; linear and quadratic equations and inequalities; systems of linear equations and inequalities; modular arithmetic; complex numbers; algebraic structures; functions; statistics. *Classification:* Required of all Elementary Education students and Exceptional Education students in M.R. and P.H. *Prerequisite:* Math. 203. *Credit:* Three semester hours—three class hours.

MATH. 207. INTRODUCTION TO ELECTRONIC COMPUTERS

History and description of computers; fundamentals of computer programming; computer mathematics. *Classification:* Elective. *Prerequisite:* Permission of Instructor. *Credit:* Three semester hours—three class hours.



MATH. 209. INTRODUCTION TO COMPUTER PROGRAMMING

Techniques of programming various languages, specifically the FORTRAN language. *Classification:* Elective. *Prerequisite:* Math. 207 or permission of instructor. *Credit:* Three semester hours—three class hours.

MATH. 211. INTRODUCTION TO PROBABILITY AND STATISTICS

Empirical frequency distributions; measures of central tendency and dispersion; theory of probability of a finite sample space; application of statistical distributions. *Classification:* Elective for non-mathematics majors. *Prerequisite:* Three years of high school mathematics. *Credit:* Three semester hours—three class hours.

MATH. 251. CALCULUS

Functions; limits; continuity; techniques for differentiation; applications; summations; anti-derivatives; definite integral; fundamental theorem of calculus; techniques for integration; applications. *Classification:* Elective for other than mathematics majors. *Prerequisite:* Permission of instructor. *Credit:* Three semester hours—three class hours.

MATH. 301. INTRODUCTION TO MODERN ALGEBRA

Fundamental concepts of sets, mappings, and operations. Topics included are semigroups, groups, rings, integral domains, fields, modular arithmetic, equivalence and order relations, construction and characterization of number systems. *Classification:* Required of all Secondary Mathematics majors and elective for others. *Prerequisite:* Math. 109 and permission of instructor. *Credit:* Three semester hours—three class hours. *Special Note:* May substitute Math. 302.

MATH. 302. LINEAR ALGEBRA

Vectors and vector spaces; linear dependence; basis and dimension; matrices and determinants; linear systems; linear transformations. *Classification:* Required of all Secondary Mathematics majors and elective for others. *Prerequisite:* Math. 109 and permission of instructor. *Credit:* Three semester hours—three class hours. *Special Note:* May substitute Math. 301.

MATH. 303. MATHEMATICS IN THE ELEMENTARY GRADES

Development of number and the fundamental processes of elementary mathematics; principles, relationships; generalizations; structure; rationale of the processes with emphasis on historical development of and concepts underlying modern algorithms of arithmetic; measurement; professional literature; readings; project. *Classification:* Elective. *Credit:* Three semester hours—three class hours.

MATH. 304. DIFFERENTIAL EQUATIONS

Preliminary ideas on order, degree, and

solutions; formation of differential equations; differential equations of first order linear equations with constant coefficients; special higher order equations; simultaneous equations; linear equations of the second order; series solutions. *Classification:* Elective. *Prerequisite:* Math. 202. *Credit:* Three semester hours—three class hours.

MATH. 305. PROBABILITY AND STATISTICS

Probability spaces, discrete and continuous; distributions of discrete and continuous random variables; mathematical expectation; brief survey of point estimation, interval estimation, and testing hypotheses. *Classification:* Elective. *Prerequisite:* Math. 109 and 202. *Credit:* Three semester hours—three class hours.

MATH. 307. ELEMENTARY THEORY OF NUMBERS

Divisibility; Euclid's algorithm; prime numbers; prime factorization theorem; Euler's phi-function; Diophantine analysis; congruences; theorems of Fermat, Euler, and Wilson. *Classification:* Elective. *Prerequisite:* Math. 109 or Permission of Instructor. *Credit:* Three semester hours—three class hours.

MATH. 308. MODERN GEOMETRY

The axiomatic method; historical background of Euclidean geometry; defects of Euclid; modern sets of postulates for Euclidean geometry; Euclidean geometry based on ruler and protractor axioms; introduction of non-Euclidean geometries. *Classification:* Required of Secondary Mathematics majors and elective for others. *Prerequisite:* Math. 109 and permission of instructor. *Credit:* Three semester hours—three class hours.

MATH. 309. ADVANCED CALCULUS

Sequences and functions; limits; continuity; derivatives; mean value theorems; intermediate forms; Taylor's theorem; series; functions of two variables; continuity in a region; higher derivatives; coordinate transformations. *Classification:* Elective. *Prerequisite:* Math. 109 and 202. *Credit:* Three semester hours—three class hours.

MATH. 310. FUNDAMENTAL PRINCIPLES OF MATHEMATICS

Measurement; language of geometry; theorems and proofs; congruence; parallels and parallelograms; space figures; similarity and trigonometry; area and volumes; spherical geometry; coordinate geometry; postulational method. *Classification:* Required of Elementary Education students. *Prerequisite:* Math. 204. *Credit:* Three semester hours—three class hours.

MATH. 311. INTRODUCTION TO TOPOLOGY

Sets and functions; metric spaces; topological spaces; connectedness; compactness; separation. *Classification:* Elective. *Prerequisite:* Math. 107, 108, 109, 202 and at least one of the following: Math. 301, 302, 305, 307, 308, 309. *Credit:* Three semester hours—three class hours.

MATH. 401. MODERN GEOMETRY

Groups and transformations; projective geometry; affine geometry; Euclidean geometry. *Classification:* Elective. *Prerequisite:* Math. 308. *Credit:* Three semester hours—three class hours.

MATH. 403. APPLIED ANALYSIS

Matrices; systems of linear equations; transformations; eigen vectors; algebra and calculus of vectors; line and surface integrals; theorems of Green, Gauss and Stokes; applications to boundary value problems; complex numbers; differentiation and integration; sequences and series; power series; analytic functions; conformal mapping; residue theory. *Classification:* Elective. *Prerequisites:* 12 semester hours of Analytic Geometry and Calculus. *Credit:* Three semester hours—three class hours. *Special Note:* Differential Equations and Advanced Calculus also recommended as prerequisites.

MATH. 404. MATHEMATICAL METHODS IN APPLIED MATHEMATICS

Linear partial differential equations; exist-

ence, uniqueness and stability of the solutions; infinite series; absolute convergence; uniform convergence; Fourier series; applications to boundary value problems; Gamma functions; Bessel functions; hypergeometric functions; Legendre functions and their applications. *Classification:* Elective. *Prerequisites:* 12 semester hours of Analytic Geometry and Calculus. *Credit:* Three semester hours—three class hours. *Special Note:* Differential Equations and Advanced Calculus also recommended as prerequisites.

MATH. 405. PROBABILITY AND STATISTICS

Sampling distributions; the central limit theorem; point and interval estimation; test of hypotheses. *Classification:* Elective. *Prerequisite:* Math. 305. *Credit:* Three semester hours—three class hours.

MATH. 406. NUMERICAL ANALYSIS

Fundamentals; finite differences; difference tables; tabulation of polynomials; difference operators; linear interpolation; classical polynomial formulas; inverse interpolation; Lagrange's formula; numerical integration; Gauss's formula; difference equations. *Classification:* Elective. *Prerequisite:* Math. 202. *Credit:* Three semester hours—three class hours.

MATH. 407. ADVANCED CALCULUS

Solid analytic geometry and vectors; partial differentiation; change of variable, maxima and minima, implicit function; multiple integrals, moment and centroids; Jacobians and transformations; infinite series, main tests for convergence. *Classification:* Elective. *Prerequisite:* Math. 309. *Credit:* Three semester hours—three class hours.

MATH. 410. SEMINAR IN MATHEMATICS

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 discussions. *Classification:* Elective for seniors and graduate students.

Prerequisite: Approval of instructor. *Credit:* Three semester hours—three class hours.

MATH. 412. MATHEMATICAL LOGIC

Validity, deducibility, and completeness in propositional and predicate logics; first order formal theories and informal theories in the context of set theory. *Classification:* Elective. *Prerequisites:* Math. 109 or Phil.

BIOLOGY DEPARTMENT

BIOL. 101. GENERAL BIOLOGY

Principles of basic cellular and tissue physiology; fundamentals of taxonomy; survey of the plant and animal kingdoms. *Classification:* Required of students in Elementary Education and Exceptional Education; elective for others. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

BIOL. 102. GENERAL BIOLOGY

Principles of reproduction, heredity, evolution, ecology and conservation. *Classification:* Required of students in Elementary Education and Exceptional Education; elective for others. *Prerequisite:* Biol. 101. *Credit:* Three semester hours; two 1-hour lectures and 2-hour laboratory, one all-day field trip may be required.

BIOL. 111. GENERAL BIOLOGY

Biochemical and physiological aspects of life; anatomy and morphology of selected organisms; and principles of systematics. *Classification:* Required of Secondary Science Majors and Biology Liberal Arts Majors. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory, one all-day field trip may be required.

BIOL. 112. GENERAL BIOLOGY

Reproduction and development; and an introduction to the principles of genetics, evolution and ecology. *Classification:* Required of Secondary Science Majors and

202. *Credit:* Three semester hours—three class hours.

MATH. 495. PROJECT

(See Project under Academic Regulations).

MATH. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

Biology Liberal Arts Majors. *Prerequisite:* Biol. 111. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory, one all-day field trip may be required.

BIOL. 201. MICROBIOLOGY

Microorganisms and the techniques of observing their morphology, growth characteristics, and distribution; the relationship of microorganisms to man and his activities. *Classification:* Elective for Biology Majors. *Prerequisite:* Biol. 111-112, or the equivalent. *Credit:* Four semester hours; two 1-hour lectures and two 2-hour laboratories.

BIOL. 202. INVERTEBRATE ZOOLOGY

Morphology, physiology, adaptation, reproduction, genetics and ecology of the invertebrates. A systematic approach. *Classification:* Elective. *Prerequisite:* Biology 101-102 or equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

BIOL. 203. GENETICS

Principles of heredity; inheritance of specific plant, animal, and human traits; biochemical aspect of the gene; relationship to evolution. *Classification:* Required of Biology Majors; others by permission of the instructor. *Prerequisite:* Biol. 111-112, or the equivalent. *Credit:* Four semester hours; three 1-hour lectures and one 2-hour laboratory.

BIOL. 204. GENERAL BOTANY

Survey of plant taxa to show the relationship of morphology and anatomy to the functioning plant. *Classification:* Elective. *Prerequisite:* Biology 101-102 or equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory. One 2-day field session may be required.

BIOL. 206. ENTOMOLOGY.

A study of the morphology, physiology, ecology and life history of insects. Major emphasis is placed on interrelationships of insects and man. *Classification:* Elective. *Prerequisite:* Biol. 101 and 102 or equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

BIOL. 210. BACTERIOLOGY

Morphology and physiology of bacteria. General application to household science, sanitary science, hygiene and infectious diseases. *Classification:* Required of Home Economics Sophomores; all College elective except Biology Majors. *Prerequisite:* none. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

BIOL. 211. HUMAN PHYSIOLOGY

Basic physiology of cells, tissues, and organ systems. *Classification:* Required of Home Economics Sophomores; all College elective except Biology Majors. *Prerequisite:* none. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

BIOL. 300. COMPARATIVE VERTEBRATE MORPHOLOGY

Description and evolution of the Chordates. Development, structure, and evolution of the organ systems; laboratory dissections of the dogfish shark, mud puppy, and cat. *Classification:* Elective for Biology Majors. *Prerequisite:* Two semesters of biology or one semester of general zoology, or the equivalent. *Credit:* Four semester hours; three 1-hour lectures, one 3-hour laboratory.

BIOL. 301. CELLULAR PHYSIOLOGY

Life phenomena of plants and animals.

Physiological processes at the cellular level. *Classification:* Required of Biology Majors. *Prerequisite:* Biol. 111-112, or equivalent, and Chem. 111-112. Organic Chemistry. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory.

BIOL. 310. MICROTECHNIQUE

The preparation of biological materials for study on the cell level. Special emphasis is placed on techniques of fixation, staining, mounting and photomicrography, using black and white, and color film. *Classification:* Elective. *Prerequisite:* Biol. 111, 112. *Credit:* Four semester hours; two 1-hour lectures, two 2-hour laboratories.

BIOL. 401. ECOLOGY

Natural communities as ecosystems, interspecific and intraspecific relationships, population changes, biogeochemical cycles, limiting factors, and energy transformations in natural communities, recognition of plants and animals in selected habitats, introduction to analysis of community composition, effects of man in modifying natural environments. *Classification:* Required of Biology Majors. *Prerequisite:* Biol. 111-112, or the equivalent. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory; one 4-day field session and two half-day field trips may be required. *Special Note:* May be taken for graduate credit.

BIOL. 403. ECONOMIC BIOLOGY AND CONSERVATION

Organisms of economic importance to man; basic concepts of modern agriculture; plant and animal diseases, including their life cycles and control; principles of biological conservation including forests, soil, water and wildlife. *Classification:* Elective for Biology Majors; others by permission of the instructor. *Prerequisite:* Biol. 111-112, or the equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory; a number of field trips may be required. *Special Note:* May be taken for graduate credit.

BIOL. 404. PLANT MORPHOLOGY

A study of the comparative structure, reproductive cycles, and phyletic implications

in the vascular and nonvascular plants; emphasis on the organization, developmental anatomy, and morphogenesis of vascular plants. *Classification:* Elective. *Prerequisite:* Biol. 111-112, or the equivalent. *Credit:* Three semester hours, two 1-hour lectures and one 2-hour laboratory. *Special Note:* May be taken for graduate credit.

BIOL. 405. ORGANIC EVOLUTION

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 species; more recent trends in evolutionary theory, such as introgressive hybridization, polyploidy, structural hybridity, apomixis, and genetic homeostasis, will be developed. *Classification:* Required of Biology Majors. *Prerequisite:* Biol. 111-112, or the equivalent; Biol. 203 and Biol. 401. *Credit:* Three semester hours; three 1-hour lectures. *Special Note:* Must be taken at the graduate level if not previously taken.

BIOL. 406. BIOMETRICS

Collection and presentation of biological data, sampling and sampling distributions, probability, tests of null hypotheses, linear regression and correlation, introduction to analysis of variance. *Classification:* Elective for Biology Majors. *Prerequisite:* Math 106 or equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory. *Special Note:* May be taken in place of calculus to fulfill math requirements for certification in Secondary Biology. May be taken for graduate credit.

BIOL. 408. PLANT PHYSIOLOGY

Physiological processes in plants, including photosynthesis, respiration, osmosis, translocation, transpiration, effects of hormones, soil nutrients, and tropisms. *Classification:* Elective. *Prerequisite:* Biol. 301, Chem. 201, 202, or equivalent. *Credit:* Three semester hours; Five hours per week including laboratory. *Special Note:* May be taken for graduate credit.

BIOL. 409. FIELD BIOLOGY

Field identification, growth characteristics, reproduction, movement, habitats and nutrition of organisms; distribution and man's effect on distribution. *Classification:* Elective. *Prerequisite:* Biol. 101-102, or the equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory, field trips required. *Special Note:* May be elected at the graduate level by non-biology majors only.

BIOL. 411. PARASITOLOGY

Principles of parasitology; morphology, physiology, ecology, life cycles, identification and pathological effects of representative parasites; control and treatment; significance of parasitism in relation to human health. *Classification:* Elective. *Prerequisite:* Biology 111-112 or equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory. *Special Note:* May be taken for graduate credit.

BIOL. 413. ORNITHOLOGY

Birds, their structure, functions, origins, and development; their identification and habits. *Classification:* Elective. *Prerequisite:* Biol. 101-102, or the equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory. Field work required. *Special Note:* May be taken for graduate credit.

BIOL. 415. RADIATION BIOLOGY

Properties of nuclear and high energy radiation; detection and counting systems; mechanisms of radiobiological actions; radioisotopes as biological tools; biological effects, dose and tolerance; personnel and area monitoring. *Classification:* Elective for Biology Majors; others by permission of the instructor. *Prerequisite:* Biol. 111-112, or the equivalent; 6 semester hours of chemistry. *Credit:* Three semester hours; four hours per week including lectures, laboratory and field trips. *Special Note:* May be taken for graduate credit.

BIOL. 418. LIMNOLOGY

Study of the physical, chemical, and bio-

logical factors influencing fresh water life. Lectures, demonstrations and field trips. *Classification:* Elective. *Prerequisite:* Biol. 111-112 or the equivalent. Not open to Sophomores. *Credit:* Four semester hours. *Special Note:* May be taken for graduate credit.

BIOL. 420. FIELD STUDIES IN THE CONSERVATION OF BIOLOGICAL RESOURCES

Problems of renewable resources, applied ecology involving soil, water, forest and wildlife; field instruction and lectures by experts from State Conservation Depart-

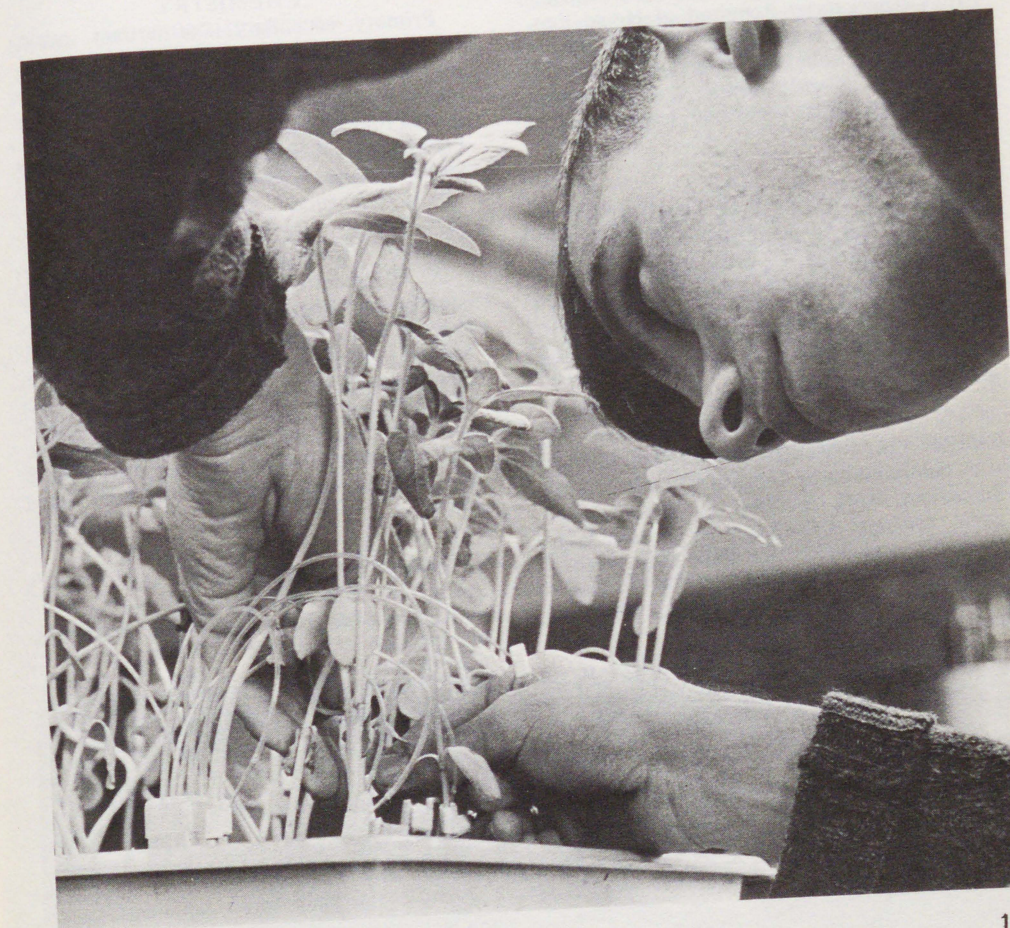
ment, federal bureaus, local community organizations; techniques in conservation education. *Prerequisite:* Six (6) semester hours of biology. *Special Note:* Intended as a service course for non-Biology Majors. Not open to Biology Majors for credit toward a degree.

BIOL. 495. PROJECT

(See Project under Academic Regulations).

BIOL. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).



CHEMISTRY DEPARTMENT

CHEM. 101. GENERAL CHEMISTRY

General Chemistry as a science exploring the facts and theories dealing with the relationship between structure and properties of matter; relation of Chemistry to other fields of knowledge and to everyday life. *Classification:* Required of Home Economics and Industrial Arts Education majors. All college elective. *Credit:* Three semester hours; two 1-hour lectures and one 3-hour laboratory.

CHEM. 102. GENERAL CHEMISTRY

A continuation of General Chemistry 101. *Classification:* Required of Home Economics and Industrial Arts Education majors. All college elective. *Prerequisite:* Chem. 101. *Credit:* Three semester hours; two 1-hour lectures and one 3-hour laboratory.

CHEM. 111. GENERAL CHEMISTRY

Introduction to chemistry utilizing physico-chemical principles with illustrative laboratory work of a quantitative nature. *Classification:* Required of chemistry and Secondary Education science majors. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory.

CHEM. 112. GENERAL CHEMISTRY

A continuation of General Chemistry 111; laboratory work includes qualitative inorganic analysis. *Classification:* Required of chemistry and Secondary Education Science Majors. *Prerequisite:* Chem. 111. *Credit:* Four semester hours; two 1-hour lectures and two 3-hour laboratories.

CHEM. 201. ORGANIC CHEMISTRY

Chemistry of carbon compounds. Bonding, stereochemistry and structural theory. Fundamental reactions of functional groups considered from the mechanistic viewpoint. Laboratory work illustrating fundamental principles, modern techniques, synthesis and properties of organic compounds. *Classifica-*

tion: Required of Chemistry Majors. *Prerequisite:* Chem. 111-112. *Credit:* Four semester hours; three lectures and one 3-hour laboratory.

CHEM. 202. ORGANIC CHEMISTRY

A continuation of Organic Chemistry 201. *Classification:* Required of Chemistry Majors. *Prerequisite:* Chem. 201. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory.

CHEM. 210. LITERATURE OF CHEMISTRY

Primary, secondary, and tertiary sources of chemical literature and library experience in usage. The literature search-research in documentation. *Classification:* Required of Liberal Arts Chemistry majors. *Prerequisite:* Chem. 111-112. *Credit:* One semester hour; one lecture hour.

CHEM. 221. INTERMEDIATE CHEMISTRY

A treatment of bonding, kinetics and equilibrium, with emphasis on organic systems. *Classification:* Required of Dietetics Majors. Elective for all other students except Chemistry Majors. *Prerequisites:* Chem. 102, Chem. 112, or Chem. 111 with permission of the Chairman of the Department of Chemistry. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory.

CHEM. 222. BIOLOGICAL CHEMISTRY

Structure and functions of the substances of biochemical interest. Living systems. *Classification:* Required of Dietetics Majors. Elective for all other students except Chemistry Majors. *Prerequisites:* Chem. 221 or Chem. 201. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory.

CHEM. 301. ANALYTICAL CHEMISTRY

Theory and laboratory applications of

quantitative analysis; utilizing gravimetric, volumetric and physico-chemical methods. *Classification:* Required of Chemistry Majors. *Prerequisite:* Chem. 111-112. *Credit:* Three semester hours; one 1-hour lecture and two 3-hour laboratories.

CHEM. 400. INORGANIC CHEMISTRY

Laws and theories of inorganic chemistry with emphasis on the application of thermodynamic, kinetic and structural principles. *Classification:* Required of Liberal Arts Chemistry majors. *Prerequisite:* Chem. 202 and Chem. 405. *Credit:* Three semester hours; three 1-hour lectures.

CHEM. 401. BIOCHEMISTRY

Physical and organic chemical studies of proteins, carbohydrates, lipids, and water applicable to cellular and membrane phenomena. *Classification:* Required of Liberal Arts Chemistry Majors. *Prerequisite:* Chem. 405. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory.

CHEM. 403. INSTRUMENTAL CHEMISTRY

Instrumental methods of chemical analysis through study of theory and operation of instruments including spectrophotometric, electrometrical and chromatographic methods. *Classification:* Required of Liberal Arts Chemistry majors. *Prerequisite:* Chem. 301 and Chem. 405. *Credit:* Three semester hours; one 1-hour lecture, two 3-hour laboratories.

CHEM. 404. CHEMISTRY SEMINAR
Presentations by students, staff and guest speakers of topics of current chemical inter-

est. *Classification:* Elective for Chemistry Majors. May be taken more than once for credit with Department approval. *Prerequisite:* 20 semester hours in chemistry. *Credit:* One semester hour.

CHEM. 405. PHYSICAL CHEMISTRY

Description of physico-chemical systems; thermodynamics, kinetics, electrochemistry. *Classification:* Required of Chemistry Majors. *Prerequisite:* Chem. 202, Phy. 112, Math. 108. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory.

CHEM. 406. PHYSICAL CHEMISTRY

A continuation of Physical Chemistry 405. *Classification:* Required of Chemistry Majors. *Prerequisite:* Chem. 405 and Chem. 301. *Credit:* Four semester hours; three 1-hour lectures and one 3-hour laboratory.

CHEM. 420. NUCLEAR CHEMISTRY

Introduction to Nuclear Structure, radioactive decay, radiation chemistry, and radioisotope technique. *Classification:* Elective for Chemistry Majors. *Prerequisite:* Chem. 301. *Credit:* Three semester hours; two 1-hour lectures and one 3-hour laboratory.

CHEM. 495. PROJECT

(See Project under Academic Regulations)

CHEM. 499. INDEPENDENT STUDY
(See Independent Study under Academic Regulations)



GEOLOGY DEPARTMENT

GEOL. 101. PHYSICAL GEOLOGY

Introduction to astronomy, weathering, erosion, deposition, mountain building, earthquakes and volcanism; minerals, rocks and topographic maps. *Classification:* All College elective. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory; occasional field trips.

GEOL. 102. HISTORICAL GEOLOGY

Origin of the solar system; physical history of the earth in relationship to the orderly development of life throughout geologic time. *Classification:* All College elective; required of Secondary Education Earth Science Majors and Liberal Arts Geology Majors. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory; occasional field trips.

GEOL. 112. PHYSICAL GEOLOGY

Introduction to astronomy; Geologic processes in operation on and beneath the surface of the earth. *Classification:* All college elective; required of Secondary Education Science Students. *Credit:* Four semester hours; three 1-hour lectures and one 2-hour laboratory; occasional field trips.

GEOL. 201. GEOMORPHOLOGY

Landforms with particular reference to the physical principles of the processes that produce them. *Classification:* Required of Secondary Education Earth Science Majors and Liberal Arts Geology or Geography Majors. *Prerequisite:* Physical Geology or Physical Geography. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory; occasional field trips.

GEOL. 205. ELEMENTARY OCEANOGRAPHY

An introduction to the science of the sea. The importance of the oceans in our civilization. *Classification:* All College elective. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory; occasional field trips.

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GEOL. 301. STRATIGRAPHY

Basic principles governing the interpretation, correlation, classification and nomenclature of stratified rock units. *Classification:* Required of Secondary Education Earth Science Majors and Liberal Arts Geology Majors. *Prerequisite:* Geol. 102, 201. *Credit:* Three semester hours; two 1-hour lectures, one 2-hour laboratory; occasional field trips.

GEOL. 302. PALEONTOLOGY

A general study of fossils and their stratigraphic distribution. *Classification:* Required of Secondary Education Earth Science Majors and Liberal Arts Geology Majors. *Prerequisite:* Geol. 102 and one year of biology. *Credit:* Three semester hours; two 1-hour lectures, one 2-hour laboratory; occasional field trips.

GEOL. 303. MINERALOGY

Minerals and their chemical and physical properties; occurrence, identification, and classification; rock-forming minerals. *Classification:* Required of Secondary Education Earth Science Majors and Liberal Arts Geology Majors. *Prerequisite:* Geol. 101 or 112 and one year of Chemistry. *Credit:* Three semester hours; two 1-hour lectures, one 2-hour laboratory; occasional field trips.

GEOL. 304. PETROLOGY

Description, origin, and classification of igneous, sedimentary, and metamorphic rocks. *Classification:* Required of Liberal Arts Geology Majors. *Prerequisite:* Geol. 303. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory; occasional field trips.

GEOL. 400. GEOLOGY OF NEW YORK STATE

Physiography, stratigraphy, paleontology, glacial geology, and economic geology of New York State; geologic history of the

region. *Classification:* Elective for Earth Science and Geology Majors; others with permission of instructor. *Prerequisites:* Geol. 301, 302. *Credit:* Three semester hours; two 1-hour lectures, one 2-hour laboratory; occasional field trips. *Special Note:* May be taken for graduate credit.

GEOL. 401. STRUCTURAL GEOLOGY

Analysis of folds, faults, and other structural features in sedimentary and metamorphic terrains; introduction to rock mechanics; regional tectonics. *Classification:* Elective for Earth Science and Geology Majors. *Prerequisites:* Geol. 101 or 112, 102. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory; occasional field trips. *Special Note:* May be taken for graduate credit.

GEOL. 402. GEOLOGY OF NORTH AMERICA

Major physical provinces of the United States and adjacent areas with reference to their geologic history, structure, and topographic development. *Classification:* Required of Secondary Education Earth Science Majors; elective for Liberal Arts

Geology Majors; others with permission of instructor. *Prerequisites:* Geol. 301, 302. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory; occasional field trips. *Special Note:* May be taken for graduate credit.

GEOL. 404. ADVANCED OCEANOGRAPHY

A general approach to the physics, chemistry, biology, and geology of the ocean and its floor. *Classification:* Elective for Secondary Education Science Students and Liberal Arts Geology Majors; others with permission of instructor. *Prerequisite:* Two years of undergraduate biology, chemistry, geology, or physics. *Credit:* Three semester hours; two 1-hour lectures, one 2-hour laboratory; occasional field trips. *Special Note:* May be taken for graduate credit.

GEOL. 495. PROJECT

(See Project under Academic Regulations).

GEOL. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)

PHYSICS DEPARTMENT

PHY. 101. GENERAL PHYSICS

Mechanics, properties of matter, heat, wave motion, and sound; selection of laboratory experiences based on the student's curricular program. *Classification:* Required of Industrial Arts sophomores; elective for others. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

PHY. 102. GENERAL PHYSICS

Light, electricity and magnetism, atomic physics; selection of laboratory experiences based on the student's curricular program. *Classification:* Required of Industrial Arts sophomores; elective for others. *Prerequisite:* Phy. 101, or the equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

PHY. 105. PHYSICS PROBLEMS

Solution of selected physics problems to raise the student's problem-solving competence to the level required in Phy. 111-112. *Classification:* Required of students with credit in Phy. 101 and 102, or the equivalent, who plan to major in physics. *Prerequisite:* Phy. 101 and 102, or the equivalent. *Credit:* Two semester hours; one 2-hour problem session.

PHY. 111. GENERAL PHYSICS

Mechanics, heat, wave motion, and sound. *Classification:* Required of Secondary Science Majors; recommended for Liberal Arts Physics Majors. *Credit:* Four semester hours; three 1-hour lectures and one 2-hour laboratory.

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PHY. 112. GENERAL PHYSICS

Electricity, magnetism, light, and modern physics. *Classification:* Required of Secondary Science Majors; recommended for Liberal Arts Physics Majors. *Prerequisite:* Phy. 111. *Credit:* Four semester hours; three 1-hour lectures and one 2-hour laboratory.

PHY. 201. ELECTRONICS

Series and parallel resonant circuits, power transfer and impedance matching; vacuum tubes, transistors, rectifiers, amplifiers; oscillators; modulation and demodulation; radio transmitters and receivers; design and construction of rectifier power supplies, amplifiers, and simple receivers. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, or the equivalent. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

PHY. 205. MODERN ATOMIC PHYSICS

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; the special theory of relativity. *Classification:* Required of Secondary and Liberal Arts Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, or the equivalent, and calculus. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 301. ELECTRICAL MEASUREMENTS

Direct and low-frequency alternating current measurements by meter deflection methods and by null methods; amplifiers and oscillographs; measurements at radio and high frequencies; applications in thermometry, mechanics, acoustics, and nuclear physics. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, or the equivalent, and calculus. *Credit:* Three semester hours; and two 3-hour laboratories.

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PHY. 303. HEAT AND THERMODYNAMICS

Transfer, emission, absorption, reflection of heat; thermodynamics; isothermal and adiabatic processes; heat engines. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, or the equivalent, and calculus. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 304. SOUND

Analysis of sound; reflection and refraction; diffraction and interference; the ear and hearing; musical sound, quality, scales; supersonics. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, or the equivalent, and calculus. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 308. OPTICS

Fundamentals of geometrical and physical optics; the nature and propagation of light; experiences with such optical phenomena as interference, diffraction, polarization, and double refraction. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisites:* Phy. 111-112, or the equivalent, and calculus. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 309. LABORATORY IN OPTICS

Principles and practices in making precision measurements using such instruments as the interferometer and spectrometer. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 308, or the equivalent, and calculus. *Credit:* Three semester hours; two 3-hour laboratories.

PHY. 403. X-RAYS

Production and measurement of X-rays; absorption and wave properties; Bragg's Law and crystal lattices; emission and absorption spectra; scattering. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, or the equivalent, and calculus. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 406. INTRODUCTION TO QUANTUM PHYSICS

Introduction to the methods of quantum mechanics with selected examples from one-dimensional problems, from atomic systems, and from quantum statistics. *Classification:* Required of Liberal Arts Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 205 and Phy. 414, or the equivalent.

PHY. 408. NUCLEAR PHYSICS

The basic properties of nucleons and nuclei, radioactivity, nuclear models, the interaction of nuclear radiation with matter, nuclear reactions, the operation of particle accelerators, and an introduction to high energy physics. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112 and Phy. 414, or the equivalent. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 409. INTRODUCTORY SPECTROSCOPY

Atomic spectra and the development of atomic theory; electron spin and the multiplet structure of line spectra; the periodic system of the elements; spectrographic instruments and their uses. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, or the equivalent, and calculus. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

PHY. 410. ADVANCED PHYSICS LABORATORY

Selected classical experiments chosen from the areas of mechanics, heat, sound, light, electricity and magnetism, and modern physics. *Classification:* Required of Secondary and Liberal Arts Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, or the equivalent. *Credit:* Three semester hours; two 3-hour laboratories. May be repeated for a maximum of nine credit hours.

PHY. 411. INTRODUCTION TO SOLID STATE PHYSICS

Theory of the structure of solids; thermal, magnetic and dielectric properties of matter in the solid state; theory in impurity semiconductors with applications to rectifiers and transistors. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112 and Phy. 414, or the equivalent. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 414. INTRODUCTION TO THEORETICAL PHYSICS I

Various introductory topics in theoretical physics; use of simple formalisms of vector analysis, ordinary differential equations, and partial differential equations in numerous problems in circuit theory, classical mechanics, optics, quantum mechanics, acoustics, and electromagnetic theory. *Classification:* Required of Secondary and Liberal Arts Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112 and Math. 108, or the equivalent. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 415. INTRODUCTION TO THEORETICAL PHYSICS II

Various introductory topics in theoretical physics; use of simple formalisms of complex variables, multi-dimensional vector spaces, and extrema calculations in numerous problems in circuit theory, classical mechanics, optics, quantum mechanics, quantum field theory, and classical electromagnetism and electrodynamics. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112 and Math. 108, or the equivalent. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 416. CLASSICAL MECHANICS I

Vectorial particle mechanics in one and two dimensions; moving reference frames in two dimensions; mechanics of a rigid body in two dimensional planar motion. *Classification:* Required of Secondary and Liberal Arts Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-

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112, Math. 202, Phy. 414 or Math. 304, or the equivalent. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 417. CLASSICAL MECHANICS II

Continuation of Phy. 416; vectorial particle mechanics in three dimensions; introduction to mechanics in generalized coordinates, to the central force problem, to the mechanics of rigid bodies in three dimensional motion, to the mechanics of continuous media, to the theory of small vibrations. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 416, or the equivalent. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 418. ELECTRICITY AND MAGNETISM I

A study of the interactions of electric charges at rest and in motion; direct current and alternating current circuits; introduction to Maxwell's equations. *Classification:* Required of Secondary and Liberal

Arts Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 111-112, Phy. 414, Math. 202, or the equivalent. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 419. ELECTRICITY AND MAGNETISM II

A continuation of Phy. 418 including a study of electric and magnetic fields in matter, discussion of electromagnetic radiation, and some special topics. *Classification:* Elective for Physics Majors; others by permission of instructor. *Prerequisite:* Phy. 418, or the equivalent. *Credit:* Three semester hours; three 1-hour lectures.

PHY. 495. PROJECT

(See Project under Academic Regulations)

PHY. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)

GENERAL SCIENCE DEPARTMENT

SCI. 101. PRINCIPLES OF PHYSICAL SCIENCE

Scientific method of inquiry exemplified by selected topics from physics and chemistry. *Classification:* Elective. Cannot be counted for credit with Phy. 101 or Chem. 101. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

SCI. 103. PRINCIPLES OF PHYSICAL SCIENCE

Scientific method of inquiry exemplified by selected topics from astronomy, geology, and meteorology. *Classification:* Elective. Cannot be counted for credit with Geol. 101, Sci. 110 on TV, or Sci. 111. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

SCI. 111. EARTH SCIENCE

Description of solar system, galaxy and cosmos; map projections; time; methods of astronomical investigation; structure and properties of the atmosphere; weather and climate. *Classification:* Part of an earth science group including Geol. 112; required of majors in teaching a specified science. Cannot be counted for credit with Geol. 101, Sci. 103, or Sci. 110 on TV. *Credit:* Four semester hours; three 1-hour lectures and one 2-hour laboratory.

SCI. 213. DESCRIPTIVE ASTRONOMY: SOLAR SYSTEM

Sun, moon, planets and constellations, their positions and movements; astronomical instruments; star maps; time and geographic position determined from celestial observations; origin of the solar system. Observa-



tion of the heavens and of the Planetarium sky. *Classification:* Elective. Cannot be counted for credit with Sci. 110 on TV, or Sci. 111. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

SCI. 214. DESCRIPTIVE ASTRONOMY: UNIVERSE

Review of solar system; our sun as a star; classification of stars; Hertzsprung-Russell diagram; binary stars; star clusters; Milky Way and other galaxies; origin of the universe. *Classification:* Elective. Cannot be counted for credit with Sci. 110 on TV. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

SCI. 215. METEOROLOGY

The atmosphere; meteorological instruments; heat balance and temperature; humidity and precipitation; atmospheric pressure; winds and circulation; air masses and fronts; typical wave cyclone; weather analysis and forecasting. *Classification:* Elective. Cannot be counted for credit with Sci. 111. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory.

SCI. 409. HISTORY OF SCIENCE

The origin and development of science and its methods; its interaction with culture and society. Careers and personalities of great scientists as factors in scientific progress. *Classification:* Elective. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour demonstration-discussion. *Special Note:* May be taken for graduate credit.

SCI. 410. SCIENCE IN THE ELEMENTARY SCHOOL CURRICULUM

Background, purposes and present scope of science in the elementary school; professional review of subject matter with demonstrations, experiments, audio-visual aids, reading. *Classification:* Elective for seniors and graduate students. *Credit:* Three semester hours; two 1-hour lectures and one 2-hour laboratory. *Special Note:* May be taken for graduate credit.

SCI. 415. BASIC SCIENCE OF RADIATION AND RADIOISOTOPES

Fundamental principles and techniques in the study of radiation and radioisotopes with emphasis on their measurement and applications, along with an examination of recent advances in radioisotopes and their social implications. *Classification:* Elective; may not be counted for major credit in biology, chemistry or physics. *Prerequisites:* Sci. 101 and Sci. 103, or instructor's approval. *Credit:* Three semester laboratory work. *Special Note:* May be taken for graduate credit.

SCI. 495. PROJECT

(See Project under Academic Regulations)

SCI. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)

SOCIAL SCIENCES

INTER-DISCIPLINARY COURSES

S.S. 101. MAN AND HIS INSTITUTIONS

Culture and human behavior; formation of personality; nature of social interaction; institutions and the satisfaction of human needs; nature of values. *Classification:* Required of all students. *Credit:* Three semester hours—three class hours.

S.S. 102. MAN AND HIS INSTITUTIONS

Human institutions; their structure, function, and interrelationships; attention centered on family, religion, polity, and economy. *Classification:* Required of all students. *Credit:* Three semester hours—three class hours.

S.S. 300. HISTORY AND CULTURE OF THE MIDDLE EAST

Definition of the Middle East; geographically, economically and politically; history of the peoples; nature of Moslem and other cultures; contemporary way of life. *Classification:* Elementary Education sophomores must elect one course from Group B (Hist.

205, 306, 307, 313, 314, S.S. 300). Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

S.S. 401. POLITICAL BEHAVIOR AND PUBLIC OPINION

Conditions of democratic political behavior; opinion formation in democratic systems; voting behavior and party affiliation in the United States; political behavior in governmental institutions; political behavior in selected western European societies. *Classification:* Elective for juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours. *Special Note 1:* May be elected by graduate students. *Special Note 2:* May be used for sociology or political science credit at the choice of the student.

S.S. 495. PROJECT

(See Project under Academic Regulations).

S.S. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

POLITICAL SCIENCE — ECONOMICS DEPARTMENT

P.S. 201. PRINCIPLES AND PROBLEMS OF INTERNATIONAL RELATIONS

Factors affecting national power; pressures in the making of national policy; international political system; conduct of foreign relations; international law in war and peace; problems of international organizations. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

P.S. 207. AMERICAN POLITICAL INSTITUTIONS AND PROBLEMS

The Constitution and its principles; functions and roles of the federal executive, legislative, and judicial branches; problems of individual liberty and governmental authority; problems of national security, economic regulations and social welfare. *Classification:* P.S. 207 required of Secondary Social Studies majors. Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

P.S. 301. COMPARATIVE GOVERNMENT

Twentieth-century setting of politics; structure and function of ideologies underlying government; political elites; policymaking, administrative and judicial processes; illustrations and comparisons among major nations. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

P.S. 302. GOVERNMENTS OF SOUTH AND SOUTHEAST ASIA

Transition from colonial to native control; attendant political, social, and economic problems facing countries of the area; significance of the area in worldwide politics and military affairs; special attention to new countries' relationships to Communist China, Soviet Union, and the United States. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

P.S. 305. STATE AND LOCAL POLITICAL SYSTEM IN AMERICA

Historical roots of American state and local political systems; constitutional and governmental structures; inter-governmental relationships; contemporary problems and issues; future trends and prospects. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

P.S. 306. AMERICAN POLITICS AND POLITICAL PARTIES

Framework of American political system; major and minor parties; party organization; pressure politics, public opinion, propaganda, party finance. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

P.S. 307. AMERICAN FOREIGN POLICY

Analysis of the basic institutions, process and ideas which shape American foreign policy; the interplay of foreign and domestic politics; the position of the United States in

the world with special emphasis upon the post-World War II era in reference to East-West conflict and major area problems. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

P.S. 309. SOVIET POLITICAL SYSTEM

A study of the political features of the Soviet regime; origins and establishment of the system; impact of Marxist-Leninist theory and Stalinist; post-Stalinist revisionism; organization and role of Communist party in relation to other institutions; planned economy; leadership goals. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

P.S. 401. INTERNATIONAL LAW AND ORGANIZATIONS

Analysis of the basic principles of international law and its role in world order; background, nature, structure, and functions of international organization with emphasis upon the United Nations. *Classification:* Elective for juniors and seniors. *Prerequisite:* 3 hours Political Science, preferably in international relations. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

P.S. 403. HISTORY OF POLITICAL THEORY

Chief modern contributors to the political ideologies of democracy, liberalism, conservatism, nationalism, socialism, communism, Fascism, and Nazism. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

P.S. 495. PROJECT

(See Project under Academic Regulations).

P.S. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

ECON. 201. PRINCIPLES AND PROBLEMS OF ECONOMICS
PART I. MACRO-ECONOMICS

Basic concepts of the economic system; analysis of national income components; determination of the level of national income; money and banking; role of monetary and fiscal policies in promoting economic growth; analysis of selected problems in economic development. *Classification:* Required of Secondary Social Studies majors. Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

ECON. 203. PRINCIPLES AND PROBLEMS OF ECONOMICS
PART II. MICRO-ECONOMICS

Nature of micro-economics; the composition and pricing of national output; distribution of income and the pricing of productive factors; supply and demand analysis as applied to agriculture, the firm, and the consumer; determination of price under various market conditions; international trade and finance; the elementary mathematics of price theory. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

ECON. 301. ECONOMICS OF LABOR-MANAGEMENT RELATIONS

Significance of labor and labor institutions in the development of the American economy; background, growth, structure and objectives of trade unions in the United States; nature, scope, issues and enforcement of collective bargaining; economic theory of the labor market; role of government in labor-management relations; current problems of labor-management relations. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

ECON. 304. ECONOMICS OF MONEY AND BANKING

Relation of personal finance to national economic activity; role of money and banking operation in the general economic sys-

tem; functioning of Federal Reserve System; development and current problems of monetary theory and general fiscal policy. *Classification:* Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

ECON. 305. PUBLIC FINANCE

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 inter-governmental fiscal relations. *Classification:* Elective for sophomores, juniors, and seniors. *Prerequisite:* Econ. 201 or 203 or consent of instructor. *Credit:* Three semester hours—three class hours.

ECON. 401. INTERNATIONAL ECONOMIC RELATIONS OF THE UNITED STATES

Importance of international trade to the economy; basic theory of international trade, specialization, and exchange; survey of foreign economic policy; relationship between foreign and domestic objectives, implementation of foreign policy; evaluation of present policy and recommendations for the future. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ECON. 403. COMPARATIVE ECONOMIC SYSTEMS

Essential characteristics of the market economy as it has evolved to the present time; increasing social control; its strengths and weaknesses; the contract with the socialist system as it operates in the Soviet Union today; strengths and weaknesses of Soviet socialism. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ECON. 495. PROJECT

(See Project under Academic Regulations).

ECON. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

GEOGRAPHY DEPARTMENT

GEOG. 101. ELEMENTS OF PHYSICAL GEOGRAPHY

Nature of geography; earth-sun relationships; maps and map interpretation; and classification, world distribution, and origins of the major elements of the natural environment: climates, soils, natural vegetation, and landforms. *Classification:* Required of Liberal Arts Geography majors; elective for others. *Credit:* Three semester hours—three class hours.

GEOG. 102. ELEMENTS OF CULTURAL GEOGRAPHY

Nature of cultural geography; relationships between cultural and physical landscapes; man's adaptations to the natural environment: hunting and gathering, herding and farming; effects of technology on land utilization; and problems arising from present occupancy of the land. *Classification:* Required of Liberal Arts Geography majors; elective for others. *Credit:* Three semester hours—three class hours.

GEOG. 201. GENERAL GEOGRAPHY I

Introduction to geography and the first half of world regional geography: nature of geography, geometrical position and map interpretation; the physical, cultural, economic, and political geographies of the Polar regions, Latin America, Africa, and southwest Asia. *Classification:* Required of Elementary Education and Secondary Social Studies majors. *Credit:* Three semester hours—three class hours.

GEOG. 202. GEOGRAPHY OF ANGLO-AMERICA

Landforms and climates, soils and natural vegetation; land-use regions: distribution of resources; changing pattern of land use; industrial development. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 203. GEOGRAPHY OF MIDDLE AMERICA

Physical, cultural, historical, and regional geography of Mexico, Central America, and the West Indies; emphasis on man's relationship to the natural environment. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 205. GEOGRAPHY OF ASIA

Excludes the Soviet Union; regional divisions: landforms, climate, and natural resources; cultural and economic geography; social and political problems related to the natural environment; industrial development. *Classification:* Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 206. GEOGRAPHY OF NEW YORK STATE

Landform regions, climate and natural resources; development of transportation; utilization and conservation of soil, mineral, forest, wildlife and water resources; industrial development; distribution of population; location and functions of cities. *Classification:* Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 207. RESOURCE-USE PLANNING AND CONSERVATION

Discussion of concept of human and cultural resources; nature, use, and management problems of natural resources; planning the use of natural resources for the future. *Classification:* Required of Geography majors; elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 301. GENERAL GEOGRAPHY II

Second half of world regional geography: the physical, cultural, economic, and political.

cal geographies of Anglo-America, Europe, Asia (excluding southwest Asia), and Australia. *Classification:* Required of Elementary Education and Secondary Social Studies majors. *Prerequisite:* Geog. 201. *Credit:* Three semester hours—three class hours.

GEOG. 302. GEOGRAPHY OF SOUTH AMERICA

Physical, cultural, historical, and regional geography of the South American continent; emphasis on man's use of land and his adjustment to the natural environment through time. *Classification:* Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 303. WORLD CLIMATOLOGY

Discussion of World Climatic regions. Fundamentals of climatic classification systems. Classification, distribution, and comparative analysis of world climatic regions. *Classification:* Elective for upperclassmen. Required of Geography majors. *Credit:* Three semester hours—three class hours.

GEOG. 305. WORLD ECONOMIC GEOGRAPHY

Study of man's major economies: agriculture, manufacturing, mining, forest industries, commercial fishing, commerce, and transportation; effects of the natural environment on the major economies, interdependence of geographic regions. *Classification:* Required of Liberal Arts Geography majors; elective for others. *Credit:* Three semester hours—three class hours.

GEOG. 306. GEOGRAPHY OF AFRICA

Physical, economic, political and historical geography of the continent of Africa; social, political and economic problems related to the natural environment; natural resources; and agricultural and industrial development. *Classification:* Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 401. DEVELOPMENT OF GEOGRAPHIC THOUGHT

Seminar on the development of geographic

thought and methodology from the Ancient Greeks to modern times. Discusses the evolution of schools of thought among Greeks, Romans, Medieval Europeans, Arabians, and Moderns. *Classification:* Required of Geography majors. Elective for History, Sociology, and Political Science majors by permission of the Instructor only. *Credit:* Three semester hours—three class hours.

GEOG. 402. MAP INTERPRETATION FOR TEACHERS

History of maps; types of maps; techniques in map interpretation; methods of developing map-reading skills; maps in the elementary and secondary schools. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

GEOG. 403. GEOGRAPHY OF EUROPE

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. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 404. GEOGRAPHY OF THE SOVIET UNION

Physiographic regions: landforms, climate, natural vegetations, soils, and drainage patterns; major economies and their relationships to the natural environment; problems resulting from changes in land use; interdependence of regions. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

GEOG. 406. URBAN GEOGRAPHY

Spatial arrangement of land uses existing within the American City; differences between these arrangements in American cities of differing functions, sizes, and locations; dynamics of change in city structure and resultant patterns; central place theory and

urban structure; and the role of urban geography in city planning. *Classification:* Elective for upperclassmen. Required for Geography majors. *Credit:* Three semester hours—three class hours. *Special Note:* Admission to course by permission of instructor only.

HISTORY DEPARTMENT

HIST. 201. SOCIAL AND INTELLECTUAL DEVELOPMENT OF THE AMERICAN PEOPLE TO 1900

Colonial society and thought; American Revolution as a social movement; equalitarian ideas and transcendentalism in the Jacksonian Period; impact of immigration on American religious groups; Civil War and social change; rise of the city; Social Darwinism at home and abroad. *Classification:* Elementary Education sophomores must elect one course from Group A (Hist. 201, 202, or 203). Elementary Education sophomores extending certification to Junior High School Social Studies must elect either Hist. 201 or Hist. 202. Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

HIST. 202. POLITICAL AND ECONOMIC GROWTH OF THE UNITED STATES TO 1900

European expansion in the New World; colonial life and problems; revolution and independence; the constitution and political parties; national growth and the common man; continental expansion; sectional economic systems and the Civil War; impact of industrialization; party politics; imperialism and world power. *Classification:* Elementary Education sophomores must elect one course from Group A (Hist. 201, 202, or 203). Elementary Education sophomores extending certification to Junior High School Social Studies must elect either Hist. 201 or Hist. 202. Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

GEOG. 495. PROJECT

(See Project under Academic Regulations).

GEOG. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

HIST. 203. UNITED STATES IN THE TWENTIETH CENTURY

Political reform and reaction; isolationism, interventionism, 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. *Classification:* Elementary Education sophomores must elect one course from Group A (Hist. 201, 202, or 203). Required of Elementary Education sophomores extending certification to Junior High School Social Studies. Elective for sophomores, juniors, and seniors in all divisions. *Credit:* Three semester hours—three class hours.

HIST. 205. TWENTIETH CENTURY EUROPE

Political, social, cultural and intellectual history of Twentieth Century Europe; factors contributory to World War I; the Versailles settlement and reconstruction; 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; the course of the War; restoration of the Atlantic Community, and the challenge of the Nuclear Age. *Classification:* Elementary Education sophomores must elect one course from Group B. (Hist. 205, 306, 307, 310, 313, 314, 317, S.S. 300). Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 206. FOUNDATIONS OF WESTERN CIVILIZATION

Major contributions of three civilizations—Greek, Roman and Medieval—to the Western heritage in philosophy, art, litera-

ture, science, government, law and economy. *Classification:* Required of secondary Social Studies majors. Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

HIST. 301. IDEAS AND SOCIAL CHANGE IN WESTERN CIVILIZATION

Growth of man's concept of himself and his world; evolution of the concepts of freedom and democracy; growth of science and the scientific spirit of inquiry; development of technology and man's reactions to it. *Classification:* Required of all students except Industrial Arts, Liberal Arts and Secondary Education English and Social Studies. *Credit:* Three semester hours—three class hours.

HIST. 302. HISTORY AND GOVERNMENT OF NEW YORK STATE

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 to the present time. *Classification:* Limited to students in social studies programs in Secondary Education and Liberal Arts. *Credit:* Three semester hours—three class hours.

HIST. 304. EUROPE FROM NAPOLEON TO THE FIRST WORLD WAR

Major influences in nineteenth century Europe; nationalism, imperialism, Industrial Revolution, democracy and socialism; causes of World War I. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 305. HISTORY OF ENGLAND SINCE 1485

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, laissezfaire, classical economics, and collectivism. *Classification:* Required of Secondary English majors. Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 306. HISTORY OF AFRICA TO 1919

Indigenous developments and early empires of Africa; the impact of Islam; Western contact and the slave trade; the development of European colonialism; the partition of Africa and colonial administrative policies of the European Powers; the waning of European power as the result of World War I. *Classification:* Elementary Education sophomores must elect one course from Group B. (Hist. 205, 306, 307, 310, 313, 314, 317, S.S. 300). Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

HIST. 307. HISTORY OF MODERN AFRICA SINCE 1919

Partition of Africa by European nations; impact of colonial regimes; African resistance movements; drive towards independence; problems of economic and social change; cultural and intellectual currents in Modern Africa. *Classification:* Elementary Education sophomores must elect one course from Group B. (Hist. 205, 306, 307, 310, 313, 314, 317, S.S. 300). Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 308. HISTORY OF CANADA

French and English colonization; confederation; national development; role in British Commonwealth; contemporary trends. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 309. AMERICAN LEADERS

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 Stef-

fens and the Muckrakers; Henry Ford and Mass Production. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 310. HISTORY OF THE FAR EAST: THE TRADITIONAL ERA

China, Korea and Japan before the coming of the West; traditional cultures, geography, political and religious institutions; impact of Western ideas and colonialism. *Classification:* Elementary Education sophomores must elect one course from Group B. (Hist. 205, 306, 307, 310, 313, 314, 317, S.S. 300). Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 313. HISTORY OF LATIN AMERICA: THE COLONIAL ERA

Physical, Indian, and European backgrounds; Hispanic conquest and colonization; colonial administration; spread of Christianity; society and social life; transmission and diffusion of culture; conflict of empires. *Classification:* Elementary Education sophomores must elect one course from Group B. (Hist. 205, 306, 307, 310, 313, 314, 317, S.S. 300). Required of Elementary Education and Liberal Arts students concentrating in Latin American Studies. Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 314. HISTORY OF LATIN AMERICA: THE NATIONAL ERA

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; growth of culture; contemporary problems. *Classification:* Elementary Education sophomores must elect one course from Group B. (Hist. 205, 306, 307, 310, 313, 314, 317, S.S. 300). Required of Elementary Education and Liberal Arts students concentrating in Latin American Studies. Elective for sophomores, juniors and seniors.

Credit: Three semester hours—three class hours.

HIST. 317. HISTORY OF THE FAR EAST: THE REVOLUTIONARY ERA

China, Korea, Japan and Southeast Asia in modern times; rise of nationalism; challenge of communism; problems of modernization and nation-building. *Classification:* Elementary Education sophomores must elect one course from Group B. (Hist. 205, 306, 307, 310, 313, 314, 317, S.S. 300). Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 318. HISTORY OF RUSSIA TO 1917

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 18th and 19th Centuries; participation in world politics, expansion in Europe and in the East; participation in World War I. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

HIST. 319. COLONIAL HISTORY OF THE AMERICAN PEOPLE

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. *Classification:* Elective for sophomores, juniors, and seniors. *Credit:* Three semester hours—three class hours.

HIST. 400. TWENTIETH CENTURY EUROPEAN DIPLOMACY

Causes and diplomatic problems of World Wars I and II; the Paris Peace Conference and interwar diplomacy; peacemaking in the Cold War era; the European movement; Gaullism and its consequences. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

HIST. 401. AMERICAN EXPANSION
SINCE 1783

Territorial acquisition through annexation, purchase, conquest, occupation and diplomatic negotiation; policies of government administration; imperialism—economic, strategic and benevolent. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 402. HISTORY OF THE SOVIET
UNION

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. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 403. HISTORY OF AMERICAN
FOREIGN RELATIONS

Independence from Britain and alliance with France; the Constitution and the formation of foreign policies; commercial and territorial expansion; diplomacy of slavery and the Civil War; diplomacy of World Wars I and II; Inter-American relations; leadership in the United Nations and in the world. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 404. THE SOUTH, SECTIONAL-
ISM, AND THE CIVIL WAR

Sectional life and sectionalism; pro-slavery and anti-slavery crusades; military conduct of the war; constitutional and diplomatic problems; life behind the lines; political, social and economic reconstruction. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 405. THE RENAISSANCE AND
REFORMATION

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. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 406. THE FRENCH REVOLU-
TION AND NAPOLEON

Political, social, economic and intellectual fabric of the Old Regime; the Revolution; dictatorship of Napoleon and spread of revolutionary ideas; rise of modern nationalism. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 407. GERMANY SINCE 1871

History, government and political thought; anti-democratic forces; economic and cultural developments; rise and impact of Nazi totalitarianism. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 408. HISTORY OF AMERICAN
THOUGHT

Sources of major bodies of thought and ideas in American History; their impact upon American culture; the role that ideas have played in producing a distinctive culture. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 409. SEMINAR IN PROBLEMS
OF AMERICAN HISTORY

Readings, discussion and research on such selected problems as internal and external causes of the American Revolution; the

frontier thesis; the causes of the Civil War; restrictions on immigration; isolationism in America. *Classification*: Required of Secondary Social Studies majors; elective for Liberal Arts History majors. *Prerequisite*: Senior status and official standing in Secondary Social Studies program or Liberal Arts History program. *Credit*: Three semester hours—three class hours.

HIST. 412. HISTORY OF EAST
CENTRAL EUROPE

Social, political, and economic history of the Baltic states and western Slavdom; struggle of eastern and western civilizations and competition of the great powers in this area; role of these peoples as Russian satellites. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 414. HISTORY OF THE
BALKANS SINCE 1453

Significant social, political, and economic developments in Southeast Europe; rise and fall of the Ottoman Empire; development of individual Balkan states; clash of the great powers in the Balkans; adjustment of the area to industrialization and Communism. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.



HIST. 415. HISTORY OF IBERIA
FROM THE RECONQUEST
TO 1815

Geography, demography, Roman, and Visigothic influences; beginning of the Reconquest; emergence of regionalism; era of the Catholic kings; age Iberian dominance; the Golden Age; 18th century Enlightenment; era of revolutions to the Congress of Vienna. *Classification*: Elective for juniors and seniors. *Credit*: Three semester hours—three class hours. *Special Note*: May be elected by graduate students.

HIST. 470. SEMINAR IN EUROPEAN
HISTORY

Readings, discussions, and research on selected problems in European History from the Classic to the Modern Period with emphasis on the gathering, interpretation, and use of historical sources. *Classification*: Elective for juniors and seniors in Secondary Social Studies or Liberal Arts history majors. *Prerequisite*: Six hours of European History. *Credit*: Three semester hours—three class hours.

HIST. 495. PROJECT
(See Project under Academic Regula-
tions).

HIST. 499. INDEPENDENT STUDY
(See Independent Study under Academic
Regulations).

SOCIOLOGY — ANTHROPOLOGY DEPARTMENT

SOC. 201. THE AMERICAN COMMUNITY

A number of basic approaches to the study of community will be emphasized. The cultural, ecological, demographic, interactionist and political basis for understanding processes of change and stability of communities in various times and places is included. Selected problems pertinent to rural, urban and metropolitan communities will be analyzed. *Classification:* Elective for sophomores, juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

SOC. 202. ANALYZING SOCIAL PROBLEMS

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 the analysis of selected social problems. *Classification:* Elective for sophomores, juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

SOC. 203. SOCIOLOGY OF THE FAMILY

Family as a social institution; its historical development, function, and structure; cross cultural comparisons; sub-cultural analysis of the contemporary American family system. *Classification:* Elective for sophomores, juniors, and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

SOC. 301. NATIONALITY GROUPS IN AMERICAN CULTURE

Problems and cultural contributions of largest immigrant ethnic groups; patterns of immigration; immigrant institutions; community life; problems of assimilation and of the "second generation." *Classification:* Elective for juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

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SOC. 303. SOCIAL PSYCHOLOGY

Motivation and nature of attitudes; attitude change and stability; interpersonal perception and behavior; role prescriptions and role conflict; prejudice; conflict resolution. *Classification:* Elective for sophomores, juniors and seniors. *Prerequisite:* S.S. 101 and three additional hours of sociology or psychology or permission of the instructor. *Credit:* Three semester hours—three class hours.

SOC. 304. SOCIAL STRATIFICATION

Functions of social stratification; kinds of stratification systems; differences in class interests, values and behaviors; social mobility. *Classification:* Elective for juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

SOC. 305. METHODS IN SOCIAL RESEARCH

The nature of scientific evidence; induction and deduction; the application of the scientific method 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 sociological materials from journals and books as illustrative material. *Classification:* Required for all sociology majors. Elective for juniors and seniors. *Prerequisite:* S.S. 101. Junior standing. *Credit:* Three semester hours—three class hours.

SOC. 306. SOCIAL STATISTICS

Statistical methods and reasoning will be used to analyze and clarify sociological information. *Classification:* Required for sociology majors (Mathematical Statistics may be substituted with departmental approval.) Elective for behavioral science juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

SOC. 401. JUVENILE DELINQUENCY

The nature of delinquency; delinquency and normal behavior of youth; the search

for causes and the state of sociological research in this area; the role of treatment agencies, the children's court, training schools; and methods of prevention; use of case histories and field trips. *Classification:* Elective for sophomores, juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

SOC. 403. CONTEMPORARY SOCIOLOGICAL THEORY

Significance of sociological theory; methods and assumptions of theory construction; structure of social systems. *Classification:* Optional (with Soc. 405); requirement for sociology majors. Elective for junior and seniors. *Prerequisite:* S.S. 101 and six additional hours in Sociology. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students who have the prerequisite for the course.

SOC. 404. SOCIOLOGY OF RELIGION

Theories in the 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. *Classification:* Elective for sophomores, juniors and seniors. *Prerequisite:* S.S. 101. At least six additional hours of sociology is recommended. *Credit:* Three semester hours—three class hours.

SOC. 409. SEMINAR IN SOCIOLOGY

Research in selected area(s) of sociology. *Classification:* Required for sociology majors. Elective for seniors. *Prerequisite:* S.S. 101 and nine additional hours in sociology. *Credit:* Three semester hours—three class hours.

SOC. 495. PROJECT

(See Project under Academic Regulations)

SOC. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)

ANTHROPOLOGY

ANTH. 201. GENERAL ANTHROPOLOGY

An introductory survey of physical and cultural anthropology: human evolution, formation of races; human prehistory, the origin and development of human institutions, the processes of culture. *Classification:* Elective for sophomores, juniors, and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

ANTH. 301. INDIANS OF NORTH AMERICA

Overview of racial and linguistic classifications, prehistory; characterization of the aboriginal culture areas of North America, study of representative tribal groups; conditions of conflict and change since 1492. *Classification:* Elective for juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

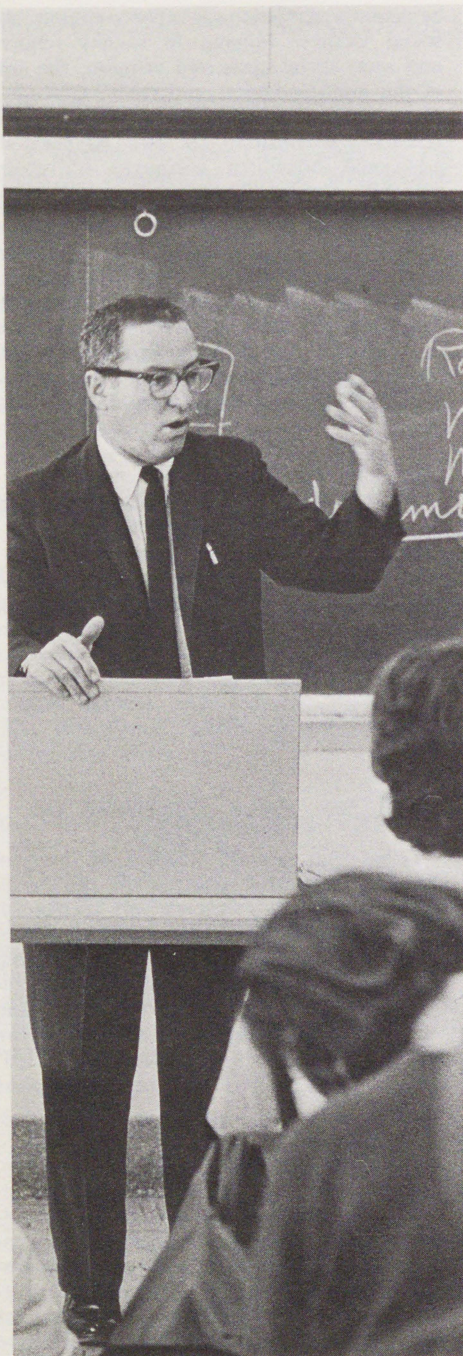
ANTH. 302. FOLK CULTURES OF MESOAMERICA

Tribal and peasant peoples of Mexico, Guatemala, Central America and the Caribbean. Introductory survey of prehistory; main emphasis on post-contact development of distinctive folk cultures, the relationship between these and emerging national cultures. *Classification:* Elective for juniors and seniors, recommended for Latin American Studies majors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

ANTH. 303. INDIANS OF SOUTH AMERICA

Native cultures of South America, including a summary of racial and linguistic classifications. Aboriginal culture areas are defined and characterized; discussion of culture change and present-day conditions of native populations. *Classification:* Elective

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for juniors and seniors, recommended for Latin American Studies majors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

ANTH. 304. ARCHEOLOGY OF LATIN AMERICA

General stages of development in the culture history of MesoAmerica and South America, combined with a survey of developments in local areas; secondary emphasis on archeological method as a source of history. *Classification:* Elective for juniors and seniors, recommended for Latin American Studies majors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours.

ANTH. 402. CULTURAL ANTHROPOLOGY

An intensive comparative approach to the content and processes of culture; problems in the interpretation of cultural materials; cross-disciplinary approaches; applied anthropology. *Classification:* Elective for juniors and seniors; recommended for sociology majors. *Prerequisites:* S.S. 101 and a lower-level anthropology course or permission of the instructor. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ANTH. 403. LANGUAGE AND CULTURE

The relationship between language and culture: (a) in descriptive or structural studies—language as a product of culture and a shaper of culture; and (b) in historical studies—linguistic and cultural change, language as a tool for studying history; evolution of language and culture. *Classification:* Elective for juniors and seniors. *Prerequisite:* S.S. 101. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ANTH. 495. PROJECT (See Project under Academic Regulations)

ANTH. 499. INDEPENDENT STUDY (See Independent Study under Academic Regulations)

PSYCHOLOGY DEPARTMENT

PSYCH. 101. INTRODUCTORY PSYCHOLOGY

The major objectives of this course are to investigate at a beginning level, the chief facts, principles, and problems of human behavior. Topics would include: introduction to main fields of psychology, psychological methodology, learning, attention and perception, intelligence, problem solving, language development, emotions and normal adjustment, motivation, personality, social relations, and a brief overview of growth and development. *Classification:* Required of H.Ec. and I.A. students; elective. *Credit:* Three semester hours—four class hours.

PSYCH. 205. ADVANCED GENERAL PSYCHOLOGY

The purpose of this course is to investigate intensively, the chief facts, principles and problems of human behavior, specifically to complement courses in growth and development. Topics studied will include: general introduction; learning, memory, forgetting; sensation, perception, attention; intelligence, thinking, problem solving; frustration, motivation; mental health and therapy; personality; group processes; and a short unit on statistics. *Classification:* Elective. *Prerequisite:* Three credit hours of psychology. *Credit:* Three semester hours—four class hours.

Courses in Applied Psychology are offered by the Elementary Education Division and the exceptional Children Education Division.

PSYCH. 400. INTRODUCTORY STATISTICS

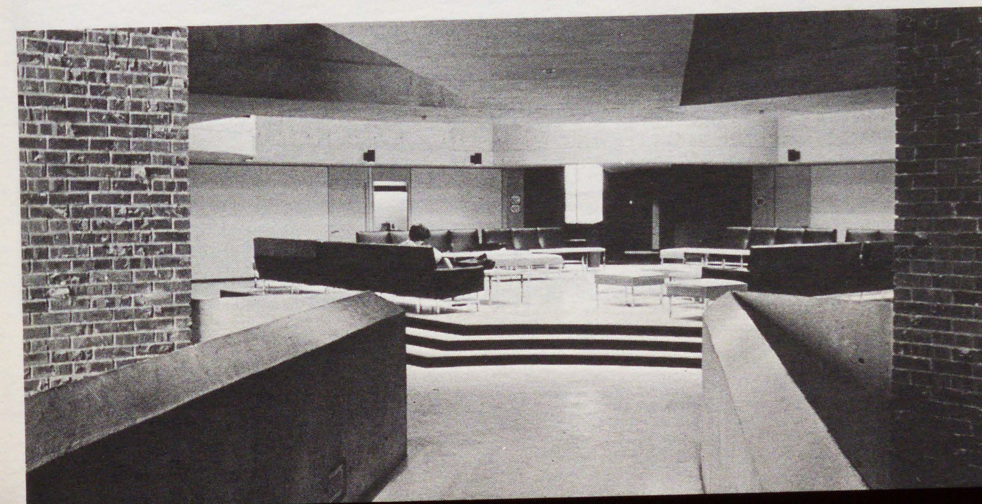
Terminology and notation of common statistical concepts; computation of elementary educational statistics; application of statistical methods to educational and psychological problems; interpretation of educational and psychological data. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

PSYCH. 402. ADVANCED STATISTICS; INFERENCE & PREDICTION

Sampling techniques; probability; hypothesis testing with frequencies and proportions, with means and with variances; introduction to analysis of variance; partial and multiple correlation; regression. *Classification:* Elective for Juniors and Seniors. *Prerequisite:* Psych. 400 Introductory Statistics. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

PSYCH. 495. PROJECT (See Project under Academic Regulations)

PSYCH. 499. INDEPENDENT STUDY (See Independent Study under Academic Regulations)





PROFESSIONAL STUDIES

The Professional Studies include Elementary Education, Secondary Education and Exceptional Children Education and details concerning the programs and courses offered are provided under these headings in this catalog. Very careful attention is given to providing an appropriate balance between professional courses and the liberal arts areas of the natural sciences, and mathematics, the social sciences, and the humanities.

A Bachelor of Science in Education degree program is offered in each area, and graduates may become certified to teach in their area of specialization in the public schools of New York State. Elective courses from any of the College's Divisions are available in the Professional Studies programs.

The Campus School, Child Study Center and Student Teaching Program are under the direction of the Dean of Professional Studies and the activities and offerings in these areas are carefully integrated into the over-all program.

A Coordinating Committee for Professional Studies gives direction in furnishing over-all cohesion on an all-College basis in the areas of Professional Studies, Arts and Science, Applied Science and Technology and Fine Arts.

ELEMENTARY EDUCATION

Graduates in Elementary Education receive the degree of Bachelor of Science in Education and are certified to teach nursery through grade 6. Students may extend their certification to teach in the junior high school grades 7-9 in the areas of English, General Science, Foreign Language, Mathematics and Social Studies.

Elementary Education students are provided with a developmental program of supervised teaching experiences with children of various age levels in different types of schools. Their professional education consists of a study of human growth and development, sociological background of elementary school children, an understanding of the learning process, and a knowledge of many ways of working with boys and girls. Participation experiences are provided in School 52, Campus School and cooperating public schools. Student teaching experiences are provided in cooperating public schools in the College community. Students are required to reside in some communities during student teaching assignments.

The four-year provisional certificate requires an academic concentration of "twenty-four hours of study in a departmental or inter-departmental program of studies." The areas of concentration are: Art, English, Foreign Language, Geography, Latin American Studies, Mathematics, Music, Science, Social Studies, Social Studies-Geography, and The Arts.

A student wishing to extend certification to teach in the junior high school grades 7-9 in the areas of English, General Science, Foreign Language, Mathematics and Social Studies will take an additional methods course pertaining to his specific area and must complete a minimum of eighty clock hours in teaching the selected academic subject in the early secondary grades.

ELEMENTARY EDUCATION CURRICULUM

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Art	3	3
Music	3	3
Humanities		
English	15	15
Health, Physical Ed. and Rec.	4	6
Philosophy	3	3
Mathematics and Science		
Mathematics	9	9
Science	12	16
Social Sciences		
Social Sciences	6	6
History	9	9
Geography	6	6
	<u>70</u>	<u>76</u>

COGNATE ELECTIVES

By advisement according to area of academic concentration	24	24
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PROFESSIONAL REQUIREMENTS

Ed. 101-102 Human Behavior and Development	6	8
Ed. 201 School and Society	3	3
Ed. 202 Teaching the Language Arts	3	4
Ed. 301 The Teaching of Social Studies, Science and Mathematics	6	9
Ed. 401 Practicum in Elementary School Teaching	15	30
Ed. 402 Seminar in Education	3	3
	<u>36</u>	<u>57</u>
Total Hours	130	157

EDUCATION

ED. 101. HUMAN BEHAVIOR AND DEVELOPMENT

Basic concepts, contemporary theories, issues, and research on human learning, behavior, and development with emphasis on physical growth, motor development, and cognitive development of children, and adolescents; educational and social implications; directed observations. *Classification:* Required of Art sophomores, Elementary Education, and Exceptional Education freshmen majoring in Mentally Retarded and Physically Handicapped, Emotionally Disturbed fields. *Credit:* Three semester hours—four class hours.

ED. 102. HUMAN BEHAVIOR AND DEVELOPMENT

Contemporary theories, issues, and research on human learning, behavior, and development with emphasis on social development, emotional development and personality of children and adolescents; educational and social implications; directed observations. *Classification:* Required of Art sophomores, Elementary Education, and Exceptional Education freshmen majoring in Mentally Retarded and Physically Handicapped, Emotionally Disturbed fields. *Prerequisite:* Ed. 101. *Credit:* Three semester hours—four class hours.

ED. 103. HUMAN BEHAVIOR AND DEVELOPMENT

Processes of development and learning in childhood and preadolescence; learning theory and application; motivation; preludes to adolescence; directed observations. *Classification:* Required of Secondary Eng., Math., S.S., Sci., and F.L. sophomores. *Credit:* Three semester hours—four class hours.

ED. 104. HUMAN BEHAVIOR AND DEVELOPMENT

Processes of development and learning in adolescence; effects of physique, family, peer group, school, neighborhood; problems of adolescents; dropouts; deviates; evaluation; theory and application; directed observations. *Classification:* Required of Second-

ary Eng., Math., S.S., Sci., and F.L., sophomores. *Prerequisite:* Ed. 103. *Credit:* Three semester hours—four class hours.

ED. 201. SCHOOL AND SOCIETY

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. *Classification:* Required of E.E. and Ex. Ed. sophomores in Mentally Retarded and Physically Handicapped, Emotionally Disturbed fields. *Prerequisite:* Ed. 101, 102. *Credit:* Three semester hours—three class hours.

ED. 202. TEACHING THE LANGUAGE ARTS

Teaching the language arts in the elementary school with special emphasis on the teaching of reading; foundations of learning; language development; various aspects of the language arts in elementary education. Directed observation and participation in school classrooms and Child Study Center; laboratory experience for developing specific professional competencies. *Classification:* Required of E.E. and Ex.Ed. sophomores in Mentally Retarded and Physically Handicapped, Emotionally Disturbed fields. *Prerequisite:* Ed. 101, 102, 201. *Credit:* Three semester hours—four class hours.

ED. 203. EDUCATIONAL PSYCHOLOGY

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 of H.Ec. and I.A. sophomores. Elective for sophomores, juniors, and seniors. *Prerequisite:* Psych. 101, H.Ec. 109; or Ed. 101, 102; or Ed. 103, 104. *Credit:* Three semester hours—four class hours.

ED. 205. OUTDOOR EDUCATION IN THE PUBLIC SCHOOL

Principles, procedure, and purposes of outdoor education programs in public schools; short field trips; camping experiences; observations and participation in outdoor teaching methods and techniques. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—three class hours.

ED. 301. THE TEACHING OF SOCIAL STUDIES, SCIENCE AND MATHEMATICS

Selecting, organizing and presenting elementary school science, mathematics, and social studies materials; evaluating pupil progress; further experience in elementary school teaching; observation and classroom participation. *Classification:* Required of E.E. juniors. *Prerequisite:* Ed. 101, 102, 201, 202; cumulative average of 2.00 or higher. *Credit:* Six semester hours — nine class hours.

ED. 305. THE CHILD AND THE CURRICULUM

Methods and materials for teaching mathematics, social studies, and science in the elementary school; selection, organization and evaluation of learning experiences; practical classroom experience in working with children. *Classification:* Required of Ex.Ed. juniors majoring in Mentally Retarded and Physically Handicapped, Emotionally Disturbed fields. *Prerequisite:* Ed. 101, 102, 201, 202; cumulative average of 2.00 or higher. *Credit:* Three semester hours—nine class hours. *Special Note:* One-half semester.

ED. 306. METHODS AND MATERIALS IN TEACHING SECONDARY SCHOOL ENGLISH

Selecting, organizing, and presenting curriculum materials; teacher-pupil relationships; evaluating pupil progress; introduction to classroom teaching; observation and participation in the secondary school; class discussion; conferences with instructors and

classroom teachers. *Classification:* Required of juniors or seniors majoring in secondary school English. *Prerequisite:* Ed. 103, 104; cumulative average of 2.00 or higher; approval by English Department chairman. *Credit:* Three semester hours—four class hours.

ED. 307. METHODS AND MATERIALS IN TEACHING SECONDARY SCHOOL MATHEMATICS

Objectives of secondary education; secondary curriculum; adaptation of programs to adolescent needs; interrelationships of elementary and secondary school programs; planning and presenting classroom learning experiences for students; introduction to classroom teaching; secondary school observations and participation. *Classification:* Required of juniors or seniors majoring in secondary school Mathematics. *Prerequisite:* Ed. 103, 104; cumulative average of 2.00 or higher; approval by Mathematics Department chairman. *Credit:* Three semester hours—three class hours.

ED. 308. METHODS AND MATERIALS IN TEACHING SECONDARY SCHOOL SCIENCE

Objectives of secondary education; adaptation of programs to adolescent needs; interrelationships of elementary and secondary school programs; introduction to classroom teaching in the field of secondary science; teacher-pupil relationships; problems involved in laboratory and demonstration experiences; planning and presenting classroom learning experiences for students, including laboratory experiences. *Classification:* Required of juniors or seniors majoring in secondary school Science. *Prerequisite:* Ed. 103, 104; cumulative average of 2.00 or higher; approval by the General Science Department chairman. *Credit:* Three semester hours—four class hours.

ED. 309. METHODS AND MATERIALS IN TEACHING SECONDARY SCHOOL SOCIAL STUDIES

Selecting, organizing and presenting cur-

riculum materials; teacher-pupil relationships; evaluating pupil progress; introduction to classroom teaching; observation and participation in the secondary school; conferences with instructor and classroom teachers. *Classification:* Required of juniors or seniors majoring in secondary school Social Studies. *Prerequisite:* Ed. 103, 104; cumulative average of 2.00 or higher; approval by the Coordinator of Social Sciences Student teaching. *Credit:* Three semester hours — four class hours.

ED. 310. METHODS AND MATERIALS IN TEACHING FOREIGN LANGUAGES IN THE SECONDARY SCHOOL

Selecting, organizing and presenting curriculum materials; interrelationships of elementary and secondary school programs; teacher-pupil relationships; evaluating pupil progress; introduction to classroom teaching. *Classification:* Required of juniors or seniors majoring in Secondary School Foreign Languages. *Prerequisite:* Ed. 103, 104; cumulative average of 2.00 or higher; approval by Foreign Language Department chairman. *Credit:* Three semester hours—three class hours.

ED. 401. PRACTICUM IN TEACHING

Teaching under supervision in elementary grades five days per week; group and individual conferences; individual and group instruction; daily and long-view planning; teacher-pupil planning; unit teaching; classroom management; routine procedures; audio-visual aids; community resources; record keeping; evaluation techniques; participation in total school program. *Classification:* Required of E.E. juniors or seniors. *Prerequisite:* Ed. 301; grade of "C" or higher in Ed. 301; cumulative and previous semester average of "C" or higher in the professional education sequence 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 Ex.Ed. 100 (Student Speech Clinic). *Credit:* Fifteen semester hours—thirty (30) hours of teaching and conferences per week.

ED. 402. SEMINAR IN EDUCATION

Nature and function of a philosophy of education; scientific movement in education; research methods and techniques; crucial issues in education; problems of beginning teachers. *Classification:* Required of E.E. seniors. *Prerequisite:* Ed. 401. *Credit:* Three semester hours—three class hours.

ED. 403. HISTORICAL AND PHILOSOPHICAL FORCES INFLUENCING SECONDARY EDUCATION

European influences in American education; religious 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. *Classification:* Required of secondary education majors in English, mathematics, science, social studies and foreign languages. *Credit:* Three semester hours — three class hours. *Special Note:* Taken concurrently with Ed. 306, 307, 308, 309, or 310 when student teaching occurs in the last semester; taken in the last semester when student teaching occurs the first semester of the senior year.

ED. 404. PRACTICUM IN ELEMENTARY SCHOOL TEACHING

Full-time teaching under supervision five days per week; group and individual conferences at college two days during eight-week assignment; individual and group instruction; daily and long-view planning; teacher-pupil planning; unit teaching; classroom management; routine procedures, audio-visual aids; community resources; record keeping; evaluation techniques; participation in total school program. *Classification:* Required of Ex.Ed. seniors majoring in Mentally Retarded and Physically Handicapped, Emotionally Disturbed fields. *Prerequisite:* Ed. 305, and Ex.Ed. 301 or 311; grade of "C" or higher in these courses; cumulative and previous semester average of "C" or higher; average of "C" or higher in the professional education sequence 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 Ex.Ed. 100 (Student Speech Clinic). *Credit:* Six semester hours—thirty (30) hours of teaching conferences per week. *Special Note:* One-half semester.

ED. 406. PRACTICUM IN TEACHING ENGLISH IN THE SECONDARY SCHOOL

Full-time teaching under supervision at least five days per week; group and individual conferences at college two days during each of two eight-week teaching assignments; individual and group instruction; daily and long-view planning; unit teaching; classroom management and routine procedures; audio-visuals aids; community resources; record keeping; evaluation procedures; participation in total school program. *Classification:* Required of juniors or seniors majoring in Secondary School English. *Prerequisite:* Ed. 306; grade of "C" or higher in Ed. 306; cumulative and previous semester average of "C" or higher; a better than "C" average (higher than 2.00) 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 Ex.Ed. 100 (Student Speech Clinic); approval by English Department chairman. *Credit:* Twelve semester hours—thirty (30) hours of teaching and conferences per week.

ED. 407. PRACTICUM IN TEACHING MATHEMATICS IN THE SECONDARY SCHOOL

Teaching under supervision at least five days per week for two eight-week assignments; individual and group instruction; daily and long-view planning; unit teaching; classroom management and routine procedure; audio-visual aids; community resources; record keeping; evaluation procedures; participation in total school program. *Classification:* Required of juniors or seniors majoring in Secondary School Mathematics. *Prerequisite:* Ed. 307; grade of "C" or higher in Ed. 307; cumulative and previous semester average of "C" or higher; a better than "C" average (higher than 2.00)

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 Ex. Ed. 100 (Student Speech Clinic); approval by Mathematics Department chairman. *Credit:* Twelve semester hours—thirty (30) hours of teaching and conferences per week.

ED. 408. PRACTICUM IN TEACHING SCIENCE IN THE SECONDARY SCHOOL

Teaching under supervision at least five days per week for two eight-week assignments; individual and group instruction; daily and long-view planning; unit teaching; classroom management and routine procedure; audio-visual aids; community resources; record keeping; evaluation procedures; participation in total school program. *Classification:* Required of juniors or seniors majoring in Secondary School Science. *Prerequisite:* Ed. 308; grade of "C" or higher in Ed. 308; cumulative and previous semester average of "C" or higher; a better than "C" average (higher than 2.00) 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 Ex.Ed. 100 (Student Speech Clinic); approval by the General Science Department chairman. *Credit:* Twelve semester hours—thirty (30) hours of teaching and conference per week.

ED. 409. PRACTICUM IN THE TEACHING OF SOCIAL STUDIES IN THE SECONDARY SCHOOL

Teaching under supervision at least five days per week; group and individual conferences at college two days during each of two eight-week assignments; 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 in total school program. *Classification:* Required of juniors or seniors majoring in Secondary School Social Studies. *Prerequisite:* Ed. 309; grade of "C" or higher in Ed. 309; cumula-

tive and previous semester average of "C" or higher; a better than "C" average (higher than 2.00) 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 Ex.Ed. 100 (Student Speech Clinic); approval by the Coordinator of Social Studies student teaching. *Credit:* Twelve semester hours — thirty (30) hours of teaching and conferences per week.

ED. 410. PHILOSOPHY OF EDUCATION

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. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ED. 411. EVALUATION IN EDUCATION

Background and current status of evaluation, principles, purposes and procedures of evaluation, effective interpretation and use of evaluative data; methods of recording and reporting pupil progress. *Classification:* Elective for juniors and seniors. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ED. 412. COMPARATIVE EDUCATION

Education as an influence in world affairs; comparison of educational problems and their solutions in various countries; relationship of educational programs to the cultural heritage and its future; selection of programs studied in terms of student interests and current developments. *Classification:* Elective for juniors and seniors. *Credit:* Three semes-

ter hours—three class hours. *Special Note:* May be elected by graduate students.

ED. 413. PRACTICUM IN THE TEACHING OF FOREIGN LANGUAGES IN THE SECONDARY SCHOOLS

Teaching under supervision at least five days per week; group and individual conferences at college two days during each of two eight-week assignments; 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 in total school program. *Classification:* Required of juniors or seniors majoring in Secondary School Foreign Languages. *Prerequisite:* Ed. 310; grade of "C" or higher in Ed. 310; cumulative and previous semester average of "C" or higher; a better than "C" average (higher than 2.00) 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 Ex. Ed. 100 (Student Speech Clinic); approval by Foreign Language Department chairman. *Credit:* Twelve semester hours—thirty (30) hours of teaching and conferences per week.

ED. 414. THE TEACHING OF READING

Importance of reading in present day society, research in child development and learning and its implication for the teaching of reading; trends in the teaching of reading; development levels of reading; reading in the content areas; methods and materials; evaluation and guidance of pupil growth in reading. *Classification:* Elective for juniors and seniors. *Prerequisite:* Ed. 202 or equivalent. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ED. 415. SEMINAR IN EARLY CHILDHOOD EDUCATION

Curriculum development for children from three through eight; historical development;

current problems and research; instructional materials and procedures; equipment; evaluating children's progress. *Classification:* Elective for juniors and seniors. *Prerequisite:* Ed. 101, 102, 201 and 202. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students in the teaching of young children.

ED. 418. AUDIO-VISUAL EDUCATION

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. *Classification:* Elective for sophomores, juniors and seniors. *Credit:* Three semester hours—four class hours. *Special Note:* May be elected by graduate students.

ED. 419. METHODS AND MATERIALS IN THE ELEMENTARY SCHOOL

School curriculum in the common branch subjects; selecting, organizing and presenting curriculum material; adapting the curriculum to the varying needs, interests, and abilities of pupils; evaluating pupil progress in terms of school objectives. *Classification:* Elective for juniors and seniors. *Prerequisite:* Ed. 301 or equivalent. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ED. 420. TEACHING LANGUAGE ARTS IN THE ELEMENTARY SCHOOL

Factors that influence language growth; interrelationship of the language arts, skills of spelling, reading, speaking, writing, handwriting, listening; factors affecting creative writing, creative dramatics, choral speaking, and leisure reading; developmental language arts program. *Classification:* Elective for juniors and seniors. *Prerequisite:* Ed. 202 and student teaching. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ED. 421. WORKSHOPS IN THE TEACHING OF READING IN THE ELEMENTARY SCHOOL

Objectives of an effective reading program; reading in relation to language arts; principles of child development and learning and their relation to reading; the developmental reading program; development of reading skills; development of vocabulary; reading materials; evaluation of growth in and through reading. *Classification:* Elective for normal school graduates and for students working for certification. *Credit:* Two semester hours—two class hours. *Special Note:* Not to be taken for credit after completion of Ed. 414.

ED. 423. COMPARATIVE EDUCATIONAL SYSTEMS OF WESTERN EUROPE

International living tour; approximately eight weeks spent in Western Europe; homestay with family in one country for three weeks; study and comparison of selected educational systems; visits to university, library, cultural, and historical centers. *Classification:* Elective for seniors and graduate students. *Prerequisite:* Participants must meet entrance requirements of State University College at Buffalo, and must meet the standards applied by the State University of New York and the Experiment in International Living. *Credit:* Eight semester hours. By special arrangement, up to four hours of credit may be applied as Social Studies credit. *Special Note:* Permission of instructor to be obtained before enrollment in course.

ED. 424. PEOPLE AND INSTITUTIONS IN ASIA

International living tour; approximately eight weeks spent in India; three-week homestay with an Indian family; study of family patterns, educational programs, and culture of India; visits to university, cultural, and historical centers. *Classification:* Elective for seniors and graduate students. *Prerequisite:* Participants must meet entrance requirements of State University College, and must meet the standards applied by the State Uni-

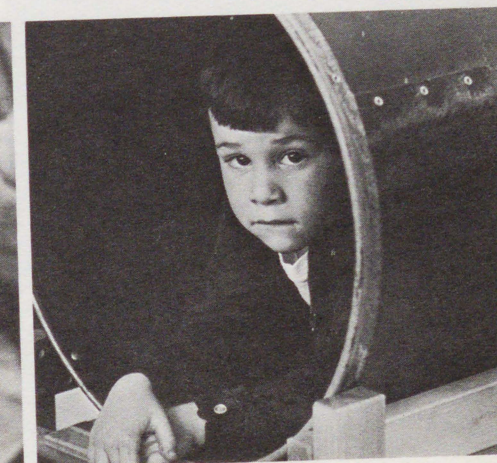
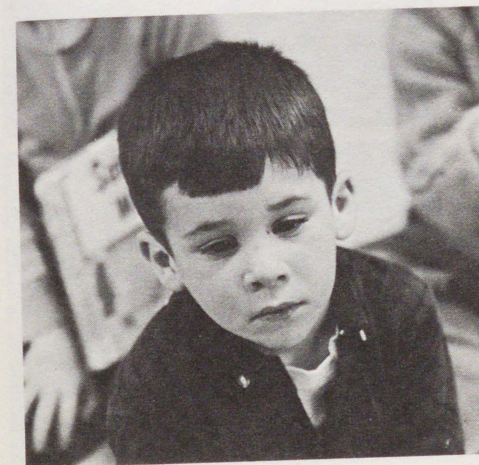
versity of New York and the Experiment in International Living. *Credit:* Eight semester hours. By arrangement, up to four hours of credit may be applied as social studies credit. *Special Note:* Permission of instructor to be obtained before enrollment in course.

ED. 425. THE FAMILY AND THE ELEMENTARY SCHOOL

Brief historical perspective on concepts which have influenced contemporary family life; changes in attitudes between members of the contemporary family; dynamics of small and large group techniques in working with parents and children; family counselling, nutrition for elementary school children, sex education, consumer education, and leisure time activities. *Classification:* Elective for juniors and seniors. *Prerequisite:* Ed. 101, 102, 201 and 202. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

ED. 427. COMMUNITY SERVICES FOR YOUNG CHILDREN

Current social and economic trends affecting the lives of young children; organization and administration of community services; planning and development of community services for young children; interaction of community services with public school programs; field trips and discussions with professional people at work in community or-



ganizations will augment lectures and readings. One or more experiences working in a community organization during the semester. *Classification:* Elective for juniors and seniors. *Prerequisite:* Ed. 101, 102, 201 and 202. *Credit:* Three semester hours—four class hours. *Special Note:* May be elected by graduate students.

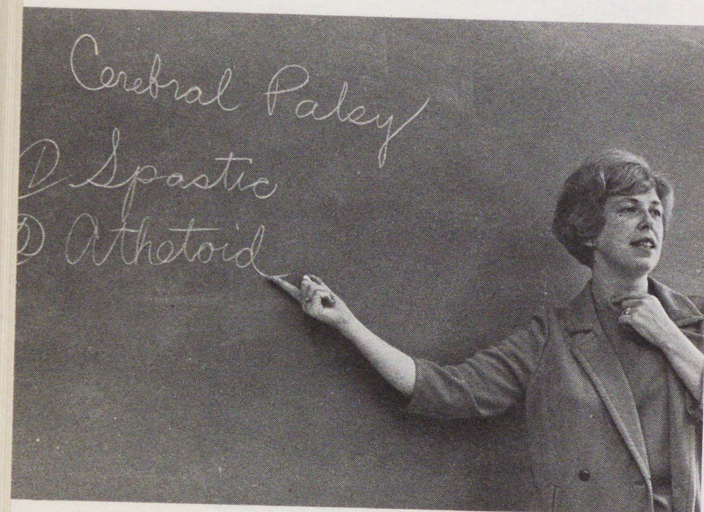
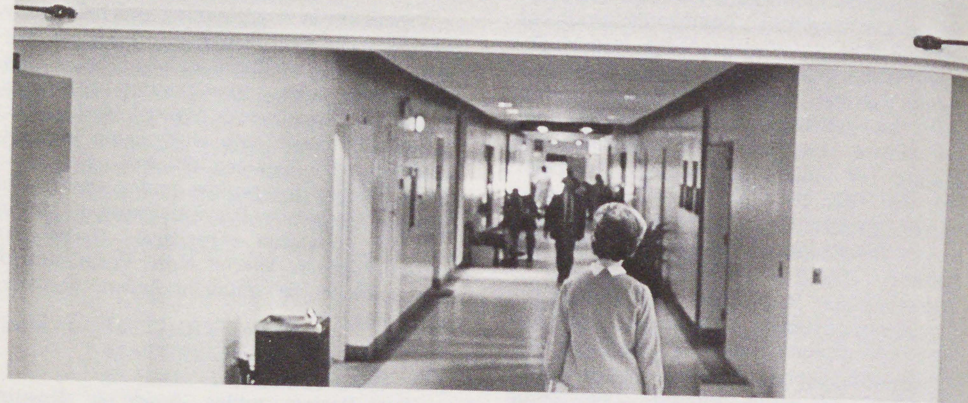
ED. 430. LEADERSHIP EXPERIENCE —OUTDOOR EDUCATION FIELD STUDY

Practicum in trip planning and field study, organization and leadership including outdoor teaching methods and techniques, outdoor living skills, and evaluative procedures. Three of the six weeks devoted to this practicum will be a travel-study-camp field experience with teen-age children. *Classification:* Elective for seniors and graduate students. *Prerequisite:* Previous camping and/or outdoor education experience. *Credit:* Six semester hours. *Special Note:* Permission of instructor to be obtained before enrolling in course.

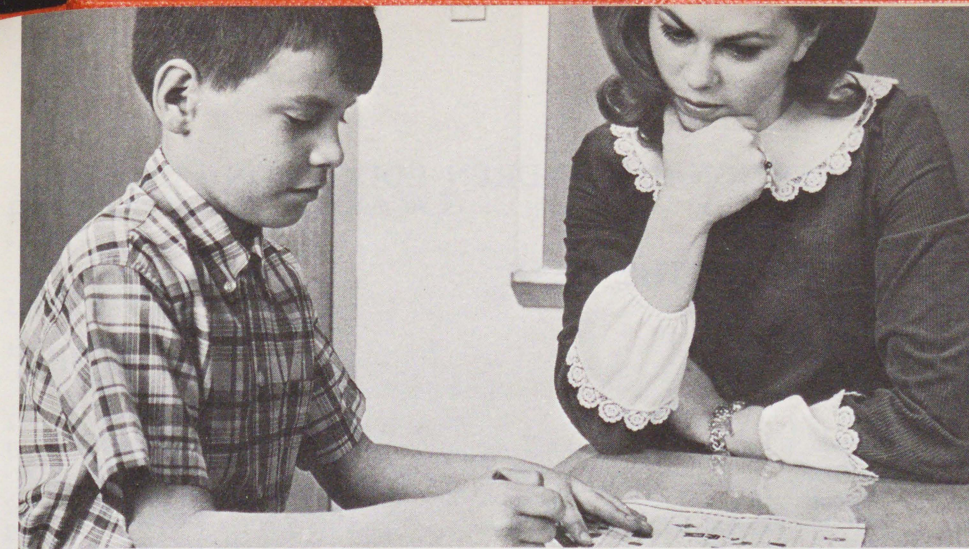
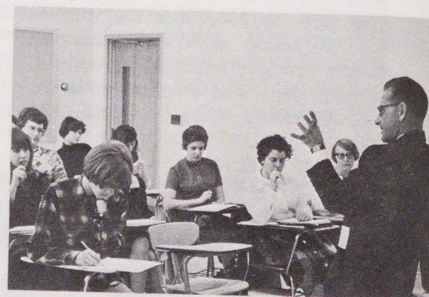
ED. 495. PROJECT (See Project under Academic Regulations).

ED. 499. INDEPENDENT STUDY (See Independent Study under Academic Regulations).

Exceptional Children Education Division



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EXCEPTIONAL CHILDREN EDUCATION DIVISION

The Division of Exceptional Children Education offers courses in the following fields:

1. Education of the Deaf
2. Emotional Disturbance
3. Mental Retardation
4. Physical Handicap
5. Speech Pathology and Audiology

Graduates of this division complete requirements for the Bachelor of Science in Education degree. In addition to this degree, students electing to specialize in the fields of mental retardation, education of the deaf, and physical handicap are granted special certificates. These certificates enable them to teach either non-specialized elementary school classes, or elementary and secondary school classes designed for children with physical and intellectual handicaps. Graduates in speech pathology and audiology are granted certificates permitting them to work as therapists in schools and clinics.

Practical experience in the various fields of exceptional education is required of all students in the division. This experience is a necessary supplement to the theoretical aspects of the program. The laboratory facilities of the College are augmented by those of the public schools, Meyer Memorial and Children's Hospitals, Roswell Park, Crippled Children's Guild, Psychiatric Center of Buffalo, West Seneca Institution for Retarded Children, The Niagara Frontier Vocational Center, Hearing and Speech Center at Buffalo, State Mental Hospital, and Methodist and Protestant Homes for Children, which are affiliated with the exceptional children program.

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ALL EXCEPTIONAL CHILDREN EDUCATION CURRICULA

EDUCATION OF THE DEAF

LIBERAL ARTS

	<i>Sem. Hrs.</i>	<i>Clock Hrs.</i>
The Arts:		
Art	3	4
Music	3	3
Humanities:		
English	12	12
Health, Physical Ed. and Rec.	2	2
Philosophy	3	3
Mathematics and Sciences:		
Mathematics	6	6
Science	6	6
Social Sciences:		
Social Science	6	6
Geography	3	3
History	3	3
Concentration	47	
	28	

MAJOR FIELD

Ex. Ed. 101	Nature and Needs of Children Who Present Exceptional Problems of Learning	3	4
Ex. Ed. 202	History, Education and Guidance of the Deaf	2	3
Ex. Ed. 211	Anatomical, Physiological and Acoustical Aspects of Communication	4	5
Ex. Ed. 315	Teaching of Language to the Deaf	3	4
Ex. Ed. 314	Teaching of Speech to the Deaf	4	5
Ex. Ed. 415	Speech Reading and Auditory Training	3	5
Ex. Ed. 305	The Child and the Curriculum (Deaf)	3	9
Ex. Ed. 423	Practicum in Teaching Deaf Children	6	30
		28	

PROFESSIONAL FIELD

Ed. 101-102	Human Growth and Development	6	8
Ed. 201	School and Society	3	3
Ed. 202	Teaching the Language Arts	3	4
Ed. 414	Teaching Reading	3	
Ed. 418 or	Audio-Visual Aids OR		
	Methods and Materials in the Elementary Schools	3	3
Ed. 305	The Child and the Curriculum (Typical)	3	9
Ed. 404	Practicum in Elementary School Teaching	6	30
		27	
	Total Hours	130	

EMOTIONAL DISTURBANCE

LIBERAL ARTS:

	<i>Sem. Hrs.</i>	<i>Clock Hrs.</i>
The Arts:		
Art	3	3
Music	3	3
Humanities:		
English	12	12
Health, Physical Ed. and Rec.	2	2
Philosophy	3	3
Mathematics and Sciences:		
Mathematics	6	6
Science	6	6
Social Sciences:		
Social Science	6	6
Sociology	6	6
Anthropology	3	3
Geography	3	3
	53	
Free Elective	3	
Concentration	24	

MAJOR FIELD

Ex. Ed. 101	Nature and Needs of Exceptional Children	3	4
Ex. Ed. 210	Child	3	4
Ex. Ed. 309	Curriculum Practices for the Emotionally Handicapped Child	3	4
Ex. Ed. 313	Observation-Participation with Emotionally Handicapped Children	3	9
Ex. Ed. 403	Mental Measurement	3	4
Ex. Ed. 430	Practicum in Emotional Handicapped	6	30
		21	

PROFESSIONAL FIELD

Ed. 101-102	Human Growth and Development	6	8
Ed. 201-202	School and Society—Teaching Language Arts	6	7
Ed. 305	Observation-Participation with Typical Children	3	9
Ed. 414	Teaching Reading	3	3
Ed. 404	Practicum in El. Ed.	6	30
		24	
	Total Hours	125	

MENTAL RETARDATION

LIBERAL ARTS

	<i>Sem. Hrs.</i>	<i>Clock Hrs.</i>
The Arts:		
Art	3	3
Music	3	3
Humanities:		
English	12	12
Health, Physical Ed. and Rec.	4	2
Philosophy	3	3
Mathematics and Sciences:		
Mathematics	6	6
Sciences	12	6
Social Sciences:		
Social Science	6	6
History	3	3
Geography	3	3
Required I. A. 305 or Art. 217	55	
Free Elective	3	
Concentration	3	
	24	

MAJOR FIELD

Ex. Ed. 101 Nature and Needs of Exceptional Children	3	4
Ex. Ed. 209 Psychology of Exceptional Children	3	4
Ex. Ed. 301 Observation-Participation in Mental Retardation	3	9
Ex. Ed. 403 Mental Measurement	3	4
Ex. Ed. 404 Curriculum Practices for the Mentally Retarded	3	4
Ex. Ed. 418 Practicum in Mental Retardation	6	30
	21	

PROFESSIONAL FIELD

Ed. 101-102 Human Growth and Development	6	8
Ed. 201-202 School and Society—Teaching Language Arts	6	7
Ed. 414 Teaching Reading	3	3
Ed. 418 Audio-Visual Aids		
Ed. 419 Elementary Methods		
Ed. 420 Teaching Language Arts		
Ed. 305 Observation-Participation with Typical Children	3	9
Ed. 404 Practicum in El. Ed.	6	30
	24	
Total Hours	130	

PHYSICAL HANDICAP

LIBERAL ARTS

	<i>Sem. Hrs.</i>	<i>Clock Hrs.</i>
The Arts:		
Art	3	3
Music	3	3
Humanities:		
English	12	12
Health, Physical Ed. and Rec.	4	2
Philosophy	3	3
Mathematics and Sciences:		
Mathematics	6	6
Science	12	12
Social Sciences:		
Social Science	6	6
History	3	3
Geography	3	3
	55	
Required I. A. 305 or 217	3	
Concentration	24	

MAJOR FIELD

Ex. Ed. 101 Nature and Needs of Exceptional Children	3	4
Ex. Ed. 209 Psychology of Exceptional Children	3	4
Ex. Ed. 417 Curriculum Practices for the Physically Handicapped	3	4
Ex. Ed. 403 Mental Measurement	3	4
Ex. Ed. 404 Curriculum Practices for the Mentally Retarded	3	4
Ex. Ed. 311 Observation-Participation with the Physically	3	9
Handicapped		
Ex. Ed. 421 Practicum in Physically Handicapped	6	30
	24	

PROFESSIONAL FIELD

Ed. 101-102 Human Growth and Development	6	8
Ed. 201-202 School and Society — Teaching Language Arts	6	7
Ed. 414 Teaching Reading	3	3
Ed. 418 Audio-Visual Aids		
Ed. 419 Elementary Methods		
Ed. 420 Teaching Language Arts		
Ed. 305 Observation-Participation with Typical Children	3	9
Ed. 404 Practicum in El. Ed.	6	30
	24	
Total Hours	130	

SPEECH PATHOLOGY AND AUDIOLOGY

LIBERAL ARTS

	Sem. Hrs.	Clock Hrs.
The Arts:		
Art	3	3
Music	3	3
Humanities:		
English	18	18
Health, Physical Ed. and Rec.	2	2
Philosophy	3	3
Mathematics and Sciences:		
Mathematics	3	2
Science	6	6
Social Sciences:		
Social Science	6	6
History	3	3
Concentration	47	
	30	

MAJOR FIELD

Ex. Ed. 101 Nature and Needs of Exceptional Children	3	4
Ex. Ed. 204 Science of Speech and Hearing	3	4
Ex. Ed. 205 Phonetics	3	4
Ex. Ed. 206 Bases of Speech	3	3
Ex. Ed. 414 Audiology I	3	5
Ex. Ed. 306 Speech Pathology I	3	5
Ex. Ed. 307 Speech Pathology II	3	4
Ex. Ed. 416 Stuttering	3	4
Ex. Ed. 415 Speech and Reading and Auditory Training	3	5
Ex. Ed. 411 Seminar in Speech and Hearing	3	3
Ex. Ed. 402 Clinical Procedures and Organization of Schools and Clinics	4	
Ex. Ed. 405 Practicum in Speech and Hearing	6	
Ex. Ed. 424 Organization and Administration of School Programs	2	
	42	

PROFESSIONAL FIELD

Ed. 101-102 Human Growth and Development	6	8
Total Hours	125	

EXCEPTIONAL CHILDREN EDUCATION

EX.ED. 100. STUDENT SPEECH CLINIC

Speech therapy for students found defective in speech production. Students enrolled must complete this course in order to be eligible for student teaching and graduation. *Classification:* Open to all students. *Credit:* None. *Special Note:* Hours by arrangement.

EX.ED. 101. NATURE AND NEEDS OF CHILDREN WHO PRESENT EXCEPTIONAL PROBLEMS OF LEARNING

Study of children who are exceptional because of intelligence, physical development, behavior, speech and hearing. Observation, one hour per week. *Classification:* Required of freshmen in Exceptional Children. *Credit:* Three semester hours—four class hours.

EX.ED. 202. HISTORY, EDUCATION AND GUIDANCE OF THE DEAF

Historical backgrounds and developments leading to present day programs in the education of the deaf. Problems affecting the habilitation and rehabilitation of the deaf. *Classification:* Required of freshmen in the education of the deaf. *Prerequisite:* Ex.Ed. 101. *Credit:* Two semester hours—three class hours.

EX.ED. 204. SCIENCE OF SPEECH AND HEARING

Anatomy and physiology of the ear and the organs of speech beginning with embryological development; production and reception of spoken language. Observation in Speech and Hearing Clinic. *Classification:* Required of sophomores in Speech Pathology and Audiology. *Credit:* Three semester hours—four class hours.

EX.ED. 205. INTRODUCTION TO PHONETICS

Production and representation of English (American) speech sounds; application of

phonetics to the correction of deviations in children's speech. Observation in Speech and Hearing Clinic. *Classification:* Required of sophomores in Speech Pathology and Audiology. *Credit:* Three semester hours — four class hours.

EX.ED. 206. BASES OF SPEECH

Study of fundamental areas of communication. The genetic, semantic, linguistic, social, and psychological bases of communication are examined in an effort to develop a broad understanding of the nature and function of communication. *Classification:* Required of sophomores in Speech Pathology and Audiology. *Credit:* Three semester hours—four class hours.

EX.ED. 209. PSYCHOLOGY OF EXCEPTIONAL CHILDREN

Examination of behavior trends common to various types of exceptionality: description, analysis, examination of educational implications. *Classification:* Required of sophomores in Mental Retardation and Physical Handicap. *Prerequisite:* Ex. Ed. 101. *Credit:* Three semester hours — four class hours.

EX.ED. 210. BEHAVIOR DISORDERS OF THE EMOTIONALLY DISTURBED CHILD

Study of the incidence and nature of emotionally disturbed children; problems of psycho-social adaptation in the educational setting. A clinically-oriented supervised field practicum in a variety of residential centers for four to six hours per week. *Classification:* Required of sophomores in Emotional Disturbance. *Prerequisite:* Ex.Ed. 101. *Credit:* Three semester hours—four class hours.

EX.ED. 211. ANATOMICAL, PHYSIOLOGICAL AND ACOUSTICAL ASPECTS OF COMMUNICATION

Anatomy and physiology of the ear and

the organs of speech; production and reception of spoken language; the clinical treatment of hearing problems; hearing testing and hearing aid construction. Assigned observations. *Classification:* Required of freshmen in the Education of the Deaf. Assigned observations. *Prerequisite:* Ex.Ed. 202 or concurrently. *Credit:* Four semester hours—five class hours.

EX.ED. 301. OBSERVATION AND PARTICIPATION IN MENTAL RETARDATION

Observation, classroom participation, class discussion and conferences with instructors; teacher-pupil relationships, selecting, organizing and presenting curriculum materials on different grade levels; evaluating pupil progress in classes for the mentally retarded. *Classification:* Required for juniors in Mental Retardation. *Prerequisite:* Ex.Ed. 404 and cumulative average of 2.00 or higher. *Credit:* Three semester hours—nine class hours.

EX.ED. 305. THE CHILD AND THE CURRICULUM (DEAF)

Review of basic curricular practices and procedures used in developing programs for the deaf and severely hard of hearing. *Classification:* Required of Ex.Ed. seniors majoring in the Education of the Deaf. *Prerequisite:* Ex.Ed. 315 and cumulative average of 2.00 or higher. *Credit:* Three semester hours—nine class hours. *Special Note:* One-half semester.

EX.ED. 306. SPEECH PATHOLOGY I

Introduction to the defects of speech; etiology and therapeutic procedures for treatment of functional and mild organic speech problems; observation and treatment of minor disorders. Laboratory two hours per week. *Classification:* Required of juniors in Speech Pathology and Audiology. *Prerequisite:* Ex.Ed. 205. *Credit:* Three semester hours—five class hours.

EX.ED. 307. SPEECH PATHOLOGY II

Etiology and therapy of more severe speech defects, particularly extensive organic problems; observation of diagnosis and treatment. Laboratory two hours per week. *Class-*

sification: Required of juniors in Speech Pathology and Audiology. *Prerequisite:* Ex.Ed. 306. *Credit:* Three semester hours—four class hours.

EX.ED. 309. CURRICULUM PRACTICES AND METHODS OF TEACHING THE EMOTIONALLY DISTURBED

Organizing a school program for emotionally disturbed children; selecting and evaluating suitable group and individual activities for the teaching of basic school subjects; observations of special classes for the emotionally disturbed (school and residential). *Classification:* Required of juniors or seniors in Emotional Disturbance. *Prerequisite:* Ex.Ed. 210. *Credit:* Three semester hours—four class hours.

EX.ED. 311. OBSERVATION AND PARTICIPATION IN PHYSICAL HANDICAP

Observation, classroom participation, class discussion, and conference with instructors; teacher-pupil relationships selecting, organizing, and presenting curriculum materials on different grade levels; evaluating pupil progress in classes for the physically handicapped. *Classification:* Required of juniors in Physical Handicap. *Prerequisite:* Ex.Ed. 417 and cumulative average of 2.00 or higher. *Credit:* Three semester hours—nine class hours.

EX.ED. 313. CURRICULUM PRACTICES FOR THE EMOTIONALLY DISTURBED

Observation classroom participation, class discussion, and conferences with instructors; teacher-pupil relationships, selecting, organizing, and presenting curriculum materials on different grade levels; evaluating pupil progress in classes for the emotionally disturbed and socially maladjusted. *Classification:* Required of juniors and seniors in emotional disturbance. *Prerequisite:* Ex.Ed. 309 and cumulative average of 2.00 or higher. *Credit:* Three semester hours—nine class hours.

EX.ED. 314. THE TEACHING OF SPEECH TO THE DEAF

Study of the principles and techniques used in developing speech sounds by the analytical and the whole word methods. Planning a speech program for the deaf. Methods of correcting defective speech for the deaf and hard of hearing. *Classification:* Required of juniors in Education of the Deaf. *Prerequisite:* Ex.Ed. 315 or concurrently. *Credit:* Four semester hours—five class hours.

EX.ED. 315. THE TEACHING OF LANGUAGE TO THE DEAF

Study of the principles and techniques of teaching language to preschool and school age deaf and severely hard of hearing children; survey of leading systems of teaching language to the acoustically impaired with experiences in developing at least one system appropriate for teaching language to the deaf. *Classification:* Required of sophomores in Education of the Deaf. *Prerequisite:* Ex.Ed. 202. *Credit:* Three semester hours—four class hours.

EX.ED. 402. CLINICAL PROCEDURES AND ORGANIZATION OF SCHOOL AND CLINIC SPEECH AND HEARING PROGRAMS

Participation in and observation of speech and hearing programs in schools, hospitals and other community agencies. *Classification:* Required of seniors in Speech Pathology and Audiology. *Prerequisite:* Eighteen hours in Speech Pathology and Audiology courses. *Credit:* Four semester hours—eighteen hours a week, half semester.

EX.ED. 403. MENTAL AND EDUCATIONAL MEASUREMENT

Examination of general measurement and evaluation techniques and descriptive statistics. Construction of teacher-made instruments. *Classification:* Required of juniors in Emotional Disturbance, Mental Retardation and Physical Handicap. *Credit:* Three semester hours—four class hours.

EX.ED. 404. CURRICULUM PRACTICES FOR THE MENTALLY RETARDED

Review of basic curricular practices and procedures used in developing programs for the educable mentally retarded. *Classification:* Required of juniors in mental retardation and physical handicap. *Prerequisite:* Ex.Ed. 209. *Credit:* Three semester hours—four class hours.

EX.ED. 405. PRACTICUM IN SPEECH AND HEARING

Clinical practice in schools under supervision of a speech and hearing clinician. *Classification:* Required of all seniors in Speech Pathology and Audiology. *Prerequisite:* Eighteen hours in speech and hearing. Cumulative average of 2.00 or higher in general college achievement in the speech and hearing sequence. *Credit:* Six semester hours—all day, five days a week, half semester.

EX.ED. 411. SEMINAR IN SPEECH AND HEARING

Advanced clinical practice in speech and hearing therapy; investigation and application of recent research. *Classification:* Required of seniors in Speech Pathology and Audiology. *Credit:* Three semester hours—four class hours.

EX.ED. 412. AUDIOMETRY AND HEARING AIDS

Study and measurement of hearing; administration of individual and group audiometric examinations, interpreting audiograms; principles of construction, fitting and use of individual hearing aids. *Classification:* Elective for majors in Speech Pathology and Audiology. *Prerequisite:* Ex.Ed. 414. *Credit:* Three semester hours—five class hours.

EX.ED. 414. AUDIOLOGY I

The clinical treatment of hearing problems particularly to assist the speech correctionist, hearing testing, hearing aid con-

struction, and research in the field of audiology. *Classification:* Required of sophomores in Speech Pathology and Audiology. *Prerequisite:* Ex.Ed. 204. *Credit:* Three semester hours—five class hours.

EX.ED. 415. SPEECH READING AND AUDITORY TRAINING

Principles and techniques of remedial procedures for hearing handicapped; examination of clinical practices; evaluation of recent research in field; practice work in speech reading and auditory training instruction. *Classification:* Required of juniors in Speech Pathology and Audiology and Education of the Deaf. *Prerequisite:* Ex.Ed. 414 or Ex.Ed. 211. *Credit:* Three semester hours—five class hours.

EX.ED. 416. STUTTERING

Theoretical concepts related to etiology of stuttering and therapeutic approaches to the problem presented. *Classification:* Required of juniors in Speech Pathology and Audiology. *Prerequisite:* Ex.Ed. 306. *Credit:* Three semester hours—five class hours.

EX.ED. 417. CURRICULUM PRACTICES FOR THE PHYSICALLY HANDICAPPED

Organizing a school program for orthopedically handicapped children; selecting and evaluating suitable group and individual activities for the teaching of basic school subjects; observations of special classes for the crippled child. *Classification:* Required of juniors in Physical Handicap. *Prerequisite:* Ex.Ed. 209. *Credit:* Three semester hours—four class hours.

EX.ED. 418. PRACTICUM IN TEACHING CHILDREN WITH RETARDED MENTAL DEVELOPMENT

Practice teaching under supervision in a special class for educable mentally retarded children. *Classification:* Required of seniors in Mental Retardation. *Prerequisite:* Ex.Ed. 301 and Ed. 305. Cumulative average

of 2.00 or higher in general college achievement in the speech and hearing sequence. *Credit:* Six semester hours—all day, five days a week.

EX.ED. 419. TEACHING THE TRAINABLE RETARDED

An examination of the curriculum methods, materials and problems encountered in educating the child with an I.Q. of below 50 in public day-school classes. *Classification:* Required of juniors planning to teach trainable children; elective for majors in Mental Retardation and Physical Handicap. *Prerequisite:* Ex.Ed. 101. *Credit:* Three semester hours—four class hours.

EX.ED. 420. SPEECH PROBLEMS OF CHILDREN

Types and causes of speech defects and disorders found in elementary school children; methods of treatment of minor disorders by the classroom teacher; some phonetic and speech science; observation of children presenting various speech problems. *Classifications:* All college elective. *Credit:* Three semester hours—three class hours.

EX.ED. 421. PRACTICUM IN TEACHING CHILDREN WITH PHYSICAL HANDICAP

Practice teaching under supervision in a special class for orthopedically handicapped children. *Classification:* Required of seniors in Physical Handicap. *Prerequisite:* Ex.Ed. 311 and Ed. 305. Cumulative average of 2.00 or higher in general college achievement and in achievement in the professional sequence. Grade of "C" or higher in Ex. Ed. 305 and Ed. 305. *Credit:* Six semester hours—all day, five days a week.

EX.ED. 423. PRACTICUM IN TEACHING DEAF CHILDREN

Practice teaching under supervision in classes for the deaf. *Classification:* Required of seniors in the Education of the Deaf. *Prerequisite:* Ed. 305 and Ex.Ed. 305.

Cumulative average of 2.00 or higher in general college achievement and in achievement in the professional sequence. Grade of "C" or higher in Ex. Ed. 305 and Ed. 305. *Credit:* Six semester hours—all day, five days a week.

EX.ED. 424. ORGANIZATION AND ADMINISTRATION OF SCHOOL PROGRAMS

Study of the organization and administration of school programs particularly relating to case selection, case load, scheduling, records and reports; speech improvement, facilities, etc. *Classification:* Required of seniors in Speech Pathology and Audiology. *Prerequisite:* Eighteen hours in Speech and Hearing Courses. *Credit:* Two semester hours—four class hours, half semester.

EX.ED. 430. PRACTICUM IN TEACHING CHILDREN WITH EMOTIONAL DISTURBANCE

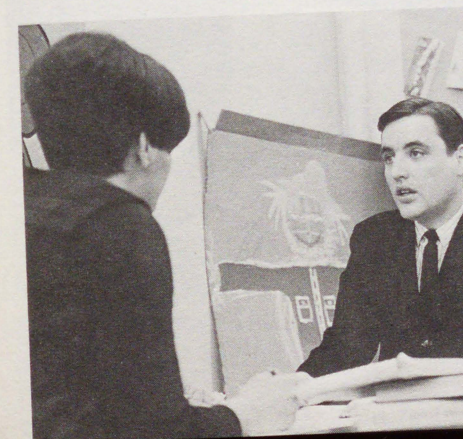
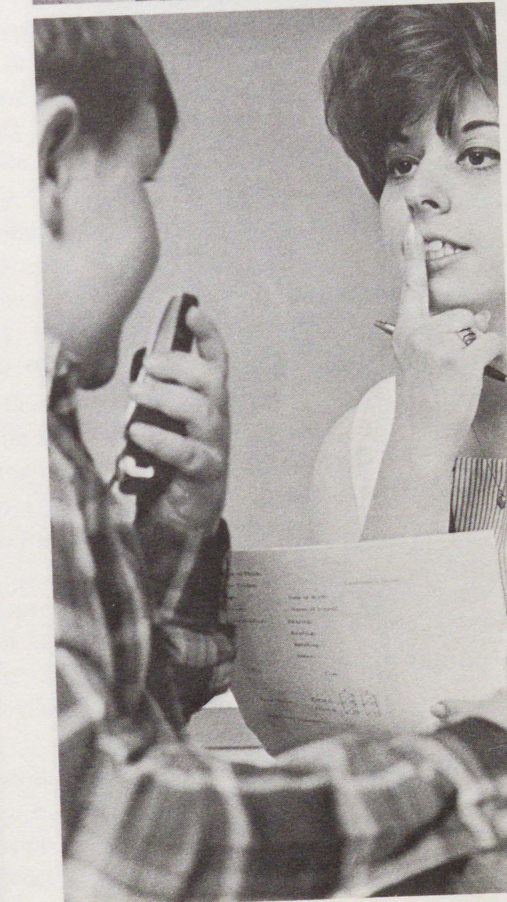
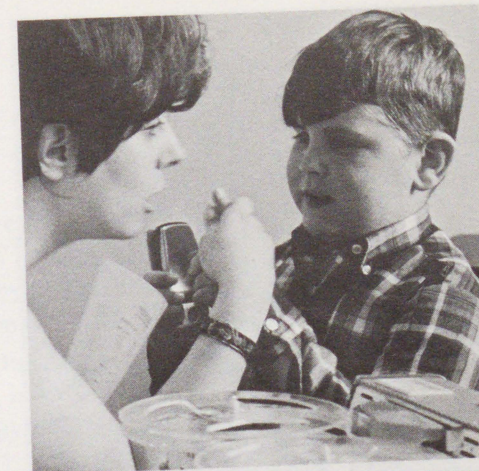
Practice teaching of emotionally disturbed children in public school special classes or residential settings. *Classification:* Required of upper seniors in Emotional Disturbance. *Prerequisite:* Ex.Ed. 313 and Ed. 305. Cumulative average of 2.00 or higher in general college achievement and in the professional sequence. Grade of "C" or higher in Ex.Ed. 313 and Ed. 305. *Credit:* Six semester hours—all day, five days a week.

EX.ED. 495. PROJECT

(See Project under Academic Regulation)

EX.ED. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)





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SECONDARY EDUCATION ENGLISH CURRICULUM

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Art, Music, Speech & Theatre Arts	6	6
Humanities		
English	12	12
Health, Physical Ed. & Recreation	2	4
Philosophy	3	3
Math & Science		
Math	3	3
Science	9	12
Social Science		
Social Science	6	6
History	6	6
	47	52

ELECTIVES

Electives outside the areas of English, Speech, Drama, Education	9	9
Electives to be grouped in one of the following fields: Art-Music, Foreign Language, Speech-Theatre, Social Science, Philosophy	9	9
Electives unrestricted	6	6
	24	24

MAJOR FIELD

Eng. 107-108 English Literature	6	6
Eng. 104 American Literature	3	3
Eng. 201, 220 or 325 Advanced Writing	3	3
Eng. 202 Public Speaking	3	3
Eng. or American Literature Elective	3	3
Eng. 213 Secondary School Literature	3	3
Eng. 427 Foundation of Language	3	3
Eng. 312 Contemporary Literature	3	3
Eng. 315 Shakespeare	3	3
Eng. 320 Oral Interpretation	3	3
	33	33

PROFESSIONAL REQUIREMENTS

Ed. 103-104 Human Growth & Development	6	8
Ed. 306 Methods & Materials in teaching Secondary School English	3	4
Ed. 403 Historical & Philosophical Forces Influencing Secondary Education	3	3
Ed. 406 Practicum in Teaching English in the Secondary School ..	12	30
	24	45
Total Hours	128	154

SECONDARY EDUCATION FRENCH AND SPANISH CURRICULA

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Art, Music or Speech & Theatre Arts	6	6
Humanities		
English	15	15
Health, Physical Ed. & Recreation	2	4
Philosophy	3	3
Mathematics and Science		
Mathematics	3	3-4
Science	3	3
Social Sciences		
Social Science	9	9
History	3	3
	18-20	18-20
Free Electives	70	72-79

MAJOR FIELD

Fr./Span. 201-202 Intermediate Language	6	8
Fr./Span. 301-302 Composition and Conversation	6	6
Fr./Span. 306 Civilization	3	3
Fr./Span. 307-308 History of Literature	6	6
Fr./Span. 403 Backgrounds of Modern Language	3	3
Fr./Span. Electives	6	6
	30	32

PROFESSIONAL REQUIREMENTS

Ed. 103-104 Human Growth and Development	6	8
Ed. 310 Methods and Materials in Teaching Secondary School Foreign Language	3	4
Ed. 403 Historical and Philosophical Forces Influencing Secon- dary Education	3	3
Ed. 413 Practicum in Teaching Foreign Language in the Secon- dary School	12	30
	24	45
Total Hours	124	149-156

SECONDARY EDUCATION MATHEMATICS CURRICULUM

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Art, Music or Speech & Theatre Arts	6	6
		175

Humanities		
English		
Health, Physical Ed. & Recreation	12	12
Philosophy	2	4
Mathematics and Science	3	3
Science		
Social Sciences	12-14	16-20
Social Science		
History	9	9
Free Electives	3	3
	21-23	21-23
MAJOR FIELD	68-72	74-80

Math. 107, 108, and 202 Analytic Geometry and Calculus	12	12
Math. 109 Sets and Logic	3	3
Math. 301 Introduction to Modern Algebra or		
Math. 302 Linear Algebra	3	3
Math. 308 Modern Geometry	3	3
Upper Division Mathematics Electives	3	3
	9	9
	30	30

PROFESSIONAL REQUIREMENTS

Ed. 103-104 Human Growth and Development	6	8
Ed. 307 Methods and Materials in Teaching Secondary School Mathematics	3	4
Ed. 403 Historical and Philosophical Forces Influencing Secondary Education	3	3
Ed. 407 Practicum in Teaching Mathematics in the Secondary School	12	30
	24	45
Total Hours	124	156-158

SECONDARY EDUCATION BIOLOGY CURRICULUM

LIBERAL ARTS

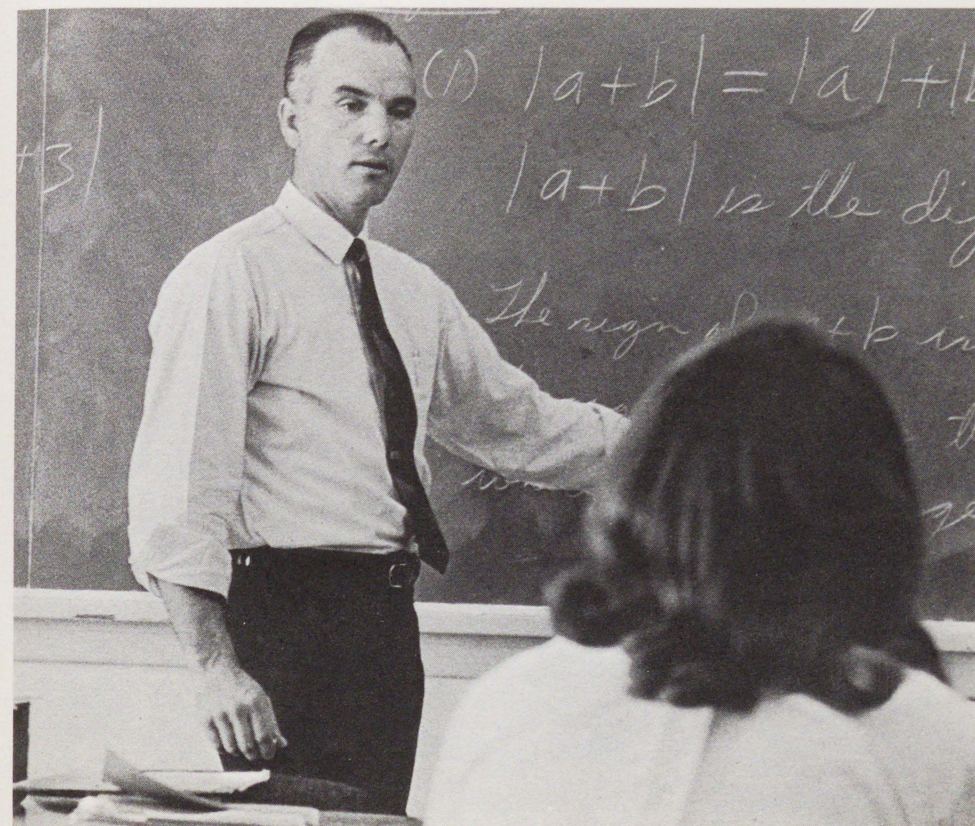
	Semester Hours	Clock Hours
The Arts		
Art, Music or Speech & Theatre Arts	6	6
Humanities		
English	12	12
Health, Physical Ed. & Recreation	2	4
Philosophy	3	3
Mathematics and Science		
Mathematics	6-8	7-8
Science	24	38
Social Sciences		
Social Science	9	9
History	3	3
Free Electives	13-15	13-15
	78-82	95-98

MAJOR FIELD

Biol. 111-112 General Biology	8	14
Biol. 201 Microbiology	4	6
Biol. 203 Genetics	4	6
Biol. 301 Physiology	3	6
Biol. 401 Ecology	4	5
Biol. 405 Organic Evolution	3	4
	26	41

PROFESSIONAL REQUIREMENTS

Ed. 103-104 Human Growth and Development	6	8
Ed. 308 Methods and Materials in Teaching Secondary School Science	3	4
Ed. 403 Historical and Philosophical Forces Influencing Secondary Education	3	3
Ed. 408 Practicum in Teaching Science in the Secondary School	12	30
	24	45
Total Hours	130	183-184



SECONDARY EDUCATION CHEMISTRY CURRICULUM

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Art, Music or Speech & Theatre Arts	6	6
Humanities		
English	12	12
Health, Physical Ed. & Recreation	2	4
Philosophy	3	3
Mathematics and Science		
Mathematics	8	8
Science	24	36
Social Sciences		
Social Science	9	9
History	3	3
Free Electives	11	11
	<u>78</u>	<u>92</u>

MAJOR FIELD

Chem. 111-112 General Chemistry	8	14
Chem. 201-202 Organic Chemistry	8	12
Chem. 301 Analytic Chemistry	3	6
Chem. 404 Chemistry Seminar	1	1
Chem. 405-406 Physical Chemistry	8	12
	<u>28</u>	<u>45</u>

PROFESSIONAL REQUIREMENTS

Ed. 103-104 Human Growth and Development	6	8
Ed. 308 Methods and Materials in Teaching Secondary School Science	3	4
Ed. 403 Historical and Philosophical Forces Influencing Sec- ondary Education	3	3
Ed. 408 Practicum in Teaching Science in the Secondary School ..	12	30
	<u>24</u>	<u>45</u>
Total Hours	130	182

SECONDARY EDUCATION EARTH SCIENCE CURRICULUM

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Art, Music or Speech & Theatre Arts	6	6
Humanities		
English	12	12
Health, Physical Ed. & Recreation	2	4
Philosophy	3	3
Mathematics and Science		
Mathematics	8	8
Science	24	36

Social Sciences	9	9
Social Science	3	3
History	13	13
Free Electives	80	94

MAJOR FIELD

E. S. 111—Geology 112 Physical Geology	8	10
Geol. 201 Geomorphology	3	4
Geol. 204 Historical Geology	3	4
Geol. 301 Stratigraphy	3	4
Geol. 302 Paleontology	3	4
Geol. 303 Mineralogy	3	4
Geol. 402 Geology of North America	<u>26</u>	<u>34</u>

PROFESSIONAL REQUIREMENTS

Ed. 103-104 Human Growth and Development	6	8
Ed. 308 Methods and Materials in Teaching Secondary School Science	3	4
Ed. 403 Historical and Philosophical Forces Influencing Sec- ondary Education	3	3
Ed. 408 Practicum in Teaching Science in the Secondary School ..	12	30
	<u>24</u>	<u>45</u>
Total Hours	130	173



SECONDARY EDUCATION PHYSICS CURRICULUM

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Art, Music or Speech & Theatre Arts	6	6
Humanities		
English	12	12
Health, Physical Ed. & Recreation	2	4
Philosophy	3	3
Mathematics and Science		
Mathematics	8	8
Science	24	38
Social Sciences		
Social Science	9	9
History	3	3
Free Electives	13	13
	80	96

MAJOR FIELD

Phy. 111-112	General Physics	8	10
Phy. 201	Radio Electronics	3	4
Phy. 202	Intermediate Electricity	3	5
Phy. 405	Modern Atomic Physics	3	3
Phy. 406	Modern Physical Concepts	4	4
Phy. 404	Laboratory Practicum	2	4
Phy. Elective		3	4
		26	34

PROFESSIONAL REQUIREMENTS

Ed. 103-104	Human Growth and Development	6	8
Ed. 308	Methods and Materials in Teaching Secondary School Science	3	4
Ed. 403	Historical and Philosophical Forces Influencing Sec- ondary Education	3	3
Ed. 408	Practicum in Teaching Science in the Secondary School ..	12	30
		24	45
	Total Hours	130	175

SECONDARY EDUCATION SOCIAL STUDIES CURRICULUM

LIBERAL ARTS

	Semester Hours	Clock Hours
The Arts		
Art, Music or Speech & Theatre Arts	6	6

180

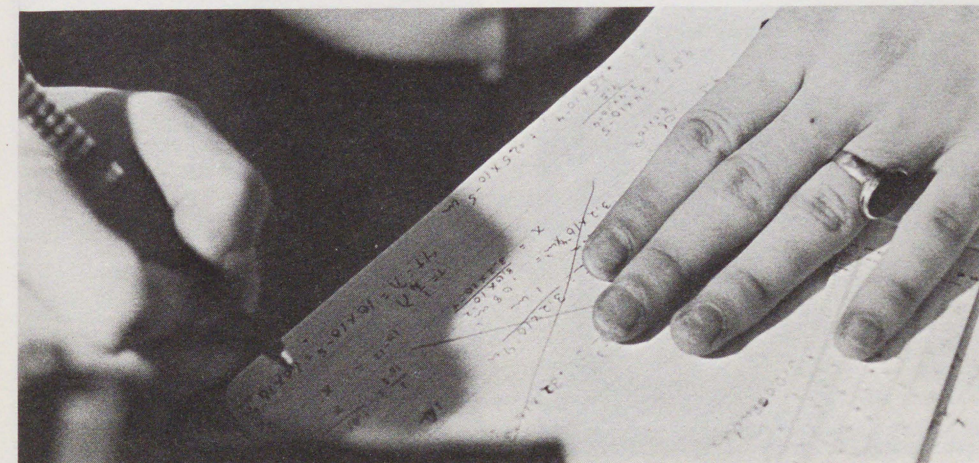
Humanities		
English	15	15
Health, Physical Ed. & Recreation	2	4
Philosophy	3	3
Mathematics and Science		
Mathematics	3	3-4
Science	3	3
Social Sciences		
Social Science	6	8
History	3	3
Free Electives	6	6
	17	17
	64	68-69

MAJOR FIELD

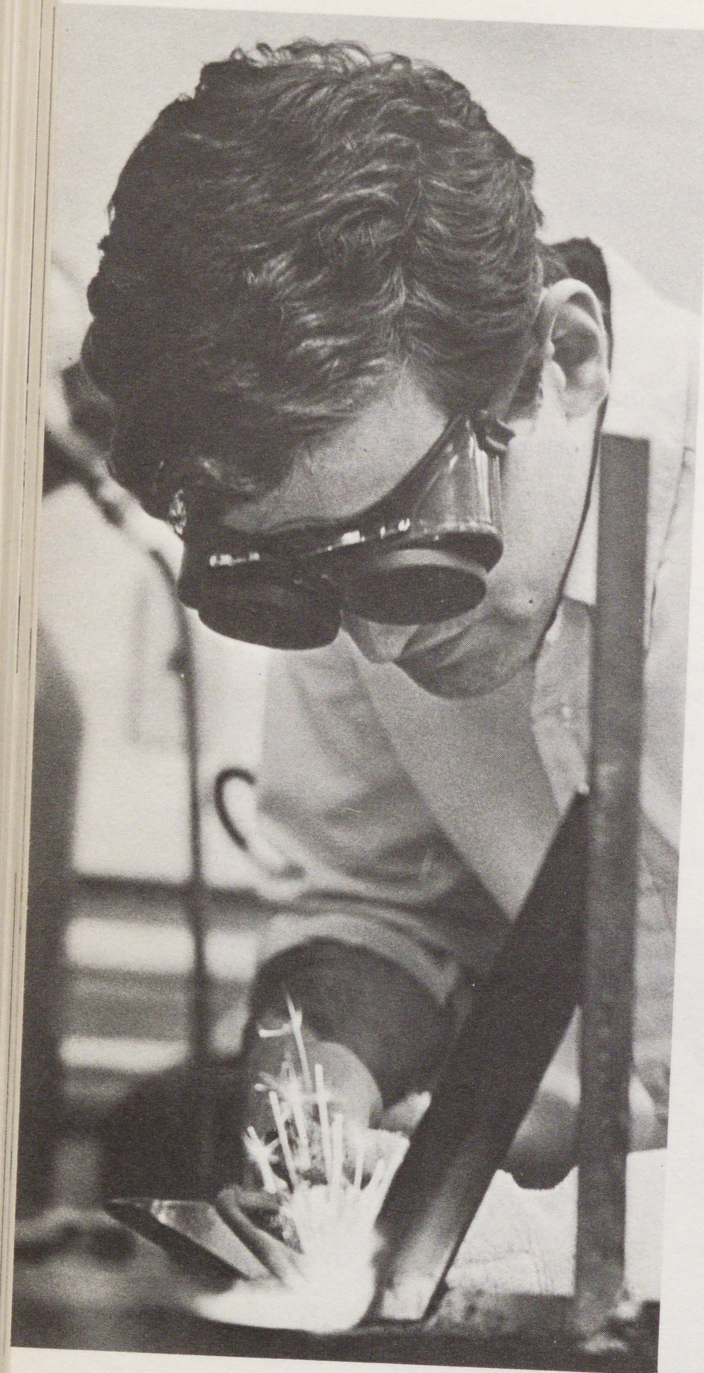
Hist. 206	Foundations of Western Civilization	3	3
Econ. 201 or 203	Principles of Economics	3	3
P. S. 207	American Political Institutions and Problems	3	3
Geog. 101	Elements of Physical Geography or		
Geog. 201	General Geography I	3	3
History or S.S. Electives (by advisement)		21	21
Hist. or S.S. Seminar		3	3
		36	36

PROFESSIONAL REQUIREMENTS

Ed. 103-104	Human Growth and Development	6	8
Ed. 309	Methods and Materials in Teaching Secondary School Social Studies	3	4
Ed. 403	Historical and Philosophical Forces Influencing Sec- ondary Education	3	3
Ed. 409	Practicum in Teaching Social Studies in the Secondary School	12	30
		24	45
	Total Hours	124	153-155



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APPLIED SCIENCE AND TECHNOLOGY

Applied Science and Technology includes the divisions of Home Economics Education, Industrial Arts Education and Vocational-Technical Education and the courses in Safety and Driver Education. The programs and courses offered by each division are described under the divisional headings.

A Bachelor of Science in Education degree is offered by each of the divisions and graduates are certified to teach in their area specialization in the public schools of New York. In addition to the Education degree, the Home Economics Education Division offers a Bachelor of Science degree program with majors in Home Economics and Dietetics which is designed to meet the needs of business, and social service agencies.

A significant portion of the Bachelor of Science and the Bachelor of Science in Education degree is devoted to study in the Liberal Arts. The major in each degree is based upon the "science of the application of knowledge to practical purposes."

Elective courses which may be selected by students from all divisions are also offered in the Division of Applied Science and Technology.

HOME ECONOMICS DIVISION

The Home Economics field is a rapidly growing area of education, creating a continuing need for Home Economists and providing opportunity for professional advancement to those prepared for it.

A new Home Economics building, Myrtle V. Caudell Hall, provides excellent laboratory facilities in the areas of food preparation and service, nutrition, selection and construction of clothing, textiles, household equipment, housing and home furnishings, and child development and family life. One wing of the building is devoted to a nursery school complete with indoor and outdoor play areas and one-way viewing rooms for observing children in action.

The college maintains an attractive, well-equipped residence, the Home Management House, located nearby where senior students live for a five-week period under faculty supervision to gain experience in the social and economic management of a home.

Students graduating from a high school or approved private secondary school in New York State, able to meet the general requirements of the College may apply for admission.

Students will need to purchase uniforms, fabrics, books and some miscellaneous supplies amounting to approximately \$130.00 per year in addition to the regular college fee.

A student, who, in any semester, desires to strengthen her professional preparation may plan a supplementary experience with her adviser for such enrichment as outlined in the supplementary experience forms, which are available in the Home Economics office.

BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN HOME ECONOMICS EDUCATION

The Home Economics Division prepares students to teach Home Economics in the public schools of New York State. Graduates who receive a Bachelor of Science degree with a major in Home Economics Education are qualified to teach in elementary, junior high and senior high schools, and in adult education programs. A curriculum leading to the Master of Science degree is explained in the Graduate Catalog.

A provisional certificate is granted for a ten year period to graduates with a major in Home Economics Education. A permanent certificate is issued to those who finished with an approved program of thirty hours of graduate study.

Graduates who hold a Bachelor of Science degree with a major in Home Economics Education teach clothing and costume design, foods and nutrition, and management of the home and its physical equipment. They teach girls and women to care for very young children, to understand the relations between the various members of the family, to bring about happy and harmonious living within the home, to recognize the importance of beauty in clothing and in the home. The influence of Home Economics extends beyond the classroom into the community where they serve as members of civic groups and committees interested in social improvements.

Home Economics Education Majors observe and participate in teaching one semester during their junior year. In the senior year, they teach for one semester in specially selected junior-senior high schools. During this time they gain maturing experience by residing in these communities.

BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN HOME ECONOMICS

A four year curriculum leading to the degree of Bachelor of Science with a major in Home Economics is available for the student interested in Home Economics and a broad cultural education. It permits the student to plan for a concentration in Clothing and Textiles; or Family Life; or Foods and Nutrition.

BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN DIETETICS

A four year curriculum leading to the degree of Bachelor of Science with a major in Dietetics is available. This major serves the interest of individuals desiring to work both in food service and nutrition education. The program meets the academic requirements of the American Dietetic Association for hospital dietetics and other internships.

SEMESTER AT MERRILL-PALMER INSTITUTE

The Home Economics Division is affiliated with the Merrill-Palmer Institute in Detroit, Michigan. Each year two seniors during the first semester and two juniors during the second semester have the opportunity with students from many states and countries to attend this school which provides intensive work in child development, parent education, social service work, and home and family living. Students are selected to attend this school by a faculty committee; they receive full credit toward their degree for work taken.

ADVANCE STANDING AND CERTIFICATION

Applicants for admission to advance standing will be informed of the requirements for the degree upon evaluation of transcripts by the Registrar. A college student wishing to complete teacher certification requirements only, should send transcripts to the Bureau of Certification, State Education Department, Albany, New York, for evaluation.



HOME ECONOMICS EDUCATION CURRICULUM

LIBERAL ARTS

	Semester Hours
The Arts	
Art, Music or Speech & Theatre Arts	6
Humanities	
English	12
Health, Physical Ed. & Recreation	2
Philosophy	3
Mathematics and Science	
Mathematics	3
Science	10
Social Sciences	
Social Science	9
Psychology	3
Elective from Liberal Arts	15
	63

COGNATE ELECTIVES

Selected from Home Economics Courses	6
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MAJOR FIELD

H. Ec. 100 Introduction to Home Economics	1
H. Ec. 107 Clothing	3
H. Ec. 108 Introductory Foods and Nutrition	3
H. Ec. 109 Human Development and Family Relations	3
H. Ec. 206 Family Health and Home Nursing	2
H. Ec. 207 Textiles	3
H. Ec. 208 Human Nutrition	3
H. Ec. 209 Human Development and Family Relations	3
H. Ec. 220 Household Equipment	3
H. Ec. 221 Housing the Family	3
H. Ec. 307 Clothing—Design and Construction	3
H. Ec. 308 Science Applied to Food Preparation	3
H. Ec. 309 Human Development and Family Relations	2
H. Ec. 310 Economics for Consumers	3
H. Ec. 402 Home Management	3
H. Ec. 409 The Individual and Family in Society and Culture	2
	43

PROFESSIONAL REQUIREMENTS

Ed. 203 Educational Psychology	3
H. Ec. Ed. 321 Methods and Materials	5
H. Ec. Ed. 423 Student Teaching	9
	18
Total Hours	130

HOME ECONOMICS CURRICULUM

LIBERAL ARTS

	Semester Hours
The Arts	9
Humanities	9-12
English	4
Health, Physical Ed. & Recreation	0-3
Philosophy	
Mathematics and Science	12
Mathematics and/or Science	12
Social Science	15
Electives from Liberal Arts	64
	20

FREE ELECTIVES

COGNATE ELECTIVES

Selected from Home Economics Courses other than major field	9-12
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MAJOR FIELD

Courses to be selected from one of the following areas:	12-15
Clothing and Textiles	
Foods & Nutrition	
Family Relationships and Human Development	
Housing and Equipment	
Consumer Economics and Management	

PROFESSIONAL REQUIREMENTS

H. Ec. 100 Introduction to Home Economics	1
H. Ec. 107 Clothing	3
H. Ec. 108 Introduction to Foods and Nutrition	3
H. Ec. 201 Preparation for Family Living	3
H. Ec. 310 Economics for Consumers	3
H. Ec. 221 Housing the Family	16
	124
Total Hours	

DIETETICS CURRICULUM

LIBERAL ARTS

	Semester Hours
The Arts	9
	187

Humanities	
English	9-12
Health, Physical Ed. & Recreation	4
Philosophy	0-3
Mathematics and Science	
Mathematics	3
Science	20
Social Science	12
Electives from Liberal Arts	6
FREE ELECTIVES	66
COGNATE ELECTIVES	18
Selected from Home Economics courses other than Major Field	12
MAJOR FIELD	
H. Ec. 108 Introductory Foods and Nutrition	3
H. Ec. 208 Human Nutrition	3
H. Ec. 308 Science applied to Food Preparation	3
H. Ec. 408 Advanced Nutrition	3
H. Ec. 410 Institutional Food Purchasing and Accounting	3
H. Ec. 412 Quantity Food Production	3
H. Ec. 415 Institutional Organization-Management	3
H. Ec. 434 Diet Therapy	3
PROFESSIONAL REQUIREMENTS	24
H. Ec. 100 Introduction to Home Economics	1
Ed. 203 Educational Psychology	3
Total Hours	4
	124



HOME ECONOMICS

H.Ec. 100. INTRODUCTION TO HOME ECONOMICS

Orientation to Home Economics. Consideration of history, depth, and scope; exploration of career opportunities within the profession. *Classification:* Required of Home Economics freshmen. *Credit:* One semester hour—one class hour.

H.Ec. 107. CLOTHING

A course designed to help the student understand the sociological, psychological and economic aspects of clothing; recognize how color, design, texture and line are combined to create individuality; apply these principles in the solution of her own problems; and develop an understanding of some basic construction skills. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with the approval of the instructor. *Credit:* Three semester hours—five class hours.

H.Ec. 108. INTRODUCTORY FOODS AND NUTRITION

Basic principles of planning, purchase, preparation, and the service management of family meals with emphasis upon nutritional aspects. Basic preparation techniques of culturally important foods in relation to science and art. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with the approval of the instructor. *Credit:* Three semester hours—five class hours.

H.Ec. 109. HUMAN DEVELOPMENT AND FAMILY RELATIONS—CONCEPTION THROUGH THE PRE-SCHOOL YEARS

Individual development from conception through the pre-school years within the family setting. Family relationships during the beginning families; expectant phase, childbearing and pre-school family stages of the family life cycle. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with the approval of the instructor. *Prerequisite:* Psych. 101 and S.S. 101. *Credit:* Three semester hours—four class hours.

H.Ec. 201. PREPARATION FOR FAMILY LIVING

The family throughout the life cycle: preparation for marriage and early marriage adjustments; planning for family and family life; the family's role in a democratic society; problems in helping children mature socially, economically, emotionally, and morally; the effect of a changing social and economic order on family disorganization and reorganization. *Classification:* Required of Home Economics students according to the student's curriculum. Elective for students not majoring in Home Economics. *Credit:* Three semester hours—three class hours.

H.Ec. 202. PRINCIPLES OF MANAGEMENT

Study of the management process as a means of determining the effective use of resources in their varying degrees of abundance and limitations and the evaluation of choices for satisfying needs and wants in relation to goals and values. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with approval of instructor. *Credit:* Three semester hours—three class hours.

H.Ec. 206. FAMILY HEALTH AND HOME NURSING

Facts and procedures essential in safeguarding the health of the individual and family; laboratory work in home nursing; community agencies concerned with family health. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with approval of the instructor. *Credit:* Two semester hours—three class hours.

H.Ec. 207. TEXTILES

A study of plant, animal and synthetic fibers and fabrics as they relate to care, use and consumer satisfaction. *Classification:* Required of Home Economics students according to the student's curriculum. *Prerequisite:* Six hours of Chemistry. *Credit:* Three semester hours—four class hours.

H.Ec. 208. HUMAN NUTRITION

The science of foods and nutrition in relation to health and disease, and the process by which the nutrients function in the human body. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with approval of the instructor. *Prerequisite:* Six hours of Chemistry. *Credit:* Three semester hours—four class hours.

H.Ec. 209. HUMAN DEVELOPMENT AND FAMILY RELATIONS—SCHOOL AGE THROUGH THE ADOLESCENT YEARS

Individual development from beginning school years through adolescence within the family setting. Family relationships of family with school-age children and with adolescent children. *Classification:* Required of Home Economics students according to the student's curriculum. *Prerequisite:* H.Ec. 109. *Credit:* Three semester hours—four class hours.

H.Ec. 210. CLOTHING

Problems of individual interest in textiles; clothing selection; buying, care, repair, restyling, and construction. *Classification:* Elective for students not majoring in Home Economics. *Credit:* Three semester hours—three hours per week.

H.Ec. 211. FOOD AND NUTRITION

Laboratory preparation and service of basic foods and meals to meet individual and family needs; basic ingredients and procedures; personal nutrition. *Classification:* Elective for students not majoring in Home Economics. *Credit:* Three semester hours—three hours per week.

H.Ec. 212. THE FAMILY IN SOCIETY AND CULTURE

The family against a background of history, biology, and social science; consideration of recent family theory and research from different frames of reference; historical, comparative, and institutional. *Classification:* Required of Home Economics students according to the student's curriculum. Elective for students not majoring in Home Economics. *Credit:* Three semester hours—three class hours.

H.Ec. 220. HOUSEHOLD EQUIPMENT

The study of material and processes used in the manufacture of household equipment; problems of selection, use, arrangement and safety for satisfying home living. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with the approval of the instructor. *Credit:* Three semester hours—four class hours.

H.Ec. 221. HOUSING THE FAMILY

Study of individual and family need and values in the selection of shelter; family spending patterns; design, location, fundamental equipment and furnishings of the home. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with the approval of the instructor. *Prerequisite:* Three semester hours of Art. *Credit:* Three semester hours—four class hours.

H.Ec. 307. CLOTHING—DESIGN AND CONSTRUCTION

Creative use of commercial patterns; emphasizing principles of design, fitting and construction; terminating in finished garments. *Classification:* Required of Home Economics students according to the student's curriculum. *Prerequisite:* H.Ec. 107 and H.Ec. 207. *Credit:* Three semester hours—six class hours.

H.Ec. 308. SCIENCE APPLIED TO FOOD PREPARATION

Scientific principles and techniques of food preparation with specific emphasis on baked products, meats, fats, oils, and sugar cookery. Some development of experimental techniques. *Classification:* Required of Home Economics students according to the student's curriculum. *Prerequisite:* H.Ec. 108. *Credit:* Three semester hours—five class hours.

H.Ec. 309. HUMAN DEVELOPMENT AND FAMILY RELATIONS—YOUNG ADULT THROUGH OLD AGE

Individual development from maturity through aging. Family relationships through

the families as launching centers, families in the middle years, and aging stages of the family life cycle. *Classification:* Required of Home Economics students according to the student's curriculum. *Prerequisites:* H.Ec. 209 or Ed. 101-102 and S.S. 101-102. *Credit:* Two semester hours—two class hours.

H.Ec. 310. ECONOMICS FOR CONSUMERS

Personal and family financial planning in relation to economic conditions; current problems of consumers; evaluation of aids for consumers. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with the approval of the instructor. *Credit:* Three semester hours—three class hours.

H.Ec. 320. PROBLEMS IN HOME EQUIPMENT

The study of current developments in home equipment. Emphasis is placed upon individual investigation of home equipment, consideration of selection and arrangement of equipment for selected situations, individual and group evaluation of laboratory studies. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with approval of instructor. *Prerequisite:* H.Ec. 220. *Credit:* Three semester hours—four class hours.

H.Ec.Ed. 321. METHODS AND MATERIALS

Aspects of curriculum in both general and home economics education; principles of learnings, teaching, evaluating; techniques in selecting, organizing, and using instructional materials; observation and participation in selected schools. *Classification:* Required of Home Economics students according to the student's curriculum. *Prerequisite:* Cumulative and pre-semester average of "C" and Ed. 203. *Credit:* Five semester hours—seven class hours.

H.Ec. 402. HOME MANAGEMENT

Principles of effective home management and their application in a living situation. Residence in the home management house

for a five-week period. Students defray own expenses. Emphasis is upon the process of management and inter-relationships of the utilization of human and material resources toward achieving personal and family goals. *Classification:* Required of Home Economics seniors. *Prerequisite:* H.Ec. 208 and H.Ec. 310. *Credit:* Three semester hours—eighteen class hours for 1/3 of semester. *Special Note:* May be elected by graduate students.

H.Ec. 408. ADVANCED NUTRITION

Modern concepts of normal nutrition as they relate to energy metabolism, protein, fats, minerals and vitamins. Emphasis on use of professional literature for application to human nutrition problems, methods used in studying nutrition and experience in interpretation of scientific reports. *Classification:* Required of Dietetics Majors. Elective by permission. *Prerequisite:* H.Ec. 208 or permission of the instructor. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

H.Ec. 409. HUMAN DEVELOPMENT AND FAMILY RELATIONS—THE INDIVIDUAL AND FAMILY IN SOCIETY AND CULTURE

Historical and comparative study of American and world families. Cultural and social variation in family organization, community relationships, and family and child-rearing practices. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with the approval of the instructor. *Prerequisite:* H.Ec. 309 or Ed. 101-102 and S.S. 101-102. *Credit:* Two semester hours—two class hours. *Special Note:* May be elected by graduate students.

H.Ec. 410. INSTITUTIONAL FOOD PURCHASING AND ACCOUNTING

Principles and standards for selection of food in institution food services, use of basic accounting principles underlying financial statements. *Classification:* Required of Dietetics Majors. Elective by permission.

Prerequisite: H.Ec. 308. *Credit:* Three semester hours—three class hours.

H.Ec. 412. QUANTITY FOOD PRODUCTION

Experience in application of food preparation principles to quantity production: menu planning; use and care of large equipment; standardized formulae and costs; service to the public. *Classification:* Required for Dietetics majors. Elective by permission. *Prerequisite:* H.Ec. 308. *Credit:* Three semester hours—one lecture hour, participation hours to be arranged in a supervised food service.

H.Ec. 415. INSTITUTIONAL ORGANIZATION AND MANAGEMENT

Organization, financial control and personnel management for institution food departments. *Classification:* Required of Dietetics Majors. Elective by permission. *Prerequisite:* H.Ec. 410, 412. *Credit:* Three semester hours—three class hours.

H.Ec. 420. HOUSING AND THE COMMUNITY

Study of the housing supply, needs, and research related to the area. The place of government in the housing: housing design, urban renewal, community controls. *Classification:* Elective for Home Economics students; others by permission of the instructor. *Prerequisite:* H.Ec. 221. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

H.Ec.Ed. 423. STUDENT TEACHING

Student teaching experience in the New York State program for home economics education; teaching experience required in two cooperating schools; on-campus work periods for consideration of problems in teaching; teacher ethics, placement and professional advancement, graduate programs. *Classification:* Required of Home Economics Education seniors; others by permission of instructor. *Prerequisite:* H.Ec. Ed. 321 with a grade of "C" or higher; cumulative average of "C" or higher in college courses. *Credit:* Ten semester hours—twenty class hours per week for $\frac{2}{3}$ of the semester.

H.Ec. 424. ADULT EXPERIENCE IN HOME ECONOMICS

An introductory course in adult experience in Home Economics. Consideration of the nature, scope, organizational procedures, methods, materials for teaching adults and out-of-school youth. *Classification:* Elective for Home Economics Education majors; others by permission of instructor. *Prerequisite:* H.Ec. 309. *Credit:* Three semester hours—three class hours.

H.Ec. 425. ADVANCED CLOTHING

Application of principles of costume selection, design and advanced construction technique. *Classification:* Elective for Home Economics majors; others by permission of instructor. *Prerequisite:* H.Ec. 307. *Credit:* Three semester hours—five hours per week. *Special Note:* May be elected by graduate students.

H.Ec. 426. FOOD DEMONSTRATION AND MEALS FOR LARGER THAN FAMILY GROUPS

Techniques of demonstrations related to food preparation and nutrition; preparation and service for special occasions and groups other than family size. *Classification:* Elective for Home Economics majors; others by permission of instructor. *Prerequisite:* H.Ec. 308. *Credit:* Three semester hours—five class hours. *Special Note:* May be elected by graduate students.

H.Ec. 427. DRAPING AND FLAT PATTERN DESIGN

Alteration of patterns to adapt them to individual needs; designing and modeling garments, using draping and flat pattern methods. *Classification:* Elective for Home Economics majors; others by permission of instructor. *Prerequisite:* H.Ec. 307. *Credit:* Three semester hours—five class hours. *Special Note:* May be elected by graduate students.

H.Ec. 428. MEAL MANAGEMENT

Family meal planning, preparation, and service in relation to consumer economics, current nutrition knowledge, time and energy management, aesthetic considerations, and regional, racial and religious food customs. *Classification:* Elective for Home Economics majors; others by permission of instructor. *Prerequisite:* H.Ec. 308. *Credit:* Three semester hours—five class hours. *Special Note:* May be elected by graduate students.

Prerequisite: H.Ec. 308. *Credit:* Three semester hours—five class hours. *Special Note:* May be elected by graduate students.

H.Ec. 429. HOME ECONOMICS AND INTERNATIONAL EDUCATION

An exploratory course to increase understanding of the role of Home Economics in world-wide education. Investigation of Home Economics programs in underdeveloped countries, contributions of private and government agencies to international service and education, study of Home Economics programs overseas as sponsored by colleges and universities in the United States. Consideration of opportunities for service abroad by home economics. *Classification:* Elective for Home Economics seniors and juniors; others by permission of instructor. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

H.Ec. 430. ISSUES OF THE MODERN AMERICAN FAMILY

Current educational, psychological and social issues and concerns of the modern American family examined and related to changing cultural values. *Classification:* Elective for Home Economics students and for students in other divisions by permission of instructor. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

H.Ec. 431. FURNISHING THE HOUSE

Study of home environment by individual and family needs and values; selection, arrangement, care and use of home furnishings and decorations. *Classification:* Elective for Home Economics students; others by permission of instructor.

Prerequisite: H.Ec. 221. *Credit:* Three semester hours—Four class hours. *Special Note:* May be elected by graduate students.

H.Ec. 434. DIET THERAPY

Modern concepts of clinical nutrition and abnormalities treated by modification of the diet. *Classification:* Required of Dietetics Majors, elective by permission. *Prerequisite:* H.Ec. 408. *Credit:* Three semester hours—three class hours.

H.Ec. 437. ADVANCED TEXTILES

Study of fibers, fabrics, yarns and finishes emphasizing textile testing and utilizing test methods. *Classification:* Required of Home Economics students according to the student's curriculum. Elective with approval of instructor. *Prerequisite:* Chemistry—6 hours. *Credit:* Three semester hours—four class hours. *Special Note:* May be elected by graduate students.

H.Ec. 447. CLOTHING IN RELATIONSHIP TO HUMAN BEHAVIOR

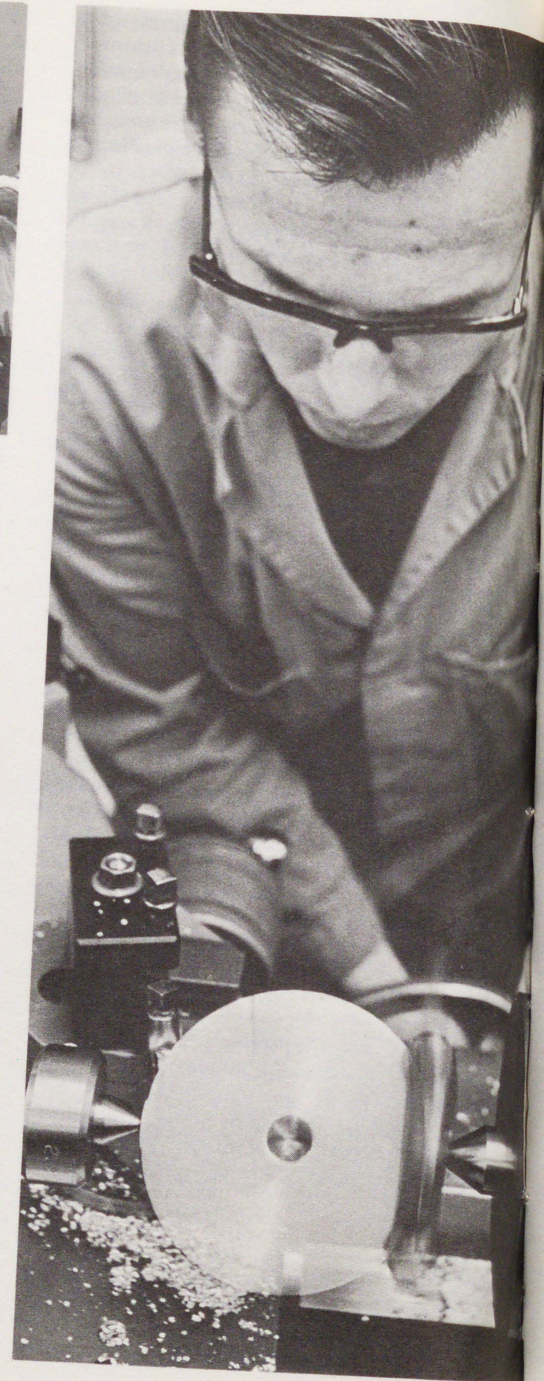
The study of cultural, social and psychological aspects of clothing as they relate to human behavior. *Classification:* Elective for Home Economics Students; others by approval of the instructor. *Prerequisite:* H.Ec. 107 or a beginning course in both sociology and psychology, or approval of instructor. *Credit:* Three semester hours—three class hours. *Special Note:* May be elected by graduate students.

H.Ec. 495. PROJECT

(See Project under Academic Regulations).

H.Ec. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).



INDUSTRIAL ARTS EDUCATION DIVISION

Graduates of the Industrial Arts Education Division receive a Bachelor of Science degree and are certified to teach Industrial Arts in the elementary and secondary schools of New York State.

The curriculum deals with the tools, materials, processes, products and occupations of the principal industries. Basic courses are required in drafting, metal, textiles, graphic arts, electricity, wood, ceramics, plastics and transportation; advanced elective courses permit concentration in two or more areas.

The professional phase of the curriculum include courses in psychology; teaching methods, a period of observation of teaching, and two nine-week periods of student teaching in selected schools.

The influence of industry on American life has added increased importance to the teaching of Industrial Arts. Graduates teach students in the public schools about industry: how it is organized; how it operates; its tools, materials, processes, products, occupations and the problems of life it creates. Industrial Arts teachers inform students regarding the intelligent use of industrial goods and services, and help many of them select careers and aid others to develop wholesome recreational pursuits.

Many Industrial Arts graduates teach in adult education programs; some enter supervisory and administrative positions in public schools. A graduate program leading to a Master of Science in Education degree prepares students for additional professional advancement.

Applicants must meet the general admission requirements of the College. Preference will be shown those who have two units of high school mathematics (including elementary algebra) and one unit each of physics and chemistry.

Transfer students, including Technical Institute or Junior College graduates and teachers in other fields wishing to extend their certificates to include Industrial Arts, may be admitted. Courses taken in accredited institutions will be appraised in terms of the requirements of this division and the State Education Department Certification Bulletin.

INDUSTRIAL ARTS EDUCATION CURRICULUM

GENERAL EDUCATION

	Semester Hours	Clock Hours
The Arts		
Art	6	15
Humanities		
English	12	12
Health, Physical Ed. & Recreation	2	4
Philosophy	3	3
Mathematics and Science		
Mathematics	6	6
Science	12	18
Social Science		
Social Science	9	9
Psychology	3	3
Free Electives	7	
	60	70

MAJOR FIELD

I.A. 102 Intro. to Wood Tech.	3	8
I.A. 103 Technical Drawing	2	5
I.A. 104 Technical Drawing	2	5
I.A. 106 Introductory Metal Working	3	8
I.A. 203 Basic Electronics	3	8
I.A. 204 Tech. Drg. & Planning for Prod.	2	5
I.A. 206 Intro. to the Ceramic Ind.	3	8
I.A. 207 Textiles	3	8
I.A. 208 Offset Lithography	3	8
I.A. 209 Letterpress	1½	4
I.A. 302 Power & Transportation	1½	4
I.A. 303 Plastics Tech.	3	8
Adv. Tech. Electives	3	8
	14	33
	44	112

PROFESSIONAL REQUIREMENTS

I.A. 111 Intro. to Ind. Arts Ed.	2	3
Ed. 203 Educational Psy.	3	4
I.A. 306 Prin. & Practices of Ind. Arts	3	6
I.A. 310-411 St. Teaching & Conference	15	
I.A. 412 Laboratory of Ind. Arts Teaching	3	7
	26	20
Total Hours	130	202

INDUSTRIAL ARTS

I.A. 102. INTRODUCTION TO WOOD TECHNOLOGY

Basic operations and processes in the use of hand tools and power equipment; elements of good design; correct construction techniques; suitable wood finishing methods; understanding of industrial practices; student planning; care and maintenance of equipment; analysis of materials. *Classification:* Required of Industrial Arts Freshmen. *Credit:* Three semester hours— eight class hours.

I.A. 103. TECHNICAL DRAWING

Graphic communication — emphasizing spatial visualization and technique through sketching and use of instruments, shape and size description, multiview projection, auxiliaries, rotations, and pictorial drawings. *Classification:* Required of Industrial Arts Freshmen. *Credit:* Two semester hours — five class hours.

I.A. 104. TECHNICAL DRAWING

Drafting conventions and standards; graphic representations and solutions; sectional views, developments, intersections, threads, fasteners, springs, cams, gears, charts and graphs, slide rule. *Classification:* Required of Industrial Arts Freshmen. *Prerequisite:* I.A. 103. *Credit:* Two semester hours — five class hours.

I.A. 106. INTRODUCTORY METAL WORKING

Fundamentals of forging, foundry, sheet-metal, oxyacetylene welding and brazing, wrought iron, heat treatment, and bench work. Machine tool operations to include lathe work, band sawing, and drill press. Related lessons in metals technology. *Classification:* Required of Industrial Arts Freshmen. *Credit:* Three semester hours — eight class hours.

I.A. 111. INTRODUCTION TO INDUSTRIAL ARTS EDUCATION

Purposes of education; Industrial Arts in general education; teaching Industrial Arts; philosophy and objectives; characteristics needed for teaching. *Classification:* Required of Industrial Arts Freshmen. *Credit:* Two semester hours — three class hours.

I.A. 203. BASIC ELECTRONICS

Basic electrical and electronic principles; generation, transmission, and use of electric power; electro-chemistry; transportation and communication; design, operation, and service of electrical devices; experimental circuit work and construction of projects. *Classification:* Required of Industrial Arts Sophomores. *Credit:* Three semester hours — seven class hours.

I.A. 204. TECHNICAL DRAWING AND PLANNING FOR PRODUCTION

Idea development, sketching, product design, working drawings, reproductions, manufacturing processes and operations, elements of jig and fixture design, inspection gages, cost analysis, sales and servicing illustrations, and drafting room procedures. *Classification:* Required of Industrial Arts Sophomores. *Prerequisite:* I.A. 103 and I.A. 104. *Credit:* Two semester hours — five class hours.

I.A. 206. INTRODUCTION TO THE CERAMIC INDUSTRIES

Introduction to industries that employ an incandescent heat treatment to inorganic-nonmetallic raw materials, such as: Minerals — rocks and stone, Lime, Gypsum, Cement and Concrete, Structural Clay Products, Whitewares, Glass, Glazes, Enamels, Refractories, Abrasives, Carbon. *Classification:* Required of Industrial Arts Sophomores. *Credit:* Three semester hours—eight class hours.

I.A. 207. TEXTILES

Fibers, processes and products of the textile industry; weaving, dyeing; surface treatment; and finishing of fabrics. *Classification:* Required of Industrial Arts Juniors; elective for others. *Credit:* Three semester hours—eight class hours.

I.A. 208. OFFSET LITHOGRAPHY

Layout and copy preparation, general and process photography, photo-offset platemaking, offset litho presswork, screen process printing, duplicating methods, gravure printing. *Classification:* Required of Industrial Arts Sophomores. *Credit:* One and one-half semester hours — four class hours. *Special Note:* I.A. 208 and I.A. 209 should be taken concurrently.

I.A. 209. LETTERPRESS

Relief printing, typographic layout and design, type composition, imposition and presswork, bindery, autographic platemaking, paper and papermaking. *Classification:* Required of Industrial Arts Sophomores. *Credit:* One and one-half semester hours—four class hours. *Special Note:* I.A. 208 and I.A. 209 should be taken concurrently.

I.A. 302. POWER AND TRANSPORTATION

Principles of operation, design and function of power and transportation devices; types of stationary and mobile power plants, vehicles, and craft and their function in our industrial society. *Classification:* Required of Industrial Arts Sophomores. *Credit:* Three semester hours — eight class hours.

I.A. 303. PLASTICS TECHNOLOGY

Fundamentals of injection, compression, transfer, rubber, and blow molding; heat sealing; vacuum forming; casting and spraying of foams; welding of plastics; properties of polymers and elastomers; mold construction. *Classification:* Required of Industrial Arts Juniors. *Credit:* Three semester hours — eight class hours.

I.A. 304. LETTERPRESS TECHNICS

Advanced study in contemporary typographic design, and letterpress printing; emphasizing the application of principles of slug casting, photoengraving, stereotype casting, matrix and plate molding, electrotyping, die making and cutting, panelling and embossing. *Classification:* Elective for Industrial Arts juniors and seniors. *Prerequisite:* I.A. 208-209. *Credit:* Three semester hours — seven class hours.

I.A. 305. CREATIVE ARTS FOR MENTALLY RETARDED CHILDREN

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 industrial arts; job analyses and occupational guidance of exceptional children. *Classification:* Elective for Exceptional Education majors. *Credit:* Three semester hours — four class hours.

I.A. 306. PRINCIPLES AND PRACTICES OF INDUSTRIAL ARTS

Preparation for student teaching; study of characteristics of good teachers, methods of teaching, organizing instructional material, lesson planning, teaching, visual aids, behavior and discipline problems, objective test construction and study of Student Teacher Guide. *Classification:* Required of Industrial Arts Juniors. *Prerequisite:* I.A. 111, Psy. 101, Ed. 203. *Credit:* Three semester hours—six class hours.

I.A. 307. TECHNICAL DRAWING AND GRAPHICS

Advanced study in technical sketching, graphics, working drawing, design drafting in selected areas of technology, reproductions, and contemporary drafting practices. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 103, I.A. 104, and I.A. 204. *Credit:* Two semester hours—five class hours.

I.A. 308. TEXTILES

Advanced work in textile design, fiber preparation, dyeing, weaving, and surface

decoration; textile testing, both physical and chemical. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 207. *Credit:* Three semester hours—seven class hours.

I.A. 309. ADVANCED UNIT CONSTRUCTION IN WOOD

Advanced study and experience in use of woodworking machines by planning and constructing furniture; study in use of woods, adhesives, and finishes; introduction to upholstery techniques. *Classification:* Elective for Industrial Arts Juniors and Seniors. *Prerequisite:* I.A. 102. *Credit:* Three semester hours—seven class hours.

I.A. 310. STUDENT TEACHING AND CONFERENCE

Full-time assignment in junior or senior high school with a master teacher, guidance of a college staff member; emphasis on acquiring ability and experience in organizing instructional materials, devising and administering classroom procedures, preparing lesson plans, and presenting lessons and demonstrations. *Classification:* Required of all Industrial Arts students. *Prerequisite:* Junior standing in Industrial Arts curriculum, cumulative average of 2.00 or higher. Cumulative average in Industrial Arts courses of 2.00 or higher, I.A. 306. *Credit:* Seven semester hours—nine weeks.

I.A. 313. ELECTRONICS-RADIO

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. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 203. *Credit:* Three semester hours—seven class hours.

I.A. 314. MACHINE TOOL TECHNOLOGY

Introductory experiences on machine tools not covered in I.A. 106; horizontal mill, vertical mill, shaper, surface grinder,

tool and cutter grinder, and advanced lathe and band saw work. Introductory physical and mechanical metallurgy. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 106. *Credit:* Three semester hours — seven class hours.

I.A. 315. MANUFACTURING PROCESSES OF THE CERAMIC INDUSTRIES

Continuation in depth of the major ceramic industries introduced in I.A. 206; emphasis on processes; crushing, grinding, polishing, pressing, drawing, extruding, screening, milling, blending, casting, annealing, firing, sand-blasting, and sawing. *Classification:* Elective for Industrial Arts students and others with appropriate background. *Prerequisite:* I.A. 206. *Credit:* Three semester hours—seven class hours.

I.A. 316. POWER TECHNOLOGY

Principles of operation, design, function of power systems employing various types of engines; mechanisms in development, transmission and control of power, dynamic analysis of specific units and their application. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 302. *Credit:* Three semester hours—seven class hours.

I.A. 318. METAL FORMING TECHNOLOGY

Advanced study of metal working processes; casting, shaping, welding, forging and finishing techniques; emphasis on individual experiences in contemporary metalworking technology. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 106. *Credit:* Three semester hours—seven class hours.

I.A. 320. MARINE TECHNOLOGY

Types and methods of marine vehicle construction; design, testing, and evaluation of hulls and power plants; safety, navigation, regulations, and handling, applicable to marine transportation. *Classification:* Elective for Industrial Arts students and A.C.E. *Prerequisite:* None. *Credit:* Three semester hours—seven class hours.

I.A. 401. INDUSTRIAL ARTS FOR THE ELEMENTARY SCHOOL

Child growth through construction activities; application of Industrial Arts in the general curriculum of the elementary school; industry and technology as a part of the culture and environment of the child. *Classification:* Elective for students not majoring in Industrial Arts. *Credit:* Three semester hours—four class hours.

I.A. 402. GRAPHIC REPRODUCTION PROCESSES

The photomechanical processes as related to offset lithography, screen process printing and gravure printing. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 208 and I.A. 209. *Credit:* Three semester hours—seven class hours. *Special Note:* May be elected by graduate students.

I.A. 403. PLASTICS TECHNOLOGY

Materials testing, identification and application; analysis of polymers; correlation between the packaging industry and the plastics industry; research techniques applicable to the field of thermoplastics. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 303 Plastics Technology or equivalent. *Credit:* Three semester hours—seven class hours. *Special Note:* May be elected by graduate students.

I.A. 406. PRODUCTION AND RESEARCH IN THE FOREST PRODUCTS INDUSTRIES

Mass production; maintenance of wood-working machinery; tools, processes, construction and materials in veneering, laminating and bending; planning and development of patterns; industrial finishes and finishing techniques. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 102 and I.A. 309. *Credit:* Three semester hours—seven class hours. *Special Note:* May be elected by graduate students.

I.A. 407. ARCHITECTURAL DRAWING

Locations, restrictions, building codes,

facilities, floor plans, elevations, and specifications of structures; materials, equipment, and methods of construction. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 103, I.A. 104, and I.A. 204. *Credit:* Two semester hours—five class hours. *Special Note:* May be elected by graduate students.

I.A. 409. ELECTRONIC INSTRUMENTATION

Circuit analysis, electronic instrumentation, and electronics techniques. Provides advanced study of electrical and electronic instruments and equipment. The application of instrumentation for demonstration techniques in the electrical or electronics field. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 203 and I.A. 313. *Credit:* Three semester hours—seven class hours. *Special Note:* May be elected by graduate students.

I.A. 410. MATERIALS AND PRODUCTS OF THE CERAMIC INDUSTRY

Fabrication of products from calculated compositions; application of forming processes; glaze, glass, and body calculations; cement and concrete compositions; property analysis and product design. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 206. *Credit:* Three semester hours—seven clock hours. *Special Note:* May be elected by graduate students.

I.A. 411. STUDENT TEACHING AND CONFERENCE

Full-time assignment in junior or senior high schools with a master teacher, guidance of college staff member; emphasis on student development to assume total responsibility for teaching, planning, keeping records on materials and equipment, evaluation of pupil progress, etc. *Classification:* Required of Industrial Arts students. *Prerequisite:* Senior standing in Industrial Arts curriculum, cumulative average of 2.00 or higher, cumulative average in Industrial Arts courses of 2.00 or higher. I.A. 306, I.A. 310. *Credit:* Eight semester hours—nine weeks.

I.A. 412. LABORATORY OF INDUSTRIAL ARTS TEACHING

Appraisal of the student teaching experience; the teacher and the profession; responsibilities as consultant, supervisor, core-resource person, and specialist; general shop organization and administration; specific planning and preparation for a particular teaching position; planning for and participating in professional meetings, conferences and workshops. *Classification:* Required of Industrial Arts Seniors. *Prerequisite:* I.A. 310 and I.A. 411. *Credit:* Three semester hours—seven class hours.

I.A. 417. DESCRIPTIVE GEOMETRY

Solutions of space problems involving points, lines, and planes. Surface developments and intersections, conic sections, vector geometry, and practical applications. *Classification:* Elective for Industrial Arts and all college students. *Credit:* Two semester hours — five class hours. *Special Note:* May be elected by graduate students.

I.A. 418. RESEARCH AND EXPERIMENTATION IN METAL TECHNOLOGY

Extend experience of previous prerequisite courses and operation of pantograph milling machine, introduction into production techniques. Introductory metallurgy in area of testing physical and mechanical properties of metals. Experimental and creative approach to development of teaching about new technologies. *Classification:* Elective for Industrial Arts students. *Prerequisite:* I.A. 106 and I.A. 314 or 318. *Credit:* Three semester hours—seven class hours. *Special Note:* May be elected by graduate students.

I.A. 419. ELECTRONICS FREQUENCY MODULATION

Frequency modulation principles, multiplex systems, FM television and high frequency transistor circuits, use of electronic instruments through laboratory work with high frequency and FM systems. *Classification:* All College elective. *Prerequisite:*

I.A. 203 and I.A. 313. *Credit:* Three semester hours — seven class hours. *Special Note:* May be elected by graduate students.

I.A. 421. INDUSTRIAL ARTS FOR STUDENTS WITH SPECIAL NEEDS

Development of methods and techniques for teaching, organizing, instructional material, presenting group activities, analyzing occupations, and evaluating students with special needs. Investigation of research pertaining to occupational training and job adjustment of students with special needs. *Classification:* Elective for junior and senior Industrial Arts students. *Credit:* Three semester hours—seven class hours. *Special Note:* May be elected by graduate students.

I.A. 423. THE INDUSTRIAL ARTS CONSULTANT IN THE ELEMENTARY SCHOOL

Elementary school philosophy; elementary industrial arts philosophy, correlating industrial arts activities with elementary school curriculum; experimental material application, child study, teaching techniques, responsibilities of Industrial Arts consultant. *Classification:* Elective for students majoring in Industrial Arts. *Credit:* Three semester hours—seven class hours. *Special Note:* May be elected by graduate students.

I.A. 427. GRAPHIC SOLUTIONS

Graphical methods for presentations of data, analysis of data, and computation; charts, graphs, diagrams, functional scales, nomography, empirical equations, and graphic calculus. *Classification:* Elective for Industrial Arts and all college students. *Credit:* Two semester hours — five class hours. *Special Note:* May be elected by graduate students.

I.A. 495. PROJECT

(See Project under Academic Regulations)

I.A. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations)

VOCATIONAL TECHNICAL EDUCATION DIVISION

The Vocational Technical Education Division offers programs of studies leading to:

1. Basic Teacher Certification
2. Bachelor of Science Degree
3. Master of Science Degree

The basic certificate program prepares accepted candidates to teach Vocational Trade Shop, Related Trade Subjects, Technical Subjects and Related Technical Subjects in the public Vocational and Technical High Schools of New York State, as well as Technical Institutes and Community Colleges. Graduates of the basic program are eligible for certification to teach in day, evening, extension and apprenticeship programs in accordance with Regulations of the Commissioner of Education.

Admission to the program is on a selective basis in accordance with the requirements of the State Education Department. An Admissions Committee selects candidates from among applicants according to trade and technical proficiency, personal qualification, scores on aptitude tests, and the probable need for teachers in each vocational technical area.

The Bachelor of Science Degree program is designed for Vocational Technical teachers to further meet certification requirements and to extend their original certification to include other subjects and areas of instruction. The curriculum includes professional courses designed to:

1. Provide orientation to the field of education in general and to vocational and technical education specifically.
2. Assist prospective vocational technical teachers in organizing their knowledge and skill for teaching.
3. Provide an understanding and skill in the methods and techniques of teaching Vocational Technical Subjects.
4. Develop the ability to organize and manage a school shop or laboratory.
5. Provide an opportunity for practice teaching under supervision.
6. Describe the basic concepts of how people learn, the characteristics of students, and the guidance functions of Vocational Technical teachers.
7. Aid prospective Vocational Technical teachers to progress in the profession.

The Master of Science Degree program will qualify candidates for principal, supervisor and administrator certificates in Vocational Technical Education. The requirements for this degree are explained in the graduate catalog.

Interested applicants may acquire additional information by communicating with the Director of the Vocational Technical Division.

VOCATIONAL TECHNICAL EDUCATION CURRICULUM

Course Titles	Semester Hours
V.T. 100 Applied Skill and Technical Information	30
V.T. 200 Introduction to Vocational Education	2
V.T. 201 Trade Analysis and Course Organization	2
V.T. 202 Trade Analysis and Course Organization	2
V.T. 203 Educational Psychology	2
V.T. 204 Methods of Teaching Vocational Technical Subjects	2
V.T. 205 Methods of Teaching Vocational Technical Subjects	2
V.T. 206 Shop Organization and Management	2
V.T. 207 Use of Instructional Materials	2
V.T. 208 Vocational and Educational Guidance	2
V.T. 209 Audio-visual Materials and Devices	2
V.T. 210 Audio-visual Materials and Devices	2
V.T. 211 Evaluation of Instruction	2
V.T. 212 Practice Teaching and Observation	2
V.T. 213 Practice Teaching and Observation	2
V.T. 214 Professional Development Seminar	2
V.T. 215 Professional Development Seminar	3
Eng. 101 Effective Communication	3
Eng. 102 Effective Communication	3
Eng. 301 Ideas of Man and His World in Literature or equivalent	3
S.S. 101 Man and His Institutions	3
S.S. 102 Man and His Institutions	2
Phil. 104 Ways of Knowing	3
Mus. 101 Essentials of Music	3
Art 200 Essentials of Art	2
H.Ed. 204 Personal and Community Health	6
Science	2
Math. 103 Mathematics and Modern Life	4
Mathematics	2
V.T. 401 Mechanical Drawing	2
V.T. 402 Mechanical Drawing	4-6
V.T. 495 Independent Study-Project or special technical courses	21-23
Electives	130
Total Semester Hours	

Continuous advisement by members of the Vocational Technical Education Division is recommended for candidates in this program of study.

VOCATIONAL TECHNICAL

V.T. 100. APPLIED SKILL AND TECHNICAL INFORMATION

Satisfied by passing a performance and theoretical examination. (Letters verifying approved and appropriate experience and in addition satisfying other necessary requirements as set forth in the admissions requirements for the Basic Vocational Technical Teacher Education Program.) These credits are acceptable only after the Basic Vocational Technical Teacher Education Program has been completed and requirements for permanent certification have been met. *Credit:* Thirty semester hours.

V.T. 200. INTRODUCTION TO VOCATIONAL TECHNICAL EDUCATION

Objectives of general and vocational education; growth of vocational education; description of the various programs of vocational education—full and part time; characteristics and content of good programs; personal and professional characteristics of teachers and trends in vocational education. *Credit:* Two semester hours — two class hours.

V.T. 201. TRADE ANALYSIS AND COURSE ORGANIZATION

Techniques of analyzing a trade for the purpose of preparing a list of teachable content of a trade; for the selection of skills, operations, tools, equipment and materials; mathematics, science, drawing, terminology, safety and hygiene, and trade judgment. *Credit:* Two semester hours — two class hours.

V.T. 202. TRADE ANALYSIS AND COURSE ORGANIZATION

A continuation of V.T. 201. *Prerequisite:* V.T. 201. *Credit:* Two semester hours—two class hours.

V.T. 203. EDUCATIONAL PSYCHOLOGY

Fundamentals of psychology and the ap-

plication to learning; nature and principles of learning, individual differences, factors influencing learning ability and problems of human behavior in an educational setting; physical, intellectual, emotional and social development of youth. *Credit:* Two semester hours—two class hours.

V.T. 204. METHODS OF TEACHING VOCATIONAL SUBJECTS

Basic principles and methods of teaching vocational subjects. Prepares the craftsman, technician, or engineer to effectively impart his knowledge to the learner. *Credit:* Two semester hours—two class hours.

V.T. 205. METHODS OF TEACHING VOCATIONAL SUBJECTS

A continuation of V.T. 204. *Prerequisite:* V.T. 204. *Credit:* Two semester hours—two class hours.

V.T. 206. SHOP ORGANIZATION AND MANAGEMENT

Emphasizing the many factors essential to success in the teaching profession. Includes the various planning, supervisory and managerial phases of the vocational teacher's position. *Credit:* Two semester hours—two class hours.

V.T. 207. USE OF INSTRUCTIONAL MATERIALS

Various media for planned meaningful class and student activities. Copyrighted, instructor, student and commercially prepared materials considered, including newer educational developments, general sources. Criteria and evaluation will be explored and developed for teacher usage. *Credit:* Two semester hours—two class hours.

V.T. 208. VOCATIONAL AND EDUCATIONAL GUIDANCE

Aims, principles and scope of guidance as a pupil personnel service of value to both

pupils and teachers; guidance as an integral part of the educational process; a cross-section of the elements of guidance and the function of the teacher in a well-organized guidance program. *Credit:* Two semester hours—two class hours.

V.T. 209. AUDIO-VISUAL MATERIALS AND DEVICES

Clear concept of the educational need and value of audio-visual materials in vocational technical subjects. Produce materials which lend themselves to simple construction; become acquainted with commercial audio-visual materials; establish evaluation procedures and record keeping for use with materials and equipment. *Credit:* Two semester hours—two class hours.

V.T. 210. AUDIO-VISUAL MATERIALS AND DEVICES

A continuation of V.T. 209. *Prerequisite:* V.T. 209. *Credit:* Two semester hours—two class hours.

V.T. 211. EVALUATION OF INSTRUCTION

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. *Credit:* Two semester hours—two class hours.

V.T. 212. PRACTICE TEACHING AND OBSERVATION

Supervised observations of vocational technical classes and practice in specially selected, approved vocational schools. Conference and reports based upon teaching assignments will be required. *Credit:* Two semester hours—two class hours.

V.T. 213. PRACTICE TEACHING AND OBSERVATION

A continuation of V.T. 212. *Prerequisite:* V.T. 212. *Credit:* Two semester hours—two class hours.

V.T. 214. PROFESSIONAL DEVELOPMENT SEMINAR

To develop the abilities and competencies

of teachers and analyze and discuss the problems and activities which confront teachers. *Credit:* Two semester hours—two class hours.

V.T. 215. PROFESSIONAL DEVELOPMENT SEMINAR

A continuation of V.T. 214. *Prerequisite:* V.T. 214. *Credit:* Two semester hours—two class hours.

V.T. 401. MECHANICAL DRAWING

Techniques of drawing, pictorial and orthographic sketching, geometric construction, instrument drawing, 2-view and 3-view drawings, lettering, dimensioning, sectional and auxiliary views, fasteners and reproduction of drawings. Required of all Vocational Technical students except for those who elect Applied Design and Art for Vocational Technical Education as it applies to their needs. *Credit:* Two semester hours—two class hours.

V.T. 402. MECHANICAL DRAWING

A continuation of V.T. 401. *Prerequisite:* V.T. 401. *Credit:* Two semester hours—two class hours.

V.T. 403. APPLIED DESIGN AND ART

Application and theory of design principles, the methods and approach to the fundamentals of drawing, art and design, emphasizing function, material, and processes in relation to form. Required of all Vocational Technical Education students in lieu of V.T. 401 and V.T. 402. *Credit:* Two semester hours—two class hours.

V.T. 404. APPLIED DESIGN AND ART

A continuation of V.T. 403. *Prerequisite:* V.T. 403. *Credit:* Two semester hours—two class hours.

V.T. 495. PROJECT

(See Project under Academic Regulations).

V.T. 499. INDEPENDENT STUDY

(See Independent Study under Academic Regulations).

SAFETY AND DRIVER EDUCATION

The Safety Education area of professional preparation in education has available courses designed to provide general as well as specialized instruction for the teaching of safe living in the myriad areas and activities of every day life.

The Safety Education course equips teachers and prospective teachers with basic safety knowledge to make it possible for New York State Education Laws number 806, 807 and 808, as well as the regulations set forth by the Commissioner of Education to be complied with in respect to the preparation of teachers so the mandatory teaching of safety education for a prescribed number of periods in the elementary and secondary schools of the State may be accomplished more effectively.

The Driver Education sequence of credit courses lead to satisfying the specialized educational preparation requirements for the purpose of gaining approval as an instructor of Driver Education for employment in the secondary schools of New York State. All individuals desiring to acquire approval as a high school Driver Education instructor must also be licensed to teach in the secondary schools and be in possession of a good driving record.

S.ED. 416. SAFETY EDUCATION

Kinds and frequency of accidents; psychology in accident prevention; safety in home, school, shop, playground and community; water, traffic, industrial and fire safety; poisons and emergency treatment; artificial respiration; teaching safety in the public schools. *Classification:* All college elective. *Credit:* Three semester hours — three class hours. *Special Note:* May be elected by graduate students.

S.ED. 417. DRIVER EDUCATION AND TRAFFIC SAFETY I

First of two courses to be taken in sequence for provisional approval of Driver Education instructors in New York State: behind the wheel instruction; traffic and pedestrian safety; psycho-physical testing; traffic law; accident statistics; accident prevention techniques; traffic engineering; negligence and liability; insurance interpretation; effects of alcohol; automobile preventative maintenance; devices and aids in teaching. *Classification:* Elective for juniors and seniors. *Prerequisite:* A good driving record; a New York State driver's license (a licensed operator for at least two years). *Credit:* Three semester hours—two class and two

laboratory hours. *Special Note:* May be elected by graduate students.

S.ED. 418. LEARNING TO DRIVE

Behind the wheel and classroom instruction, taught by upper class college students in a supervised program of practice teaching. Course very closely parallels the high school driver education course in content and methods employed in instruction. Two periods classroom and two periods car instruction each week. Available for students who do not have an operator's license, and who are at least 18 years old. No Credit.

S.ED. 426. DRIVER EDUCATION AND TRAFFIC SAFETY II

Second and final course for provisional approval as a Driver Education instructor; classroom and in the car practice teaching; organization and administration of the high school driver education program; instructional techniques and methods; equipment, materials and facilities; public relations. *Classification:* Elective for juniors and seniors. *Prerequisite:* S.Ed. 417. *Credit:* Two semester hours—two class and two laboratory hours. *Special Note:* May be elected by graduate students.

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. succeeds 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 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
- 1958 Approval of Secondary Teacher Education Curricula in Mathematics and Science
- 1959 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 English
- 1962 Approval of Secondary Teacher Education Curriculum in Social Studies
- 1963 Approval of Liberal Arts Degree Program
- 1963 Kate Butler Righter re-appointed Chairman of Local Council
- 1964 Approval of Secondary Teacher Education Curriculum in Foreign Language
- 1964 Approval of 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

ACCREDITATION AND MEMBERSHIP

STATE UNIVERSITY COLLEGE AT BUFFALO

accreditations

Board of Regents, University of the State of New York
 Middle State Association of Colleges and Secondary Schools
 National Council for Accreditation of Teacher Education

affiliations

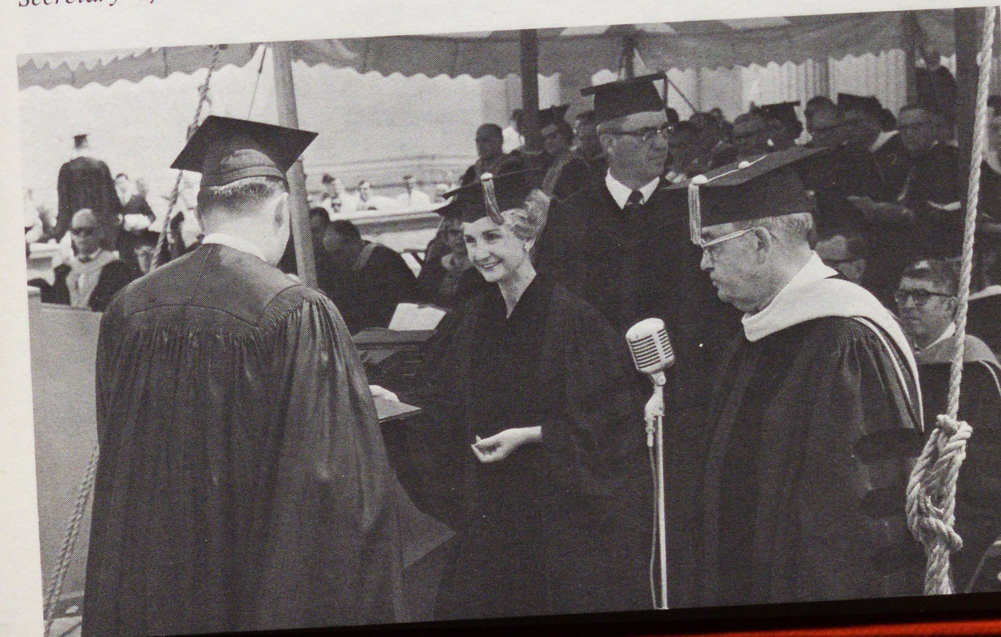
American Association of Colleges for Teacher Education
 American Association of College Registrars and Admissions Officers
 American Association of University Women
 American Council on Education
 American Library Association
 Association for General and Liberal Studies
 Association for Higher Education
 Association of College Unions
 Great Lakes Historical Society
 National Association of College and University Summer Session
 National Association of Elementary School Principals
 National Association of Secondary School Principals
 National Association of Student Personnel Administrators
 New York State Historical Association

STATE UNIVERSITY OF NEW YORK

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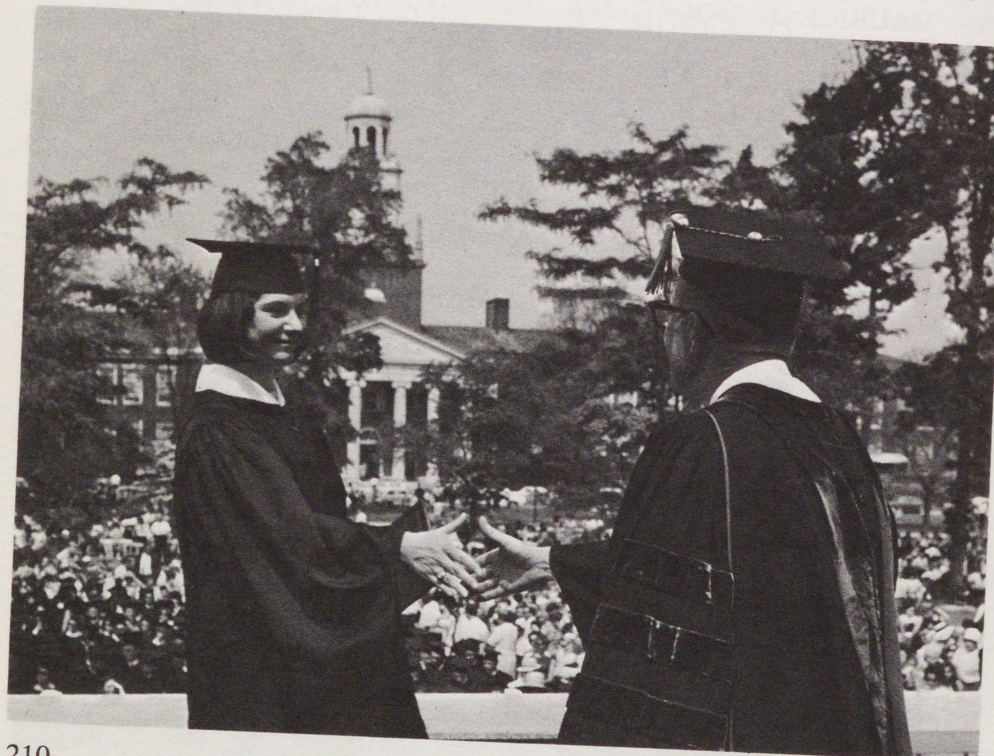


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Term Expires
 1972
 1973
 1971
 1975
 1970
 1969
 1974
 1968
 1967



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 Associate Librarian ...

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Resident Director, Scajaquada West Hall ... MARY ANN GRIFFIN, B.S.
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 Assistant College Registrar ... DOROTHY E. EELLS, B.A., M.A.

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 Associate Director of Counseling ... JOHN GAMBON, B.S., Ph.D.
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 Counselor ... JAMES M. HENDERER, B.A., Ph.D.

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 Assistant Coordinator of Financial Aids ... ROBERT T. TYLER, B.S., Ed.M.
 Financial Aids Counselor ... PETER J. BAGAROZZO, B.S.
 Financial Aids Counselor ... MICHAEL WALIZER, B.S., M.Ed.
 Director of Placement ... JUNE H. TRUESDALE, B.S.

Director of Student Health ... PAUL J. WEIGEL, M.D.
 Coordinator of Student Health ... MADELINE K. TURNER, R.N., M.S., M.A.
 College Physician ... WINIFRED G. MERNAN, M.D.
 Nurse ... MONICA WOLCOTT, R.N.
 Nurse ... MARY K. GLAIR, R.N.
 Nurse ... LORETTA A. FAHEY, R.N., B.S., M.S.
 Nurse ... MARY T. FOX, R.N., B.S.

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 Director of Development and Cultural Affairs ... EDNA M. LINDEMANN, B.S., M.A., Ed.D.
 Executive Secretary, Alumni ... HILMA M. COOK

Director of Business Affairs ... E. WILLIAM BAKER, JR., B.A., M.A.
 Administrative Services Supervisor ... RAYMOND S. BURRY, B.S.
 Senior Financial Secretary ... JAMES M. CAPUTI, B.A.
 Purchasing Agent ... LAWTON L. DICKINSON
 Accounting Supervisor ... WINIFRED KLAUS
 Bursar ... SALLY M. NOWOCIN, A.A.S.
 Business Management Ass't. for Budget ... CECILIA M. WOOD, A.A.S.
 Personnel Supervisor ... CHESTER J. PULASKI, B.A., M.A.
 Data Processing Manager ... ALBERT B. SANTINI, B.S.
 Plant Superintendent ... LON J. McADAM, B.M.E.
 Institution Safety Officer ... BRIAN R. COLE
 Director of Food Services ... JOSEPH P. CANNAMELA, A.S., B.S.
 Dietitian ... DOROTHY B. DEERING, B.S.
 College Store Manager ... CHARLOT M. FETTERMAN, B.S.
 Corporation Accountant ... ROBERT E. JOHNSON



THE FACULTY*

- ✓ GERALD F. ACCURSO (1965)
Instructor in General Science
B.S., State University College at Fredonia;
M.S., Canisius College.
- ✓ JOSEPH P. ADESSA (1948)
Professor of Health, Physical Education
and Recreation
B.S., M.Ed., Pennsylvania State University.
- ✓ HARRY ADNER (1964)
Associate Professor of Vocational
Technical Education
Ch.E., Rensselaer Polytechnical Institute.
- ✓ JOHN R. AIKEN (1964)
Associate Professor of History
A.B., Iowa Wesleyan College; M.A., Iowa.
- ✓ WALTER AINSWORTH (1960)
Assistant Professor of General Science
A.B., Pennsylvania State University; A.M.,
Michigan.
- ✓ JOHN L. ALLEN (1964)
Assistant Professor of Industrial Arts
B.S., State University College at Oswego.
- ✓ JON P. AMATO (1965)
Instructor in Geography
B.S., Arizona State; M.A., State University
of New York at Buffalo.
- ✓ JOAN AMROZOWICZ (1966)
Instructor in Education
B.S., M.S., State University College at
Buffalo.
- ✓ DAVID M. ANDERSEN (1967)
Instructor in English
B.A., Western Washington State College;
M.A., University of California.
- ✓ DUANE J. ANDERSEN (1958)
Associate Professor of Ceramics
B.F.A., Alfred University; M.S.,
Wisconsin.
- ✓ DAVID E. ANDERSON (1967)
Assistant Professor of Industrial Arts
B.S.Ed., M.S., Illinois State University.
- ✓ JACK R. ANDERSON (1967)
Assistant Professor of General Science
B.S., M.Ed., State University College at
Fredonia.
- ✓ BRUCE K. ANDREW (1965)
Assistant Librarian
B.A., State University of New York at
Buffalo; M.S., Syracuse University.
- ✓ HELENE ANNAS (1966)
Instructor in Music
B.M., Eastman School of Music

*As of June 1, 1967

34 4 min 5 Ph.D. 2 no Ph.D. 14 total 2 no Ph.D. 0 Ph.D. 0 (2) no.

✓ BERNARD D. ANSEL (1964)
Assistant Professor of History
B.S., Boston; M.A., Columbia University.

✓ VINCENT C. ARNONE (1963)
Assistant Professor of Child Art
B.S., State University College at Buffalo;
M.A., Columbia University.

✓ HARUM ARRASJID (1966)
Assistant Professor of Instructional Re-
sources
B.A., University of North Sumatra, In-
donesia; M.A., Syracuse University.

✓ JUDITH J. ARTHURS (1965)
Instructor in English
B.A., Little Rock University; M.A., Ar-
kansas.

✓ SALEH I. ASSAD (1967)
Assistant Professor, Campus School
B.S., M.S.Ed., Canisius College.

✓ RICHARD C. AUERBACH (1966)
Associate Professor of Education
B.S., M.S., State University College at
Buffalo.

✓ CHARLES R. BACHMAN (1965)
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B.S., Ohio State University; M.A., Colum-
bia University; Ph.D., Ohio State Uni-
versity.

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Associate Professor Emeritus of Social
Studies, Campus School
A.B., Indiana University; M.A., Columbia
University.

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Director Emeritus of Home Economics
Division
B.S., M.A., Columbia University.

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Professor Emeritus of Education
A.B., Defiance College; M.A., Ph.D., Ohio
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Associate Professor Emeritus of Health,
Physical Education and Recreation
A.B., Boston University; M.A., Peabody
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Reference Librarian, Retired
B.L., Smith College.

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Assistant Professor Emeritus of Industrial
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B.S., State University College at Buffalo;
Ed.M., State University of New York at
Buffalo.

KATHERYNE T. WHITEMORE (1925)
Professor Emeritus of Geography and Di-
rector of Arts and Science Division
A.B., Vassar College; A.M., Ph.D., Clark
University.

STATE UNIVERSITY OF NEW YORK

UNIVERSITY CENTERS

State University at Albany
State University at Binghamton

State University at Buffalo
State University at Stony Brook

MEDICAL CENTERS

Downstate Medical Center at Brooklyn (New York City)
Upstate Medical Center at Syracuse

COLLEGES OF ARTS AND SCIENCE

College at Brockport College at Fredonia College at Oneonta College at Plattsburgh
College at Buffalo College at Geneseo College at Oswego College at Potsdam
College at Cortland College at New Paltz

(Three additional Colleges of Arts and Science are under development. Two four-
year campuses, in Westchester and Nassau Counties, are in early planning. A third, up-
per-divisional in nature, has been proposed for the Utica-Rome-Herkimer Area.)

SPECIALIZED COLLEGES

College of Forestry at Syracuse
Graduate School of Public Affairs at Albany
Maritime College at Fort Schuyler (Bronx)
College of Ceramics at Alfred University
College of Agriculture at Cornell University
College of Home Economics at Cornell University
School of Industrial and Labor Relations at Cornell University
Veterinary College at Cornell University

AGRICULTURAL AND TECHNICAL COLLEGES (Two-year)

Agricultural and Technical Colleges at: Alfred Cobleskill Farmingdale
Canton Delhi Morrisville

COMMUNITY COLLEGES

(Locally-sponsored two-year colleges under the program of State University.)

Adirondack Community College at Hudson Falls
Auburn Community College at Auburn
Borough of Manhattan Community College at New York City
Bronx Community College at New York City
Broome Technical Community College at Binghamton
Corning Community College at Corning
Dutchess Community College at Poughkeepsie
Erie County Technical Institute at Buffalo
Fashion Institute of Technology at New York City
Fulton-Montgomery Community College at Johnstown
Hudson Valley Community College at Troy
Jamestown Community College at Jamestown
Jefferson Community College at Watertown
Kingsborough Community College at Brooklyn
Mohawk Valley Community College at Utica
Monroe Community College at Rochester
Nassau Community College at Garden City
New York City Community College of Applied Arts and Sciences at Brooklyn
Niagara County Community College at Niagara Falls
Onondaga Community College at Syracuse
Orange County Community College at Middletown
Queensborough Community College at New York City
Rockland Community College at Suffern
Staten Island Community College at New York City
Suffolk County Community College at Selden
Sullivan County Community College at South Fallsburg
Ulster County Community College at Kingston
Westchester Community College at Valhalla

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