

1971

Northeastern Illinois State College Graduate Catalog, 1971-1972

Northeastern Illinois State College

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NORTHEASTERN ILLINOIS STATE COLLEGE
graduate catalog 1971-72



statement on equal opportunity

Northeastern Illinois State College adheres to the principle of equal opportunity for all, regardless of creed, color or national origin. This principle applies to admissions in which the college makes every effort to seek applicants from all races, from all ethnic and minority groups, from all parts of the metropolitan area and from all of the economic segments of the urban community. To do this the college attempts to make admissions on the basis of several criteria to avoid the particular cultural bias of any single criterion and to provide the support necessary for all students to make the adjustments necessary for success.

In matters of course offerings and course content, the college is well aware of the problems involved in providing a fair and objective presentation of facts about minorities and minority viewpoints which have, historically, been omitted or given at most a passing reference. The college, therefore, recognizes the importance of incorporating studies of all minority and ethnic groups in its curriculum.

The college follows the policies stated above not only because of legal and moral commitments, but also because an educational institution with people on all levels coming from broad rather than narrow segments of the population is a stronger institution and can give a more meaningful and effective education by virtue of its diversity.

Jerome M. Sachs

—Jerome M. Sachs
PRESIDENT



graduate catalog 1971-72

NORTHEASTERN ILLINOIS STATE COLLEGE
BRYN MAWR AT ST. LOUIS AVENUE
CHICAGO, ILLINOIS 60625 583-4050

THIS ISSUE of the Graduate Catalog of Northeastern Illinois State College includes announcements, procedures, and requirements for the academic period 1971-72. The College reserves the right, however, to make whatever changes may be necessary from time to time. Since the contents of this publication are subject to change, you are advised to consult the appropriate College official for the latest information.

For information regarding course offerings and class hours, see the class schedules published by the College before the opening of each trimester and summer session.



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genesis of the college

The genesis of Northeastern Illinois State College began in 1869 with the authorization by the General Assembly of the State of Illinois to establish a normal school in any county of the state. The Cook County Board of Supervisors, which had been operating experimental normal school classes at Blue Island, established a normal school in the Village of Englewood. Eventually ownership, control and support of the normal school was annexed to the City of Chicago. An agreement was reached in 1896 whereby the school system of Chicago was obligated to maintain teacher education on the site, and control of the school became the concern of the Chicago Board of Education.

Traditionally, the single purpose and precise goal of educating men and women to become teachers was the main objective of the Cook County Normal School. This aim flourished under the direction and guidance of Colonel Francis W. Parker, principal of the Cook County Normal School from 1883 to 1889. Because of his innovations, new practices and ideas were being used to modify the process of teaching.

Originally, the curriculum was based upon a six month program, however, in 1899 this was extended to a full two years. It was not until 1938 that the Bachelor of Education Degree was



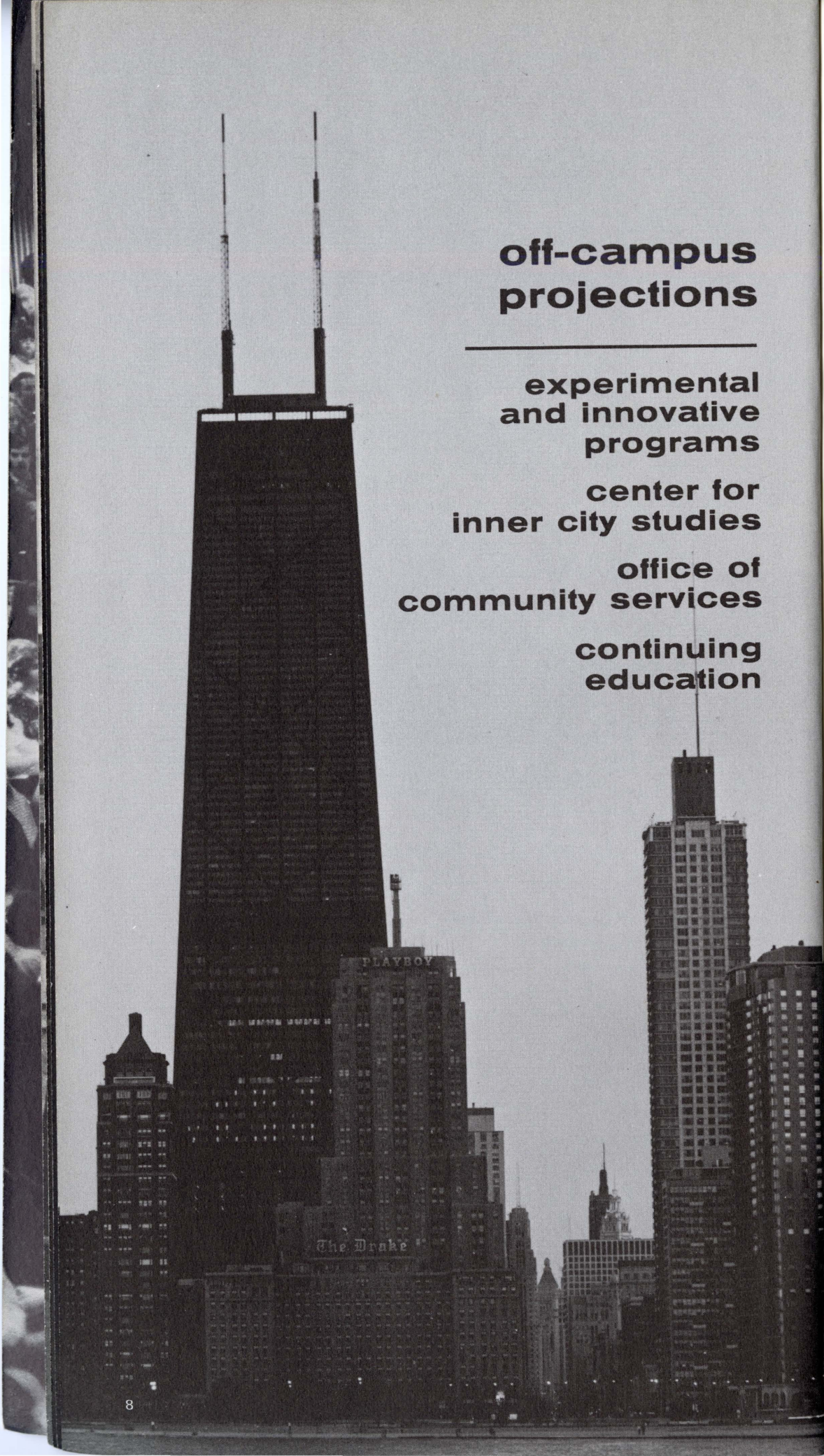
authorized, a four year curriculum introduced, graduate studies initiated and the Cook County Normal School became Chicago Teachers College.

In the succeeding years, the demand for teacher training facilities in Chicago increased. Branch locations provided temporary relief to an overcrowded situation. From these modest beginnings, a permanent North Campus at Bryn Mawr and St. Louis avenues emerged in 1961, known as Chicago Teachers College.

Ownership and control of the college (with a name change to Illinois Teachers College North) was transferred by the General Assembly of the State of Illinois, to the Board of Governors of State Colleges and Universities on July 16, 1965. On July 1, 1967, the institution became known as Northeastern Illinois State College.

Today, the college is a rapidly developing urban institution offering a wide spectrum of courses and programs in liberal arts and sciences, teacher education for elementary and secondary schools as well as graduate studies.

Striving to guide each individual student through the development of his full potential, the college is committed to assist the individual student to understand himself—other human beings—and the society in which he lives . . .



off-campus projections

experimental and innovative programs

center for inner city studies

office of community services

continuing education

experimental and innovative programs

Historically, Northeastern has been committed to a program of educational experimentation and innovation in curriculum, methodology and utilization of technology. Creativity on the part of the faculty with the encouragement of the administration has produced a number of new approaches to learning and teaching in critical areas of today's world. The scope of academic and community innovation has been as wide and varied as it has been both experimental and experiential. One can find "new programs" being conceived and developed in every area of college life, and through a variety of mechanisms.

The most novel and fruitful of these mechanisms, however, has proved to be the Center for Program Development. The Center was approved by the Board of Governors and the Board of Higher Education to foster, encourage and coordinate programs of innovation and experimentation on campus for the enrichment of the entire institu-

tion. Programs sponsored by the Center permit creativity in non-traditional academic techniques and procedure by all segments of the college community to be laboratory tested and evaluated for two years before becoming an established part of college programs. A committee of ten representative faculty members serves as advisors, aids in determination of policy, and makes some degree of objectivity possible in approval and evaluation of all new experimental programs. A center Director is responsible for carrying out policies recommended by the committee and endorsed by the Office of Academic Affairs. He is also responsible for the establishment and coordination of innovations thus approved, carries on evaluations of continuing experimental programs, and encourages the genesis of other new programs on a continuing basis. The Center, then, is both a clearinghouse and incubator for educational experimentation at Northeastern.

center for inner city studies

Amidst the controversy over community control, tenant strikes, welfare rights, gang warfare, and urban renewal, Chicago's Center for Inner City Studies (CICS) sits physically in the middle of a Model Cities target area and intellectually in the heart of America's urban crisis.

The Center for Inner City Studies represents a departure from the general academic framework. Its primary concern is with the human condition in the inner city. Although it must relate to the given institutional framework, the Center is committed to fit its resources to the total community program. This means that in training teachers the Center must equip the prospective teacher to deal from within the framework of the community in its complex of cultural, economic, social and political problems. Traditionally, education has attempted to categorize its courses of study. However, the Center is subjective, people-oriented, rather than objective-oriented.

The Center for Inner City Studies began official operation in the Abraham Lincoln Centre, a social settlement house located in a south side slum ghetto, on August 1, 1966. Supported primarily by an Experienced Teacher Fellowship Program Grant, awarded under the Higher Education Act of 1965, the Center commenced its graduate program on September 8, 1966.

Twenty-five students were selected to enroll in the Experienced Teacher Fellowship Program during the first fall trimester. Today, the Extended Day Enrollment has increased to approximately 600 students. The student body includes teachers, social workers, policemen, politicians, lawyers, poverty agency workers and nurses. These individuals come from various parts of the United States.

The City of Chicago is a unique laboratory for attacking the problems of America's urban poor. Generally recognized as being the most severely

disadvantaged, these groups are quite prevalent in the Chicago area. Since the Center for Inner City Studies touches bases with all disadvantaged groups in the city as well as scores of agencies, institutions and organizations, the Center has become an invaluable resource and a natural base as a multi-ethnic university complex. In 1969, the Center began its Follow Through Program in three communities: Akron, Ohio; Topeka, Kansas; and Chicago, Illinois. The plan designed by CICS and used in these schools is the Cultural Linguistics Approach.

TEL-TRI is another program which is operated by the Center. The official title of the project is "Trainers of Educational Leaders for Talent Retrieval in Illinois."

In addition, CICS is involved in the Co-Plus Project in the Chicago Public Schools. The Cooperatively Planned Urban Schools (CO-PLUS) Project is a comprehensive program which encompasses not only a pre-school pro-

gram for children ages 3 and 4, but also opens the school for six extra hours daily and up to seven days a week for a program designed jointly by the community and school. The plan endeavors to serve the community needs as the community sees them.

The Center holds numerous conferences and seminars on inner city problems for students, community groups, faculty from other colleges and universities, law enforcement workers, youth workers and others who live and/or work in the inner city. Frequent lectures and workshops are also a part of the service that is provided by the Center for Inner City studies.

Due to the rapid expansion and increased enrollment at the Center, plans are being carried out which include additional classrooms, lecture halls, office space, a student lounge and a 45,000 volume materials resource center.

office of community services

The function of the Office of Community Service is to extend assistance from the College to the community, particularly to the inner-city areas. At present, the office is involved in:

1. consulting, planning and training services to agencies interested in broader educational programs;
2. providing student services to community agencies;
3. developing community projects for disadvantaged youth;
4. instituting off-campus college cen-

ters for community services. Such centers will offer opportunities to students for involvement in various types of community services.

A typical example of student services to the community is the Aqui Estoy Project. This program provides a way for Spanish-speaking students to work within their community. It also gives the non-English speaking immigrants the opportunity to learn English as a second language. This furnishes the prerequisite to continue their education or to be eligible for job opportunity.

continuing education

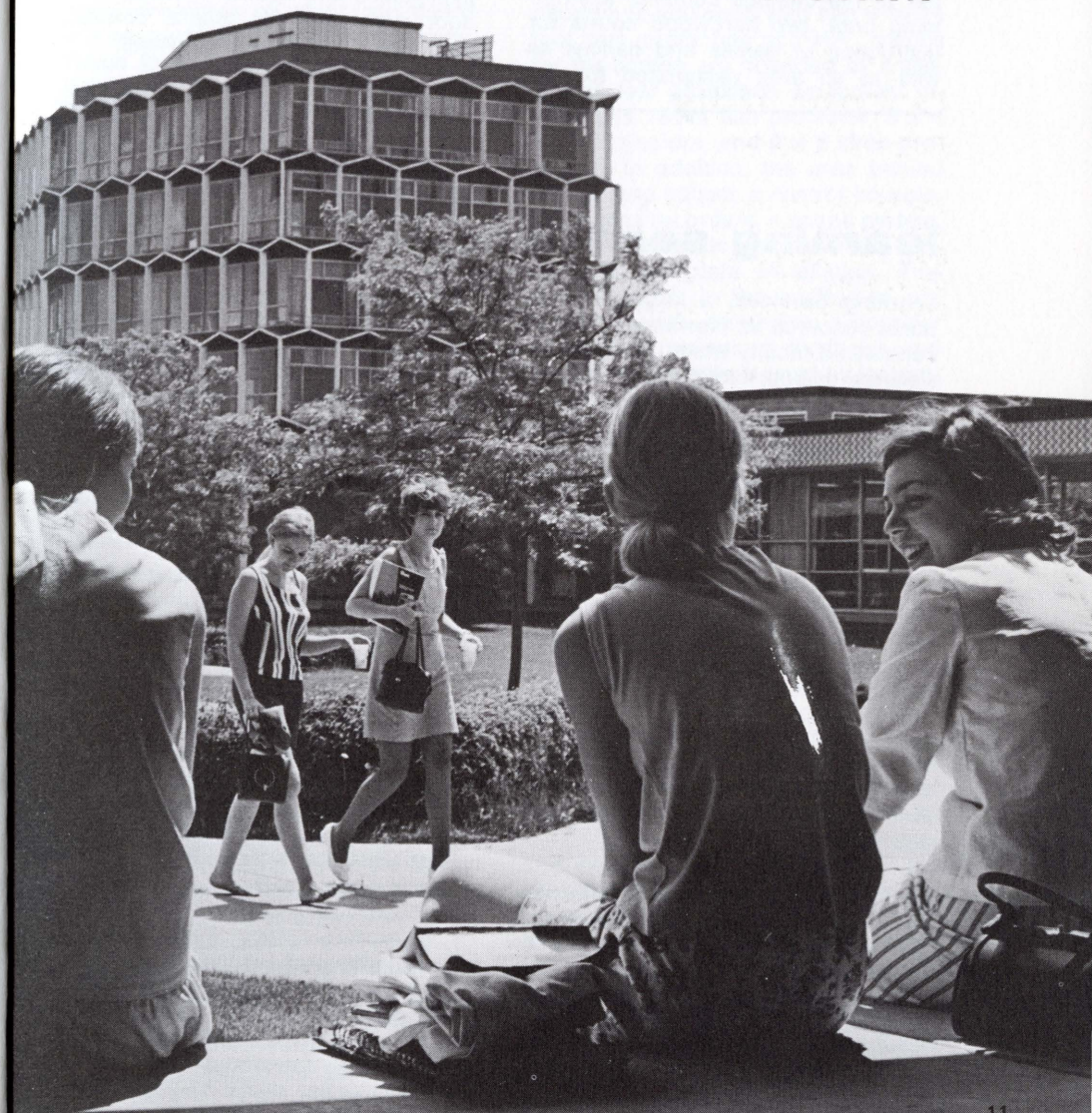
Extension Classes, as well as NISC Evening and Saturday Classes, are offered to accommodate teachers and others in the Chicago area who are pursuing advanced degrees on a part-time basis or taking course work as unclassified students for the purpose of professional advancement.

NISC resources are "extended" to various centers in the city and neigh-

boring suburbs where needs and enrollment justify their existence. In planning the various classes to be offered, the College is most considerate of requests from superintendents, administrators, groups of teachers, and other agencies. Information concerning class schedules may be obtained by contacting the Office of Continuing Education and Extension Services.

the campus setting

gymnasium
learning services
the library
north and south halls
commuter center
health services
commencement
alumni



Serving the north side community, NISC was constructed in 1961 on a 32-acre site. The architectural design of the campus is comprised of eight unified buildings with connecting walkways and halls. The new science building, currently under construction, is adjacent to the central nucleus of buildings. Housed within will be classroom rooms, laboratories and preparation rooms, seminar and conference rooms and faculty offices.

Additional classroom facilities will be available upon completion of the new classroom building. Due to the ever-increasing number of students seeking admission, plans are currently underway for a high-rise parking structure and additions to the physical plant as well as plans to acquire additional land to meet anticipated needs.

gymnasium

The gymnasium, at the southwest corner of the campus contains a swimming pool, two hardwood courts for instruction of games and dances as well as an area designated for the

As a public co-educational commuter college, the campus is situated just eight miles northwest of Chicago's Loop. Public Transportation makes the campus within reach of the bus and "L" system. Easy access to the city's major arteries offer convenience for the student who wishes to drive.

Students who drive to the college can park their cars at the west end of the campus, and all students parking on campus are required to pay a \$6.00 fee for Vehicle Registration.

Offices of the faculty and administration are now located in the six-story administration building and additional offices will be available in the new science and classroom buildings. In addition, the college leases space in nearby buildings for auxiliary faculty and administrative offices.

storage of supplies and equipment for gymnastics and sports. Adjacent outdoor areas are for tennis, softball, golf practice and other activities.

learning services

Learning Services, a major instructional resource at Northeastern, is a centralized facility which provides assistance to both faculty and students in implementing their learning objectives. The individual services within the division consist of television, film production, audio-visual, multimedia, the listening room, the foreign language laboratory, photography, graphic arts, three-dimensional instructional materials, and electronic maintenance for instructional and learning purposes. Learning Services aims to provide a wide range of opportunities for faculty and students to fully exploit the potentialities of non-print media in communication and learning. Therefore, the college community is strongly encouraged to develop and utilize these services as they pursue their learning activities.

The work of Learning Services is carried out by faculty, Civil Service and student personnel. The faculty personnel who supervise and coordinate the services of the division are trained and experienced specialists who hold rank in academic disciplines. In addition to educational and teaching backgrounds, they also have experience

in commercial and educational television, radio, theater, and other media operations. Non-faculty personnel are Civil Service employees who are trained and experienced creative artists and technicians. More and more, student employees, too, are gaining valuable experience in media and, at the same time, making a significant contribution to the college.

Northeastern has taken advantage of recent technological advances to provide new teaching aids and communication systems for teaching and learning. Examples of the newer developments in use are the closed-circuit television system, the multi-media auditorium, which is equipped with a student responder system, and the automated foreign language laboratory. Brief descriptions of these and other services available from the Division of Learning Services to the college community are:

Audio-Visual Services. Most classroom usage of audio-visual material is handled through a centralized audio-visual storage center even though facilities are permanently located in some teaching areas. The equipment

includes audio tape recorders; slide, overhead, 8mm, and 16mm projectors; projection screens; and a variety of self-study activities and systems. A film library is being added rapidly, and films are also borrowed from free services or rented for both classroom use and the free film series. Every student and faculty member has a standing invitation to visit the Audio-Visual Department and learn how he may use the equipment and services. The Audio-Visual Self-Study Center is open to all students.

The production services of graphic arts, photography, instructional materials preparation (three-dimensional displays, models, etc.), and electronic maintenance are available to the instructional systems as well as to all other instructional, administrative, and student projects. Students make valuable contributions in these areas also, especially student artists and photographers who work on student publications and publicity for student activities.

Learning Services also administers several learning centers, the instructional objectives of which are determined by academic departments. These include the 35-station foreign language laboratory which all students use in their language study, the audio-tape recording-duplicating room, the listening center for audio tapes and records used primarily by music students for assigned and optional listening, and the instructional materials workshop which is also used by art students for individual projects.

Closed Circuit Television. Seventy locations are wired into a master television antenna system which allows television signals to be received from all UHF stations in our area, as well as from our own two closed-circuit channels. The classroom studio is equipped

with excellent facilities including vidicon cameras, control equipment, a sophisticated lighting system, studio display units, and both professional and industrial model video-tape recorders. Television is used in a wide variety of learning situations as well as for student programs and coverage of special events at the College. With the arrival of a TV mobile unit equipped with vidicon cameras, control and sound gear, and a professional model video-tape recorder, the range of television learning experiences has been greatly enlarged. Using either its own power generator or available power, the unit is capable of program origination in virtually any location on campus or in the urban community.

Film Production Service. A professional 16mm sound film production unit, 8mm film camera, and editing equipment enable students to achieve a greater degree of personal involvement. Consequently, experimental films, short teaching segments, and films of urban and college life have been produced.

Multimedia Services. The 670-seat auditorium is equipped with two 9 by 14 foot rear projection screens. Images for the screen are provided by a battery of rear projection equipment including a 16mm film projector, 3 x 4 slide projectors, and 2 x 2 slide projectors. In addition, the area behind the screens houses a control console, audio tape recorders, a sound system, and the electronic system which controls the complete installation. Five hundred seats in the auditorium are equipped with six-choice responder units for large group feedback and testing. Multimedia is used by instructors for large group instruction when they wish to include audio and visual materials and also in a variety of other situations when information is conveyed to large groups.

the library

Northeastern's Library is a modern four-level building at the center of the campus. The library reflects the multipurpose educational commitment of the College, containing approximately 190,000 bound volumes and extensive holdings of unbound periodicals and documents, pamphlets, pictures, maps, microfilm, microfiche and filmstrips. In addition to the traditional bibliographic services in the Reference department, there is a large selection of catalogs from other colleges and universities.

The Circulation department provides a quick photocopying service as well as maintaining the reserve book desk.

The Periodicals section receives approximately 2500 titles in a wide variety of fields on a continuous basis throughout the year. Students who are involved in research and reference work make considerable use of microfilm technology, through the availability of reading machines and microtext printout.

The Government Documents collection has its basis in the library's designation as both a United States and Illinois State Depository. In addition to federal and state documents, there is a rapidly expanding collection of municipal and United Nations documents.

The Curriculum Materials Center is primarily concerned with supporting professional education and children's literature courses. However, part of the service provided to students and visitors includes general library orientation.

Northeastern's Library offers some excellent display areas which are available for use by students as well as faculty members. Arrangements for exhibits can be made through the Curriculum Materials Center.

In addition to the on-campus library facilities, the College's Center for Inner City Studies has a continuously developing library, emphasizing materials on the disadvantaged problems of the urban area. Special effort is made to provide all services available at the main campus library to students who attend the Center. In conjunction with the Center, several rooms are equipped for library functions.

Students and staff are fortunate in having access to many other libraries in the Chicago metropolitan area, such as the Board of Education Library, the Chicago Public Library, the John Crerar Library, and, with permission, specialized libraries in subject areas and a number of great university libraries. Information regarding this service is available in the Reference department.

north and south halls

The modern, air-conditioned structures leading to the administration building contain classroom facilities, seminar rooms and laboratories. Many of the rooms may be divided through the use of sliding soundproof partitions, electrically or manually operated. Thus, great flexibility is provided to care for large and small groups of students and to meet the variations in instructional space required for ex-

perimental teaching.

Each hall has its own student lounge for relaxation and study. Individual study carrels line the wide, well-lighted corridors connecting North and South Halls with other units of the College. Every effort has been made to encourage students to grow intellectually and socially through the facilities provided for instruction and independent study.

commuter center

The focal point of Northeastern's Student life begins at the Commuter Center. NISC has no residential facilities, its student body is composed mainly of urban commuters. The facilities of the Commuter Center and the programs of Student Activities are, therefore, designed to enrich the educational experiences of the college community and, at the same time, provide comfortable surroundings for informal study and relaxation. Conveniently located on the main floor of the Commuter Center are:

Food Service Facilities

- Cafeteria
- Coffee Shop
- Office of Food Service Manager

Adjacent to the Food Service Area

- Cashier's Booth
- Information Desk
- Public Telephones
- Bulletin Boards
- Coin-Operated Lockers
- Vending

On the Lower Level

- Book Nook (School supplies and used book exchange)
- Beehive (The College Yearbook)
- Billiard Room
- Checkroom
- Lost and Found

On the Upper Level

- Associate Deans of Students
- Director Commuter Center
- Activities Program Advisor
- Student Senate Office

- Commuter Center Activities Board
- Print (The Student Newspaper)
- Student Typing Center
- Student Organizations' Mail Boxes
- TV and other Lounges

Additional Student Lounges are readily accessible from the North (A) and South (B) Classroom Wings. Public telephones and additional vending machines are in or near these lounges.

health services

The Health Service office provides for the health needs of the college community. Registered nurses are on duty:

Monday thru	
Thursday	8:00 a.m. to 9:00 p.m.
Friday	8:00 a.m. to 4:00 p.m.
Saturday	8:00 a.m. to 12:00 noon

First aid treatment is available for minor injuries and illness to all NISC students, faculty and staff without charge.

When the services of a physician are required or hospital care is necessary, the student will be referred to his private doctor, the emergency room of the hospital of his choice, or the emergency room of the Swedish Covenant Hospital. The college does not assume any financial responsibility for the

treatment given beyond first aid in the office of Health Service.

Accidents occurring on campus should be reported promptly to the Health Service office. Students are urged to cooperate.

Additional functions of the office of Health Service include:

- Health Counseling
- Literature and Brochure Materials
- Health Exhibits and Displays
- Claim Processing for Athlete's Insurance
- Statistics on Accidents and Illnesses Incidence
- Environmental Health and Safety Reports
- Referral Service to Doctors, Clinics, Health Agencies

commencement

Commencement ceremonies are held three times a year (April, August and December). A committee plans the

Commencement Program which honors those students who have fulfilled all necessary graduation requirements.

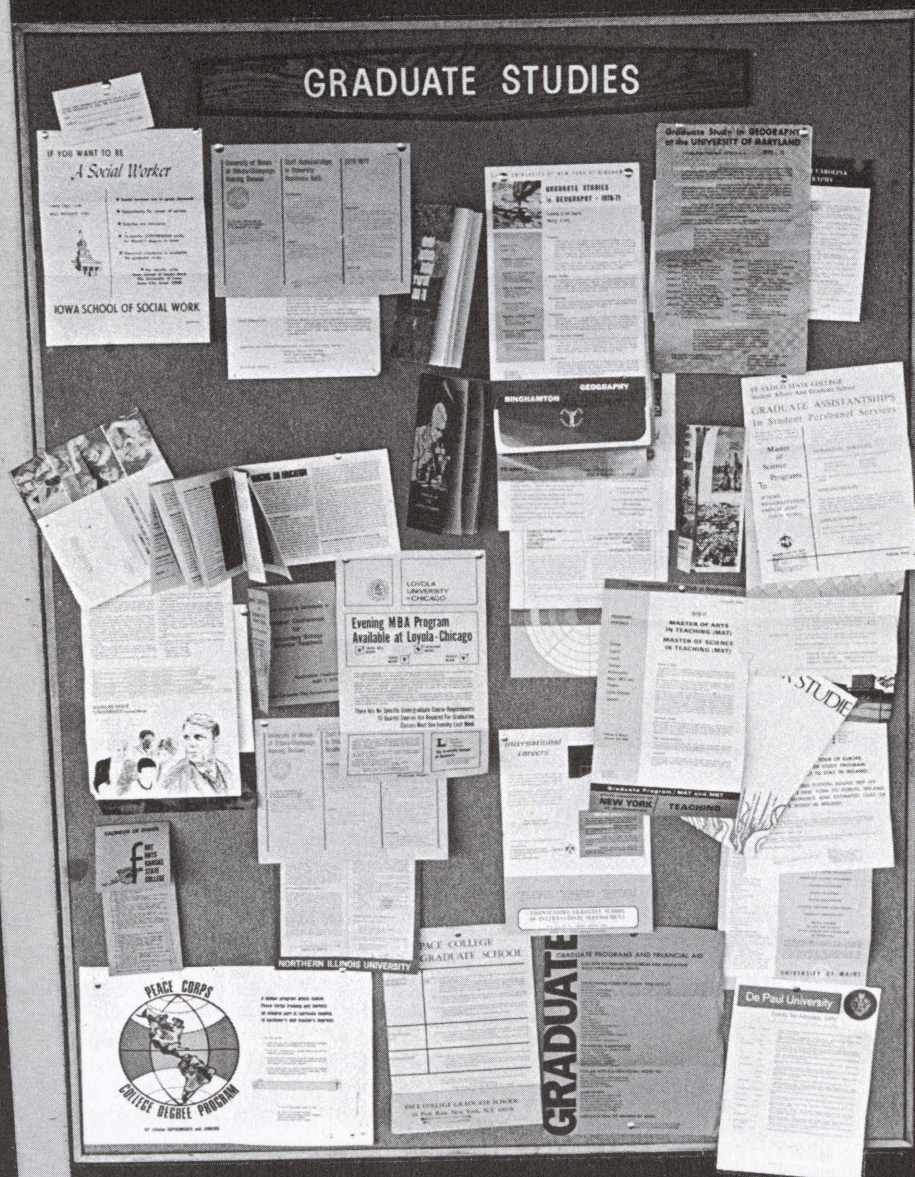
alumni

The Northeastern Illinois State College Alumni Association is open to all former graduates as well as students in their last trimester at the college. Throughout the year, various social

and cultural activities are planned for Alumni and their families. In addition, a quarterly publication entitled, "Alumni News" is issued for the membership of this association.

the graduate college

organization
academic information
admission
tuition
financial aid



accreditation

The Graduate College is accredited by the North Central Association of Colleges and Secondary Schools, and by the Department of Public Instruction of the State of Illinois. It is also a member of the Council of Graduate Schools in the United States.

The Graduate College attempts to provide the atmosphere and facilities in which qualified students join faculty in extending their knowledge and competence and sharing in research of professional and scholarly nature.

Thirty-three individual sequences lead to the Master's degree. The Graduate College offers the majority of its course work during the late afternoon

and evening to accommodate teachers and others in the Chicago area who are pursuing an advanced degree on a part-time basis, or who are taking course work as unclassified students for the purpose of professional advancement. Because the graduate program is organized essentially for part-time students, full-time students may on occasion have difficulty in scheduling a full program.

organization of the graduate college

The Dean of the Graduate College is responsible for implementation of institutional policies related to the Graduate College.

Two faculty committees are involved with the administration of the graduate program. These are the Graduate Executive Council and the Graduate Curriculum Committee. The Graduate Executive Council is elected by the graduate faculty and is the body that normally initiates policy for the administration of the Graduate College. The Graduate Curriculum Committee is a committee of the Curriculum Council; its membership comprises those graduate faculty members serving on the Curriculum Council who have been

appointed by the Faculty Senate to membership on the Graduate Curriculum Committee. This Committee develops and recommends graduate curriculum policy and graduate curriculum changes.

All student inquiries and petitions should be channeled through the Dean of the Graduate College. Applications for admission, for acceptance to degree candidacy, and for graduation should be submitted to the Graduate Office.

Graduate advisors are assigned by the disciplines in which the graduate students are enrolled.

the academic year

The regular academic year consists of three trimesters of 16 weeks each, which will allow a student to complete the requirements for graduation in three years (9 trimesters). Concurrent with the spring trimester, two sessions of eight weeks each are offered.

Attendance

Attendance in class is compulsory. The responsibility for enforcement of attendance rests with each faculty mem-

ber, at whose discretion a student may be dropped from class for absence with a grade of "F".

In the event of return following extended absence due to illness, a student may be required to present a statement signed by a physician, concerning the nature and duration of that illness.

A student must attend the class and section for which he is registered. He

may not attend a class other than the one for which he is registered.

A student may not attend meetings of a class without first registering for it. However, a student dropping a course within the first nine weeks of the sixteen week trimester, or within the first five weeks of an eight week term, may remain in attendance without possibility of credit, provided he has the consent of the instructor and continues in residence at the college.

Students are required to be present at the beginning of the term and to remain until the work of the term is finished.

Unit of Credit

The unit of credit is the semester hour. The semester hour consists of the equivalent of one 50-minute lecture or discussion period, or two laboratory periods per week, for a trimester. For individual study programs, the time requirement for a credit unit will be arranged.

Marking System

Letter grades are given; the grade-point values are:

Letter Grade	Grade Points Per Credit Hour
A	5
B	4
C	3
D	2
F (failure)	1
P (pass—used in Experimental College)	No grade point value
V (visitor)	No credit, No grade point value
I (incomplete)	

Under certain circumstances, the symbols L, W/P and W/F are used instead of letter grades.

I (Incomplete), may be given if a student is absent from the final examination or fails to complete a special research or individual study project because of some unavoidable circumstances, such as illness. The instructor should be notified within twenty-four hours after the time scheduled for the examination or completion of the paper or project. It is the responsibility of the student to make arrangements for removal of an incomplete grade. The I (incomplete) will be retained until such time as the instructor assigns a regular grade.

V (Visitor). A student who wishes to audit courses must obtain the written

permission of the instructor, must register in the regular manner, and pay all fees charged students earning credit in the same course. Auditors' names will appear in the record designated as V, and no credit will be conferred. Once a student has enrolled as an auditor in a course, he may not change his registration to earn credit.

The Student's Program

The recommended credit hour load for full-time students in the graduate program is 12 semester hours of academic work in the regular sixteen-week trimester and 6 semester hours in the special eight-week terms.

The recommended credit hour load for students who are engaged in full-time employment is 6 semester hours in the sixteen-week trimester and 3 semester hours in the eight-week term.

Dropping Classes

A student who wishes to drop a class during the first nine weeks of instruction in the regular sixteen-week trimester, or during the first five weeks of instruction in the eight-week terms, must fill out a change of registration form in the Record Office and pay a change of registration fee. Before the end of the ninth week of the sixteen-week term, or the end of the fifth week of the eight-week term, a student may be dropped from class for absence as well as for other reasons with a grade of "F". A student who drops a class or withdraws from the College during these periods receives an L (left).

Beginning with the tenth week of the sixteen-week trimester or the sixth week of the eight-week term, official withdrawal from any class is no longer possible; **unofficial withdrawal results in an F**. Special circumstances, such as extended serious illness, may make it necessary or advisable for a student to drop courses after this period. In that event, at the discretion of the instructor, a grade of W/P (withdrew passing) or W/F (withdrew failing)—depending on the student's status in the class—may be given instead of F.

In-Service And Institute Programs

The College also provides an opportunity for teachers to improve their academic background and their classroom skills by specialized course offerings and in-service institutes. These courses are scheduled in the late day, evenings, and Saturdays or during the summer. Many of these courses are given at the graduate level and may be used for promotional credits or salary adjustments. Separate brochures describe these institutes and workshops.

admission

General Admission Requirements

All applicants who wish to enroll in graduate courses at Northeastern Illinois State College must satisfy the following general requirements for admission.

1. Possession of a degree from an accredited college or university, or an institution that is recognized for full transfer credit. Degree transcripts from foreign schools are normally submitted for evaluation to the Comparative Education Branch of the United States Office of Education in Washington, D.C. Accordingly, a delay in processing the application should be anticipated.
2. Persons who have served in the armed forces of the United States are expected to have been honorably discharged.

Admission as an Unclassified Student

Applicants who wish to enroll in graduate courses but who do not intend to seek admission to a Master's degree program may do as follows:

1. Fulfill the general requirements.
2. Secure a Registration Permit from the Admissions Office prior to the time of initial registration.
3. Select appropriate courses, those for which the student is eligible in terms of prerequisites or "consent of instructor." Students who do not have the published prerequisites may be required to drop the course and to pay the change of registration fee. In reading the prerequisites, careful attention should be paid to the differences among "graduate standing," "degree student" and "Master's degree candidate."

Graduate standing indicates possession of an acceptable degree;

degree student means that the student has been admitted to a specific graduate program; and

Master's degree candidate means that the student has been formally accepted for degree candidacy.

Courses taken as an unclassified graduate student are not automatically accepted in a degree program if the

student subsequently applies for admission and is accepted.

A maximum of 9 hours credit earned as an unclassified student is transferable to a degree program if the student applies and gains admission. Such work would have to correspond to the specific degree program requirements.

Admission to a Degree Program

Unconditional admission to a degree program is dependent upon the following criteria:

1. Fulfillment of the general admission requirements.
2. Filing of the Application for Admission to the Graduate College and arranging for receipt of all necessary transcripts: **two copies of degree transcript, two copies of each transcript of graduate work already completed.** If the undergraduate degree transcript shows more than nine hours of transfer credit, duplicate transcripts of the original record are also required.

The Graduate College cannot accept "in hand" transcripts submitted by students, nor — once a transcript has been received as a corroborating document — can it be released from the files of the Graduate College. Delay in the receipt of transcripts will delay evaluation of the Application for Admission; it is the applicant's responsibility to arrange for receipt of transcripts by the Graduate Office directly from the colleges previously attended.

3. Departmental or program committee approval, including any additional specific requirements. The final decision regarding all applications for admission rests with the graduate faculty members of the appropriate department.

After the Application for Admission has been evaluated, the student will receive a letter from the Dean of the Graduate College indicating the results of the evaluation. If the evaluation is not completed by the time of registration, it is suggested that the student register as an unclassified graduate student. (Please refer to the section for Admission as an Unclassified Student.)

Since each graduate degree program has its own specific course requirements, it is imperative that the student assume the responsibility for contacting the assigned advisor in the program. The letter of admission will identify the advisor. **Detailed program counseling cannot be done—and should not be expected—at registration time; the student should arrange for an appointment with the advisor well in advance of any registration period.**

Conditional Admission to a Degree Program

Conditional admission to a degree program may be granted upon the approval of the Dean of the Graduate College and of the departmental advisor.

1. Conditional status resulting from:
 - a. possession of a degree from a non-accredited college or one that is not granted full transfer credit, or
 - b. an undergraduate grade point average below 3.75.

The above conditions must be removed no later than at the completion of 12 hours in the degree program by achievement of a minimum grade point average of at least 4.0 (B); otherwise, the conditional admission is rescinded. The student may, however, continue to take courses as an unclassified graduate student, subject to the regulations appropriate thereto.

2. Conditional status resulting from failure to meet specific departmental requirements must be removed by fulfillment of the requirements by such time as is deemed appropriate by the Dean of the Graduate College and the departmental advisor. In no case will the student be accepted to degree candidacy until all provisions of the conditional admission are satisfied.

Requirements for Degree Applicants

In addition to the requirements for admission to a degree program (possession of the necessary prerequisites, an average of at least B in the undergraduate work that forms the foundation for the graduate program, and an overall undergraduate scholastic average of C +) the student must, during the period while he is working for the Master's degree, satisfy the following requirements:

1. All graduate credits within the scope of the specific Master's Program, not only those actually applied, must average at least B.

No more than 6 hours of C credit will be accepted. Grades below C bear no credit toward the degree and the student will become ineligible for the degree upon receiving grades below B in four courses.

2. The student must take and perform acceptably on the Miller Analogies Test by the time he has completed no more than 6 hours of work in the degree program. This test is scheduled periodically at the College.
3. In the Master of Education programs in Language Arts and in Mathematics, and in the Master of Arts programs in Guidance and Counseling and in Special Education, the student must have acquired a permanent (not temporary) city or state teaching certificate.
4. In the programs in Guidance and Counseling and in Special Education, the student must have at least one year teaching experience, and two letters of recommendation are required at the candidacy stage. An interview may also be required.

Documents to be Submitted by Degree Applicants

From the time of admission to a degree program to the date of commencement and the awarding of the Master's degree, the applicant must submit to the Graduate Office the following documents in the sequence indicated:

(Note the difference between admission to a degree program and acceptance to degree candidacy)

1. "Application for Admission to the Graduate College" with indication of a specific degree program. Duplicate copies of the necessary transcripts are required to complete the application (see "Admission to a Degree Program"). A letter with the results of the evaluation will be sent to the applicant.
2. "Application for Acceptance to Candidacy for the Master's Degree." This form should be submitted after the student has been admitted to a degree program and after he has completed a minimum of 12 hours of course work in the program during which he has demonstrated his competence and professional motivation through the achievement of a grade point average of at least 4.0 (B). A maximum of six hours of course work accepted on transfer from other colleges or universities may be used for the candidacy application. All provisions for students admitted conditionally must have been satisfied. (See also the third and fourth requirements under "Requirements for Degree Applicants.")

sities may be used for the candidacy application. All provisions for students admitted conditionally must have been satisfied. (See also the third and fourth requirements under "Requirements for Degree Applicants.")

3. "Preliminary Application for Graduation." After the student has been accepted for degree candidacy and when he has completed additional work so that he can reasonably expect to graduate on a given date, this preliminary application may be filed. The status of the applicant will be determined and he will be informed of all outstanding requirements. He will also be informed as to whether or not there is a possibility for completion of these requirements by the deadline date preceding the date of anticipated graduation. This deadline is approximately six weeks in advance of graduation and **all requirements must be completed as of the deadline. Extension and/or exceptions cannot be granted and should not be requested!**
4. "Final Application for Graduation." After the preliminary application has been approved and the student plans to complete the outstanding requirements by a given deadline date, the final application may be filed. The non-refundable and non-transferable graduation fee of \$15.50 must accompany the final application. The \$15.50 fee cannot be carried over if the student fails, for any reason, to graduate on schedule.

Deadline dates for submission of the various applications and for the completion of requirements for graduation are given each trimester in the Evening and Saturday Bulletin, Graduate Announcements Section and also in the Inside Back Cover of this catalog.

Transfer of Credits, Time, Limitations, etc.

1. A minimum of 21 hours of graduate work must be taken in residence at Northeastern Illinois State College before the Master's degree may be awarded.
2. A maximum of 9 hours of transfer credit **may** be accepted. Students desiring to transfer credits must first be admitted to a degree program and must write a letter of petition to the Dean of the Graduate College. **The course(s) in question should be identified by title, number, school, and a general description.** A transcript

of the work must be on file in the Graduate Office. The petition will be evaluated by the appropriate department and the student will be informed of the results. The criteria for acceptance are: the work must have been taken at an accredited institution; it must be relatively recent; the grade(s) must be at least B; and the course(s) must be the equivalent of one that applies to the degree sequence.

3. In the case of graduate credit taken at colleges and universities outside of the United States, recommendation of the appropriate department and approval of the Graduate Executive Council must be secured for transfer credit. Documentation of work abroad will be necessary and consultation with an outside agency may be necessary.
4. A maximum of 6 hours of graduate work taken prior to the granting of the bachelor's degree **may** be accepted if these credits have not been applied to the baccalaureate degree.
5. The graduate program must be completed within a period of six years. Course credit will be withdrawn for any work completed more than six years prior to the granting of the Master's degree.
6. Students applying for waiver of specific course requirements through demonstration of competence may petition the appropriate department or program committee.

Thesis Seminar, Independent Study, Tutored Study

Independent Study is a carefully delineated area of interest to be examined by the student or original research. It is not a previously structured regular course. The student is required to indicate the nature and scope of the area to be studied and why he wishes to take the course. The instructor should present a statement on how he proposes to conduct the course, somewhat in the nature of a contractual obligation between instructor and student.

Tutored Study is a regular course taken by the student under the direction of an instructor outside a formal class setting. Under normal circumstances, no attempt should be made to use the Tutored Study course as a substitute for a course formally listed in the College Catalog or Schedule of

Classes. Tutored Study courses should not be used as a substitute for required courses in meeting graduation requirements.

Students who plan to take courses through independent study, tutored study or who plan to register for the thesis seminar must complete the appropriate forms in order to obtain approval, insure proper assignment of course number and section, and arrange for preparation of appropriate class cards. This form may be obtained at the Record Office or the Graduate Office. **THIS FORM MUST BE COMPLETED AND SUBMITTED TO THE VICE PRESIDENT OF ACADEMIC AFFAIRS (for Independent Study and Tutored Study) OR GRADUATE DEAN (for Thesis Seminar) AT LEAST ONE WEEK IN ADVANCE OF STUDENT'S REGISTRATION DATE.**

Thesis Procedures

The "Manual of Thesis Procedures" and "Guidelines for Master's Projects for Students in the Special Education Program" are available upon request at the Graduate Office. Students who write a thesis or do a project as part of their graduate degree requirements are expected to be familiar with and to follow the guidelines as indicated in these pamphlets.

Certification of Status

If a graduate student has completed all academic requirements and is awaiting the formal awarding of the degree at the following commencement

ment exercises, the Dean of the Graduate College will, at the student's request, issue a letter certifying the student's status. Such letters are normally accepted by boards of education for salary increment purposes.

Exceptions

Exceptions to the published regulations of the Graduate College may be made only after approval of the Graduate Executive Council following the submission of a petition.

Changes in Policy

The College reserves the right to make whatever changes in policy may be necessary from time to time.

Chicago Certification; State Certification

Individuals who wish to take course work in order to meet Chicago certification requirements, extend their certificates, or meet course requirements for an additional certificate, should acquaint themselves with the rules and information regarding examinations of candidates for certificates to teach as published in the Circular of Information issued by the Board of Examiners, 228 N. LaSalle Street, Chicago, Illinois 60601.

Individuals who wish to take course work for the purpose of meeting State of Illinois certification requirements are advised to secure detailed information from the Illinois State Certification Board, 188 W. Randolph Street, Chicago, Illinois 60601.

Statement of Fees

All tuition and fees are subject to change without notice by action of the Board of Governors of State Colleges and Universities. These fees must be paid at the time of registration. There will be a \$3 service charge for checks returned by the bank for any reason.

tuition

RESIDENTS Per Trimester

Registration Fee	
7 credit hours or more	....\$210.00
6 credit hours or less,	
per credit hour	..... 32.00
Student Fees	
Student Union	.....\$ 10.00
6 credit hours or less	... 5.00
Student Activities	..... 18.00
*Health Insurance	
single plan	..... 12.80
family plan	..... 47.70

*The Group Hospitalization Plan, indicated above, is optional for graduate students.

Extension Courses, per credit hour\$ 24.00

Per Eight-Week Term

Registration Fee	
4 credit hours or more	....\$105.00
3 credit hours or less,	
per credit hour	..... 32.00
Student Fees	
Student Union	.....\$ 5.00
3 credit hours or less	... 2.50
Student Activity	..... 9.00

NON-RESIDENTS Per Trimester

Registration Fee	
7 credit hours or more	....\$633.00
6 credit hours or less,	
per credit hour	..... 95.00
Student Fees	
Student Union	.....\$ 10.00
6 credit hours or less	... 5.00

Student Activities	..... 10.00
*Health Insurance	
single plan	..... 12.80
family plan	..... 47.70

*The Group Hospitalization Plan, indicated above, is optional for graduate students.

Per Eight-Week Term

Registration Fee	
4 credit hours or more	....\$316.50
3 credit hours or less,	
per credit hour	..... 95.00
Student Fees	
Student Union	.....\$ 5.00
Student Activity	..... 9.00

Fees Applicable to All Students

Application Fee	.....\$ 15.00
Required of all undergraduate on campus students registering at Northeastern Illinois State College for the first time. This fee is not refundable and not applicable toward other fees.	
Late Registration Fee	.....\$10.00
Late Examination Fee	..... 1.00
Graduation Fee, includes cap and gown rental	
Undergraduates	..... 12.50
Graduates (includes hood rental)	..... 15.50
Thesis Fee (3 copies required)	15.00
Additional copies, per copy	2.50
Transcript Fee	
(each copy after first)	1.00
ID Card Replacement Fee	1.00
Change of Registration Fee	5.00
This fee is not charged if:	
a) a student drops all courses	
b) a student must make a program change because of a failure the preceding term	
c) a program change is required because of a cancelled class, or	
d) a student adds a class	
Vehicle Registration	.....\$6.00
Special fees, where applicable, are shown in the schedule of classes.	

Refunds

Final dates for refunds upon complete withdrawal from the college will be

stated in the schedule of classes. In the regular 16-week trimester, the final date will be the tenth day after classes begin. In the 8-week session, the final date is the fifth day after classes begin. Note: There is no partial refund of tuition. Activity fees are not refundable. Laboratory and material fees may be refunded if the fee card is returned for the current term. Parking fee refund requests should be directed to the Supervisor of Parking and Security.

Out-of-State Fees

Students who do not meet the following residence requirements will be assessed the official out-of-state fees.

1. Students under 21 years of age are considered residents of Illinois only if their parents (or legal guardians) are residents of Illinois. This means that the parents or legal guardians have a permanent place of abode in Illinois of such a nature as would qualify them to vote in this state.
2. Students over 21 years of age are considered residents of Illinois only if they have established a bona fide residence in Illinois for a period of 12 months preceding registration and are residents at the time of registration.
3. An exception to these criteria is made for a woman student of any age who becomes an Illinois resident upon marriage to a man who is a legal resident.
4. Students who move into the State of Illinois and formally file an intent to remain here.
5. In all cases where questions as to residence arise, the student is responsible for furnishing evidence to support his claim, which will be taken to the Vice-President for Academic Affairs for settlement.

financial aid for graduate students

Financial assistance for graduate students at Northeastern is available on a limited basis.

Basically two aid categories exist: those assistance programs geared to full-time graduate students only (9 cr. hrs. or more) and those open to full or part-time graduate students.

Full-time Programs

1. **National Defense Student Loans:** Federal regulations allow half-time students to receive NDSL's; however, funds have been in such short supply in recent years that the Financial Aid Office has been forced to limit NDSL's to full-time students.

Applicants must complete a needs analysis form (available in the NISC Financial Aid Office). The Financial Aid Office staff will compute the student's need and advise him of the exact dollar amount for which he is eligible. Graduate students may receive up to \$2,500 per year if need is demonstrated and funds are available. Repayment, usually extended over a number of years (maximum of 10), begins one year after graduation. NDSL's carry the benefit of partial cancellation through teaching.

2. Illinois Guaranteed Loans (State):

Full-time graduate students may borrow up to \$1,500 per academic year (no needs analysis necessary) through a local bank, savings and loan, or credit union. Repayment of the principal (plus 7% simple interest per year) begins 9 months after departing the institution and may not be extended beyond six years. Minimum payment on principal is \$30 per month. NOTE: This loan provides no cancellation feature for teachers.

3. Student Employment: Two types of student employment exist at NISC:

a. Student Aide Jobs: Part-time, on-campus jobs are available to full-time students who apply early to the Financial Aid Office each term. Applications may be obtained by mail or at the reception desk.

b. Work-Study Jobs (federal program): Federally financed jobs on-campus or off-campus are available to full-time Northeastern students who show that they have need for funds to continue their education. Off-campus jobs are arranged with public or private non-profit agencies and must serve the public interest. Both Student Aide and Work-Study jobs are generally limited to 15 hours per week, which is felt to be prudent in light of study demands. Students may work 40 hours per week during trimester breaks with the consent of employers.

Full or Part-time Programs

1. Assistantships: Certain academic departments at NISC have assistantships available on a limited basis. Interested graduate students should contact the individual department.

2. Fellowships: Characteristically, fellowship programs change from year to year; new fellowships are initiated,

others expire. Fellowships currently in effect at NISC are as follows:

a. Prospective Teacher Fellowship. Program in Inner City Studies (with an emphasis on linguistics and language development): A three-trimester program to train teachers for inner city teaching situations; culminates in M.Ed. in Inner Cities Studies. Contact:

Dr. Nancy Arnez
Director, Center for Inner
City Studies
Northeastern Illinois State
College
700 E. Oakwood Blvd.
Chicago, Illinois 60653

b. State of Illinois Fellowships in Special Education (handicapped children). Interested students should write the Superintendent of Public Instruction in Springfield for publication entitled "Article 14, Handicapped Children."

Applications for such fellowships may be obtained from:

Dr. William Itkin
Director, Special Education
Northeastern Illinois State
College

3. Scholarships: Tuition scholarships are available to students who hold valid Illinois Teacher Certificates and who wish to take graduate work in special education. Such students should contact their County Superintendent of Schools for information concerning application procedure.

4. Veterans Benefits: Graduate students are eligible to participate in either or both of the veterans programs at Northeastern:

a. The Federal G.I. Bill (applications available in the Financial Aid Office)

b. The State of Illinois Veterans Scholarship: The State of Illinois will provide a 4-year waiver of tuition and fees to any veteran who resided in Illinois until at least 6 months prior to induction or enlistment and served on active duty in the Armed Forces for at least one year at any time since September, 1940. The veteran must submit a copy of his Separation Form (DD-214) to the Financial Aid Office, verifying his honorable discharge and Illinois residency.

For further information concerning any form of Financial Aid at Northeastern, call 583-4050, extension 451.



master's degree programs

available program sequences

Available program sequences leading to the Master's Degree are as follows (details of each program can be found on the appropriate page as indicated).

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english

master of arts in literature

The program is designed to service teachers, as well as students who are not in the teaching profession. It would benefit secondary teachers and students who intend to continue their graduate work beyond the MA or who wish to teach in a Junior College.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Students electing this program must have completed 30 hours of undergraduate work in English. Included in the 30 hours must be at least six hours in two of the following areas: Chaucer, Shakespeare, Literary Criticism. History of the English Language may be substituted for Chaucer. (All of these must be covered at the completion of the degree program.)

Requirements for the Degree

The program requires twenty-seven hours of course work, a six-credit thesis, and final written and oral examinations.

Thesis

A thesis is required, and students who intend to pursue further study in Literature beyond the Master's degree are also urged to become proficient in French or German. After he achieves

candidacy, the student will be assigned a thesis advisor with whom he must consult before selecting a topic. The approved thesis must be submitted to the departmental graduate advisor at least one month before the final examination.

Examination

There will be a four hour written and a one hour oral final examination. Successful completion of the written examination is a prerequisite for the oral examination. The oral will involve the thesis. Students who fail any part of the written examination may take that part the following year. A student who fails the oral examination may take the examination one more time. The graduate advisor may require a student who fails any part of the examination to take extra course work.

Courses

Credits

Thirty-three hours in Literature distributed as follows:

14-431 Bibliography and Methods of Literary Study . .	3
American Literature courses at the 400 level including at least one seminar	6
English Literature courses at the 400 level including at least one seminar	9
Electives to be chosen from 300 level or 400 level courses with guidance of the advisor	9
14-453 Thesis Seminar: Literature	6

master of arts in the teaching of english: literature

This program is designed for teachers who desire advanced training in the appreciation and criticism of literary works and who wish to utilize this learning in the classroom.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Students electing this program must have completed 30 hours of undergraduate work in English. In undergraduate or graduate studies,

courses in the following areas must be presented:

History of the English Language or Chaucer	3
American Literature	6
English Literature	6
Shakespeare (in addition to the above)	3
Rhetoric and Composition	6

Requirements for the Degree

Course requirements include 21 credits in Literature and 9 credits in Education. In connection with the two required seminars, students must complete two extensive papers demon-

strating their ability in literary and critical analysis. These papers must have been accepted by the Department of Literature at least two months before the final examination. The final examination will test the student's knowledge and critical abilities in English Literature from 1500 to the present, plus Chaucer; and American Literature from 1700 to the present.

Literature: 21 credits Credits
14-431 Bibliography and Methods of Literary Study 3
(Prerequisite to all seminars)

Education: 9 credits

64-414 Principles of Curriculum Development 3
65-421 Research in Classroom Teaching of Language Arts 3
69-402 Television and Related Instructional Media ... 3

master of education in the teaching of language arts

This program is designed to meet the needs of teachers who desire work in the Language Arts on a graduate level and who wish to utilize further this knowledge in the classroom.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: In undergraduate work the student must present the following: Education, 15 credits; Language Arts, 18 credits — including Writing (6), Literature (6), Speech (3), and Reading or Language Arts (3).

Requirements for the Degree

Program requirements include 36 credits in course work, 21 in Language Arts and 15 in Education. Possession of a permanent State or Chicago teaching certificate is required at the time of application for degree candidacy. Two special papers must be submitted. Normally, these papers will be initiated in the required Language Arts courses and must be completed before the final written examination. The final examination will consist of two parts:

- a written examination testing competence in all areas of the Language Arts.
- an oral examination related to the written examination.

Language Arts (required): 18 credits

14-432 The Literary Experience in the Elementary School. 3
15-414 Specialized Problems in Speaking and Listening 3
28-417 Linguistics for the Classroom Teacher ... 3

28-419 Fundamentals of Modern Linguistics ... 3
68-401 Developmental Reading Theory 3
68-402 Specialized Problems in Reading Instruction ... 3

Language Arts (elective): 3 credits, to be chosen from

15-308 Independent Study in Speech 3
15-355 Advanced Oral Interpretation 3
15-362 The Film as an Art Form . 3
15-393 Creative Dramatics 3
15-425 Interpretation of Prose for Children 3
69-333 Library Materials for Language and Creative Arts 3

Education (required): 9 credits

64-414 Principles of Curriculum Development 3
65-421 Research in the Classroom Teaching of Language Arts 3
69-402 Television and Related Instructional Media ... 3

Education Courses (elective): 6 credits to be chosen from

62-411 Comparative Education .. 2
62-412 Selected Concepts in the Philosophy of Education 2
62-413 Teacher Interpersonal and Intergroup Relations 2
64-418 Classroom Problems in Teaching-Learning Process 2
66-411 Testing and Evaluation .. 2
69-401 The Theory of Programmed Instruction 2

guidance and counseling

master of arts in guidance and counseling elementary school level

This program is designed to train the elementary school counselor; however, the classroom teacher who desires to remain as such would also be more effective upon completion of this program. Judicious selection of courses will insure meeting approval standards pertaining to counselor education effective January 9, 1968, State Teacher Certification Board. Persons interested in qualifying for counselor approval should study carefully State requirements as listed, following the outline of the degree program. Students who are desirous of meeting requirements for the position of adjustment teacher in the Chicago Public Schools should plan their work consistent with Chicago requirements.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: (1) Three credits in undergraduate Educational Psychology or its equivalent. (2) An undergraduate Reading Methods course. A course in Language Arts is **not** acceptable. (3) The student must possess a standard State or permanent Chicago teaching certificate at the time of making application for the program. **The original certificate or a photostatic copy is required with the application for admission.** State certificates must indicate **current** validity on the reverse side. Chicago certificates dating back beyond three years must be accompanied by a letter signed by the principal of the school in which the applicant is employed. Said letter must state that the applicant is **assigned** and is teaching on a **permanent** certificate. (4) One year of teaching experience at the elementary level on a standard state or permanent Chicago teaching certificate is required at the time application for admission is made.

Requirements for the Degree

(1) Satisfactory completion of 36 credits (30 required hours and 6 hours of applicable electives) as indicated below. (2) Satisfactory completion of a comprehensive examination. (3) At the time of application for candidacy, two letters of recommendation are required from administrators who have had an opportunity to observe the student's teaching. (4) **SPECIAL NOTE:** The nature of the counseling relationship with pupils and students is such that certain characteristics must exist in an individual doing counseling. **The possession of high or excellent scholastic ability does not insure that the needed characteristics are present.** Therefore, it must be understood and accepted by the student entering the program that at **any time** in the program an evaluation as to fitness **for counseling** may be made by the staff, with the possibility that a student may be dropped from the program.

Area 1. Principles and Techniques of Guidance

66-313 Principles and Techniques of Guidance	Credits 3
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Area 2. Appraisal Techniques

36-331 Tests and Measurements ..	3
or	
66-411 Testing and Evaluation ..	2
plus	
66-412 Laboratory in Testing and Evaluation	1

Area 3. Growth and Development of the Individual

37-311 Psychology of Exceptional Children ..	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities ..	3
66-321 Diagnosis and Treatment of Reading Difficulties ..	3
66-455 Classroom Applications of Learning Principles (elective)	3

Area 4. Principles and Practices of Counseling

36-436 The Counselor and the Counseling Process (elective)	3
36-437 Theories and Principles of Counseling	3
66-413 Group Work in the Educational Setting (elective)	3
66-451 Practicum I in Guidance and Counseling	3
66-452 Practicum II in Principles and Practices of Counseling	3

Area 5. Occupational, Educational, and Personal and Social Information

37-461 Cultures of the Disadvantaged	3
or	
47-316 Urban Ecology	3
or	
66-312 Education in a Large Urban Area	3
66-456 Community Resources and the Schools	3

Area 6. Organization of Guidance Services

66-458 The School Guidance Program (elective)	3
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Area 7. Mental Health and/or Personality Dynamics

36-311 Psychology of Personality ..	3
or	
36-328 Psychology of Mental Health	3
37-322 Mental Health and Behavior Deviations (elective)	3

Area 8. Research

36-453 Research Seminar in Guidance and Counseling	3
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Note: Where choices are offered under required courses those courses not selected for meeting requirements may be considered electives.

Courses meeting approval standards for Illinois schools participating in the State program under the auspices of Title V. National Defense Education Act.

Area 1. Principles and Technique of Guidance

66-313 Principles and Techniques of Guidance	3
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Area 2. Appraisal Techniques

36-331 Tests and Measurements ..	3
66-411 Testing and Evaluation ..	2
plus	
66-412 Laboratory in Testing and Evaluation	1

Area 3. Growth and Development of the Individual

36-412 Advanced Child Psychology	3
37-311 Psychology of Exceptional Children ..	3
*38-401 Diagnosis and Remediation of Severe Learning Disabilities	3
*66-321 Diagnosis and Treatment of Reading Difficulties	3
*66-455 Classroom Applications of Learning Principles ..	3

Area 4. Principles and Practices of Counseling

*36-436 The Counselor and the Counseling Process ...	3
*36-437 Theories and Principles of Counseling	3
*66-413 Group Work in the Educational Setting ...	3
66-451 Practicum I in Guidance and Counseling	3
66-452 Practicum II in Principles and Practices of Counseling	3

Area 5. Occupational, Educational and Personal and Social Information

*37-461 Cultures of the Disadvantaged	3
*47-316 Urban Ecology	3
66-456 Community Resources and the Schools	3

Area 6. Organization of Guidance Services

66-458 The School Guidance Program	3
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Area 7. Mental Health and/or Personality Dynamics

36-311 Psychology of Personality	3
36-328 Psychology of Mental Health	3
*37-322 Mental Health and Behavior Deviations ..	3

Area 8. Research

36-453 Research Seminar in Guidance and Counseling	3
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**Starred courses are electives that can be counted toward fulfillment of the total required credits but cannot be counted as fulfilling one of the area requirements. The State of Illinois requires at least one course in areas 1, 2, 3, 4, 5, and 7.*

master of arts in guidance and counseling secondary school level

This program is geared to the needs of the secondary school counselor; however, the classroom teacher who desires to remain as such would also be more effective upon completion of this program. The judicious selection of courses will insure meeting approval standards pertaining to counselor education effective January 9, 1968, State Teacher Certification Board. Persons interested in qualifying for counselor approval should study carefully State requirements as listed, following the outline of the degree program.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: (1) Three credits of undergraduate Educational Psychology or its equivalent. (2) One course at the undergraduate level from among General Psychology, Introduction to Psychology, or Elementary Psychology—or equivalent. (3) The student must possess a standard State or permanent Chicago teaching certificate at the time of making application for the program. **The original certificate or a photostatic copy is required with the application for admission.** State certificates must indicate **current** validity on the reverse side. Chicago certificates dating back beyond three years must be accompanied by a letter signed by the principal of the school in which the applicant is employed. Said letter must state that the applicant is **assigned** and is teaching on a **permanent** certificate. (4) One year of teaching experience at the secondary level on a standard State or permanent Chicago teaching certificate is required at the time application for admission is made.

Requirements for the Degree

(1) Satisfactory completion of 36 credits (30 required hours and 6 hours of applicable electives) as indicated below. (2) Satisfactory completion of a comprehensive examination. (3) At the time of application for candidacy, two letters of recommendation are required from administrators who have

had an opportunity to observe the student's teaching. (4) **SPECIAL NOTE:** The nature of the counseling relationship with pupils and students is such that certain characteristics must exist in an individual doing counseling. **The possession of high or excellent scholastic ability does not insure that the needed characteristics are present.** Therefore, it must be understood and accepted by the student entering the program that at **any time** in the program an evaluation as to fitness **for counseling** may be made by the staff, with the possibility that a student may be dropped from the program.

Area 1. Principles and Techniques of Guidance

Credits

- 66-313 Principals and
Techniques of
Guidance 3

Area 2. Appraisal Techniques

- 36-331 Tests and Measurements. 3
or
66-411 Testing and Evaluation .. 2
plus
66-412 Laboratory in Testing
and Evaluation 1

Area 3. Growth and Development of the Individual

- 36-329 Adolescent Psychology .. 3
38-401 Diagnosis and
Remediation of
Severe Learning
Disabilities 3
or
66-321 Diagnosis and Treatment
of Reading Difficulties . 3
66-455 Classroom Applications
of Learning Principles
(elective) 3

Area 4. Principles and Practices of Counseling

- 36-436 The Counselor and the
Counseling Process
(elective) 3
36-437 Theories and Principles
of Counseling 3
66-413 Group Work in the
Educational Setting
(elective) 3

- Credits
66-453 Practicum I in Guidance
and Counseling
(Secondary Level) 3
66-454 Practicum II in Guidance
and Counseling
(Secondary Level) 3

Area 5. Occupational, Educational, and Personal and Social In- formation

- 37-461 Cultures of the
Disadvantaged 3
or
47-316 Urban Ecology 3
or
66-312 Education in a Large
Urban Area 3
66-457 Information and
Resources for
Secondary School
Guidance 3

Area 6. Organization of Guidance Services

- 66-458 The School Guidance
Program (elective) 3

Area 7. Mental Health and/or Per- sonality Dynamics

- 36-311 Psychology of Personality 3
or
36-328 Psychology of Mental
Health 3
36-421 Introduction to Clinical
Psychology (elective) . 3
37-322 Mental Health and
Behavior Deviations
(elective) 3

Area 8. Research

- 36-453 Research Seminar in
Guidance and
Counseling 3

Note. Where choices are offered under required courses those courses not selected for meeting requirements may be considered as electives.

Courses meeting approval standards for Illinois schools participating in the State program under the auspices of Title V. National Defense Education Act.

Area 1. Principles and Techniques of Guidance

- 66-313 Principles and
Techniques of
Guidance 3

Area 2. Appraisal Techniques

- 36-331 Tests and
Measurements 3
66-411 Testing and Evaluation .. 2
plus
36-412 Laboratory in Testing
and Evaluation 1

Area 3. Growth and Development of the Individual

- Credits
36-329 Adolescent Psychology .. 3
*38-401 Diagnosis and
Remediation of
Severe Learning
Disabilities 3
*66-321 Diagnosis and
Treatment of Reading
Difficulties 3
*66-455 Classroom Applications
of Learning Principles . 3

Area 4. Principles and Practices of Counseling

- *36-436 The Counselor and the
Counseling Process ... 3
*36-437 Theories and Principles
of Counseling 3
*66-413 Group Work in the
Educational Setting ... 3

- 66-453 Practicum I in Guidance
and Counseling
(Secondary Level) 3
66-454 Practicum II in Guidance
and Counseling
(Secondary Level) 3

Area 5. Occupational, Educational, and Personal and Social In- formation

- *37-461 Cultures of the
Disadvantaged 3
*47-316 Urban Ecology 3
66-457 Information and
Resources for
Secondary School
Guidance 3

Area 6. Organization of Guidance Services

- 66-458 The School Guidance
Program 3

Area 7. Mental Hygiene and/or Personality Dynamics

- 36-311 Psychology of Personality 3
36-328 Psychology of Mental
Health 3
*36-421 Introduction to Clinical
Psychology 3
*37-322 Mental Health and
Behavior Deviations ... 3

Area 8. Research

- 36-453 Research Seminar in
Guidance and
Counseling 3

**Starred courses are electives that can be counted toward fulfillment of the total required credits but cannot be counted as fulfilling one of the area requirements. The State of Illinois requires at least one course in each of Areas 1, 2, 3, 4, 5, and 7.*

inner city studies

master of arts in inner city studies

This program is intended essentially for students who intend to work in various capacities, other than teaching, in the inner city. It is intended to provide training in depth in one or two relevant areas.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Requirements for the Degree

Program requirements include 30 credits in course work, a thesis, and speaking and listening knowledge of either Spanish or the Negro ghetto idiom. Students must take a written examination covering all course work (may not be taken until all course work is completed) and must give a defense of their research and thesis in a final oral examination. The program is to be organized under the guidance of the faculty advisor.

Required Courses: 21 credits

	Credits
91-352 Research Methods in Inner City Studies	3

Credits

91-353 Research Writing	3
91-411 Graduate Study in Disadvantage	3
91-412 Pathology in the Afro-American Ghetto	3
91-421 Seminar in Disadvantage—the Negro	3
or	
91-422 Seminar in Disadvantage—the Southern Mountain White	3
or	
91-423 Seminar in Disadvantage—the Spanish-Speaking	3
91-452 Field Internship	3
91-453 Seminar in Field Internship	3

Thesis Credit: 3 credits

91-451 Research and Thesis	3
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Electives: 6 credits

Courses selected with guidance of faculty advisor	6
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master of education in inner city studies

This program is designed essentially for teachers in inner city schools. It is intended to give breadth of experience.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Requirements for the Degree

Program requirements include 36 credits in course work and a Master's paper. Students must take a written examination covering all course work (may not be taken until all course work is completed) and must give a defense of their research and Master's paper in a final oral examination. The program is to be organized under the guidance of the faculty advisor.

Required Courses: 21 credits

91-352 Research Methods in Inner City Studies	3
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91-353 Research Writing	3
91-411 Graduate Study in Disadvantage	3
91-412 Pathology in the Afro-American Ghetto	3
91-421 Seminar in Disadvantage—the Negro	3
or	
91-422 Seminar in Disadvantage—the Southern Mountain White	3
or	
91-423 Seminar in Disadvantage—the Spanish-Speaking	3
91-452 Field Internship	3
91-453 Seminar in Field Internship	3

Electives: 15 credits

Courses selected with guidance of faculty advisor	15
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master of education in inner city studies with language emphasis

The purpose of the program is to train experienced and prospective elementary school teachers to work more effectively with disadvantaged children of selected minority groups, namely: American Negroes, Spanish-Speaking, Southern Mountain Whites, and American Indians. The program will provide the teachers with a thorough understanding of the history and nature of the English language. Regional and social dialects and their relationships to social and cultural factors will be studied. New methodologies will be used for teaching language skills in the inner-city classroom.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Requirement for the Degree

Program requirements include 36 credits in Linguistics and Inner City Studies, including related seminars, field experiences with social agencies, and classroom experiences in public or private schools. Students will be required to write a Master's paper that will be presented to a seminar. A final oral examination will also be administered. The program is to be organized

under the guidance of the faculty advisor.

Inner City Courses: 21 credits

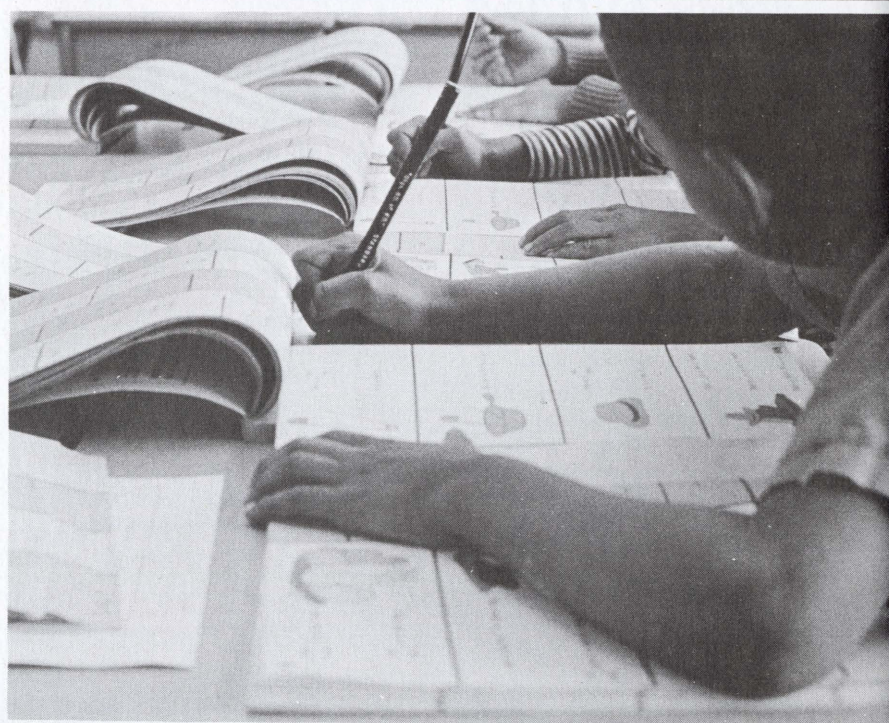
	Credits
91-312 History and Cultures of Afro-Americans	3
91-313 The Idioms of Afro-American Communities	3
91-316 History and Cultures of American Indians	3
91-326 Language Behavior in Inner-City Communities	3
91-331 Literature of Minorities . .	3
91-354 Methods of Teaching in the Inner City	3
91-452 Field Internship	3

Linguistics Courses: 15 credits

28-415 Phonetics and Phonology	3
28-419 Fundamentals of Modern Linguistics . . .	3
28-447 Standard English as a Second Dialect	3
28-453 Seminar in Applied Linguistics	3
29-312 The Development of American English	3

With the consent of the advisor, some course substitutions in both categories above are permitted.

linguistics



master of arts in english linguistics

This program is designed for the present or prospective high school or college English teacher who, sensitive to what may be a wide "language gap" in his education, desires to acquire a thorough groundwork in modern linguistic description of language, and of the English language in particular. This program is also designed for the general student of Linguistics, with or without plans to teach, who wishes to specialize in English Linguistics.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: A minimum of 30 credits, excluding basic courses, in English Linguistics or in English and related areas (e.g. foreign languages) with approval of the program coordinator.

Requirements for the Degree

- 33 credits selected as shown below. In addition to the distribution of courses in the various groups, the student must take at least 6 of the 33 credit hours in seminar-level courses of the Department of Linguistics.
- Reading proficiency in one foreign language. This can be satisfied by passing the Graduate School Foreign Language Test (currently offered in French, German, Russian, and Spanish, by Educational Testing Service).
- Written comprehensive examination, prepared and evaluated by the Department of Linguistics.
- Two scholarly papers on different subjects (prepared in courses or independently) which will be acceptable to an examination committee, or, upon invitation by the Department, an acceptable thesis.

Courses

- | | |
|---|---------|
| I. Introductory (required: 28-419) | Credits |
| 28-419 Fundamentals of Modern Linguistics . . . | 3 |
| II. General and Theoretical Linguistics (required: 28-415, 29-449, and one other course, normally 28-411) | |

	Credits
28-411 Transformational Analysis	3
28-415 Phonetics and Phonology	3
28-421 Seminar in Linguistic Theory	3
28-423 Independent Study in Linguistic Theory . . .	3
28-425 Typology of Grammatical Systems	3
28-426 Independent Study in Linguistic Typology	3
29-449 History of Linguistics . .	3

III. Historical and Comparative Linguistics (required: one course, normally 29-412 or 29-416)	
29-402 Introduction to Old English	3
29-412 American English: History and Growth . .	3
29-416 The English Language: History and Development	3
29-417 Middle English	3
29-422 Comparative-Historical Linguistics	3
29-431 Introduction to Indo-European Linguistics	3
29-451 Seminar in Historical Linguistics	3
29-461 Independent Study in Historical Linguistics	3

IV. Applied Linguistics (required: one course)	
28-417 Linguistics for the Classroom Teacher . .	3
28-444 Lexicography	3
28-447 Standard English as a Second Dialect	3
28-451 Independent Study in Applied Linguistics . .	3
28-453 Seminar in Applied Linguistics	3
29-481 Teaching American English as a Second Language . .	3

V. Linguistics and Related Fields (required: two courses)	
29-401 Linguistics, Logic and Computers	3
29-403 Seminar in Writing Systems	3
29-404 Field Methods in Linguistics	3

	Credits
29-428 Linguistic Analysis of Literature	3
29-429 Psycholinguistics	3
29-445 Semology	3
29-446 Socio-Linguistics	3
29-452 Seminar in Language and Literature	3
29-453 Seminar in Linguistics and Related Fields . .	3
29-462 Independent Study in Language and Literature	3

VI. Collateral Studies (required: three courses)

master of arts in general linguistics

This program is designed for students who already have an undergraduate background in linguistics (a major or a minor) and who desire graduate work in the theory and methods of general linguistic research. It is a natural sequel to the Department's undergraduate liberal arts major in linguistics, but can also serve students in, e.g. psychology, anthropology, foreign language, who wish to specialize in those areas of their disciplines most closely related to linguistics. The program also provides the type of training normally expected for entrance into a doctoral program in linguistics.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: An undergraduate major in linguistics or in a related field (e.g. anthropology, foreign or classified language, English) with a minimum of 12 credits in linguistics.

Requirements for the Degree

- 33 credits selected as shown below. In addition to the distribution of courses in the various groups, the student must take at least 6 of the 33 credits in seminar-level courses of the Department of Linguistics.
- Reading proficiency in one foreign language. This can be satisfied by passing the Graduate School Foreign Language Test (currently offered in French, German, Russian, and Spanish by Educational Testing Service).

These may be elected from the courses in Groups II-V or, with the approval of the graduate advisor, from relevant graduate courses in related disciplines in which the student has a good academic background.

	Credits
VII. Master's Thesis	
29-415 Thesis Seminar: Linguistics	3
(By Departmental invitation)	

- Written comprehensive examination, prepared and evaluated by the Department of Linguistics.
- Two scholarly papers on different subjects (prepared in courses or independently) which will be acceptable to an examination committee, or, upon invitation by the Department, an acceptable thesis.

Courses

- | | |
|--|---|
| I. Introductory (none required; 28-419 will not normally count toward degree requirements) | |
| 28-419 Fundamentals of Modern Linguistics . . . | 3 |
| II. General and Theoretical Linguistics (required: 28-411, 28-415, 28-425) | |
| 28-411 Transformational Analysis | 3 |
| 28-415 Phonetics and Phonology | 3 |
| 28-421 Seminar in Linguistic Theory | 3 |
| 28-423 Independent Study in Linguistic Theory . . . | 3 |
| 28-425 Typology of Grammatical Systems | 3 |
| 28-426 Independent Study in Linguistic Typology . . | 3 |
| 29-449 History of Linguistics . . | 3 |
| III. Historical and Comparative Linguistics (required: two courses) | |
| 29-402 Introduction to Old English | 3 |

	Credits
29-412 American English: History and Growth	3
29-416 The English Language: History and Development	3
29-417 Middle English	3
29-422 Comparative-Historical Linguistics	3
29-431 Introduction to Indo-European Linguistics	3
29-451 Seminar in Historical Linguistics	3
29-461 Independent Study in Historical Linguistics	3
IV. Applied Linguistics (none required; may be taken as electives)	
28-417 Linguistics for the Classroom Teacher	3
28-444 Lexicography	3
28-447 Standard English as a Second Dialect	3
28-451 Independent Study in Applied Linguistics	3
28-453 Seminar in Applied Linguistics	3
29-481 Teaching American English as a Second Language	3
V. Linguistics and Related Fields (required: two courses)	
29-401 Linguistics, Logic and Computers	3

	Credits
29-403 Seminar in Writing Systems	3
29-404 Field Methods in Linguistics	3
29-428 Linguistic Analysis of Literature	3
29-429 Psycholinguistics	3
29-445 Semology	3
29-446 Socio-Linguistics	3
29-452 Seminar in Language and Literature	3
29-453 Seminar in Linguistics and Related Fields	3
29-462 Independent Study in Language and Literature	3
VI. Collateral Studies (required: four courses)	
These may be selected from the courses in Groups II-V or, with the approval of the graduate advisor, from relevant graduate courses in related disciplines in which the student has a good academic background.	
VII. Master's Thesis	
29-415 Thesis Seminar: Linguistics	6
(By Departmental invitation)	

	Credits
28-411 Transformational Analysis	3
28-415 Phonetics and Phonology	3
28-421 Seminar in Linguistic Theory	3
28-423 Independent Study in Linguistic Theory	3
28-425 Typology of Grammatical Systems	3
28-426 Independent Study in Linguistic Typology	3
29-449 History of Linguistics	3
III. Historical and Comparative Linguistics (required: one course, normally 29-412 or 29-416)	
29-402 Introduction to Old English	3
29-412 American English: History and Growth	3
29-416 The English Language: History and Development	3
29-417 Middle English	3
29-422 Comparative-Historical Linguistics	3
29-431 Introduction to Indo-European Linguistics	3
29-451 Seminar in Historical Linguistics	3
29-461 Independent Study in Historical Linguistics	3
IV. Applied Linguistics (required: one course)	
28-417 Linguistics for the Classroom Teacher	3
28-444 Lexicography	3
28-447 Standard English as a Second Dialect	3
28-451 Independent Study in Applied Linguistics	3

	Credits
28-453 Seminar in Applied Linguistics	3
29-481 Teaching American English as a Second Language	3
V. Linguistics and Related Fields (required: two courses)	
29-401 Linguistics, Logic and Computers	3
29-403 Seminar in Writing Systems	3
29-404 Field Methods in Linguistics	3
29-428 Linguistic Analysis of Literature	3
29-429 Psycholinguistics	3
29-445 Semology	3
29-446 Socio-Linguistics	3
29-452 Seminar in Language and Literature	3
29-453 Seminar in Linguistics and Related Fields	3
29-462 Independent Study in Language and Literature	3
VI. Collateral Studies (required: one course)	
This may be elected from the courses in Groups II-V or, with the approval of the graduate advisor, from relevant graduate courses in related disciplines in which the student has a good academic background.	
VII. Education (required: three courses)	
64-414 Principles of Curriculum Development	3
65-421 Research in Classroom Teaching of Language Arts	3
69-402 Television and Related Instructional Media	3

master of arts in the teaching of english: language and applied linguistics

This program is designed for English and Language Arts teachers who wish to acquire a thorough groundwork in a modern linguistic description of the language. Approaches to the teaching of grammar (traditional, structural, and transformational), the teaching of the various communication skills, and the teaching of forms of literature that are derived from basic linguistic concepts.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: A background in English equivalent to an undergraduate area of concentration. Specifically, 27 credit hours, including basic courses, are required (advanced courses in a foreign language or in linguistics may be accepted in lieu of part of the 27 credit

hours in English, at the discretion of the program coordinator).

Requirements for the Degree

- 30 credits selected as specified below. In addition to the distribution of courses in the various groups, the student must take at least 3 of the 30 credits in a seminar-level course, for which a major paper is required.
- Written comprehensive examination, prepared and evaluated by the Department of Linguistics.

Courses

- Introductory (required 28-419)
28-419 Fundamentals of Modern Linguistics 3
- General and Theoretical
Linguistics (required: one course, normally 28-411)



mathematics

master of science in mathematics

This program is designed to fulfill two objectives: First to provide the student a broad general introduction to the areas of higher Mathematics and to encourage in him an appreciation for some of the advanced concepts and methods employed in the various disciplines in Mathematics. The second objective is to provide the student an opportunity to secure a more concentrated course of instruction in one of the three basic areas of advanced Mathematics: Analysis, Algebra, or Geometry.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: A major undergraduate sequence in Mathematics is required, including the completion of at least seven courses beyond Integral Calculus.

Requirements for the Degree

This program requires 30 credits in Mathematics, including 12 required and 18 elective. By invitation of the Mathematics Department, a thesis may be substituted for 6 elective credits. A final comprehensive examination is required. In cases where a thesis has

been presented, part of the examination would be devoted to its content.

Required Courses: 12 credits

	Credits
22-415 Functions of a Complex Variable	3
22-416 Functions of a Real Variable	3
22-421 Modern Geometry	3
22-436 Modern Algebra	3

Electives: 18 credits

Six courses chosen with the guidance of the faculty advisor. A maximum of four may be at the 300-level; others must be at 400-level

Courses required to make up background deficiencies, prerequisites for required graduate courses, courses required for undergraduate Mathematics majors, and courses applicable to the Master of Education degree in the Teaching of Mathematics will not be applicable toward the Master of Science degree in Mathematics.

Thesis: 6 credits

22-494 Thesis Seminar— Mathematics	6
(by Invitation only.)	

master of education in the teaching of mathematics

This program is of particular interest to teachers in grades Kindergarten through Eight. The intent of the program is to strengthen the teaching of Mathematics at the elementary school level. It is aimed at elementary school teachers who do not have a strong background in Mathematics and includes courses both in Mathematics and Education.

Requirements for Admission to the Program

General: Students must fulfill the re-

quirements for admission to the Graduate College.

Specific: Interest in the new Mathematics and a good background for elementary school teaching.

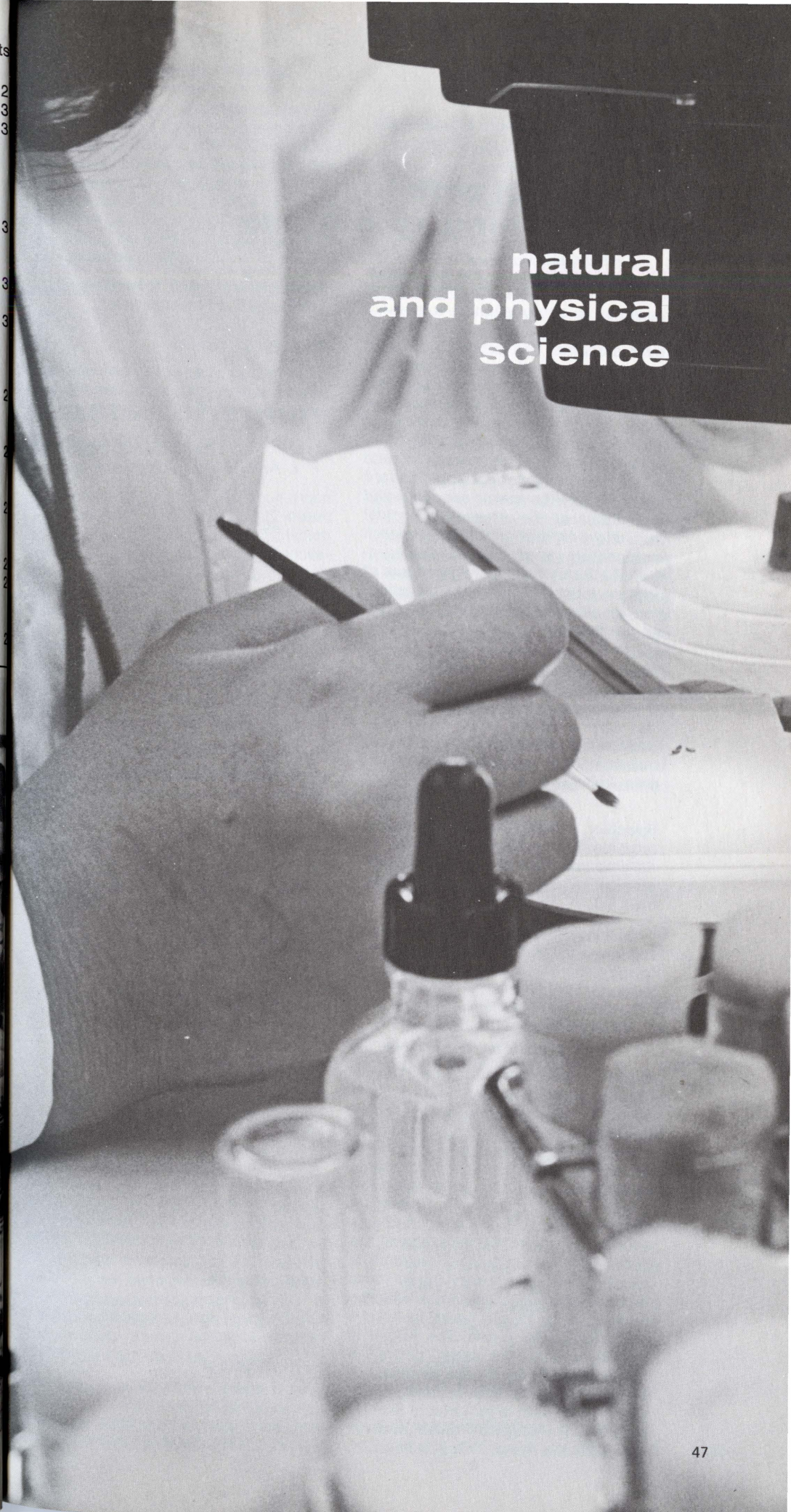
Requirements for the Degree

Course requirements for the degree include 15 credits in Mathematics and 15 in Education. In addition, candidates must pass an oral examination. Possession of a permanent state or Chicago teaching certificate is required at the time of application for degree candidacy.

- Credits
- I. At least one of: 2 to 4 credits**
- 22-355 Modern Mathematics
for the Primary
Grades 2
- 22-356 Modern Mathematics
for the Middle
Grades 2
- II. One or two of: 2 to 4 credits**
- 22-351 Modern Mathematics
Pedagogy 2
- 22-352 Numerical Analysis
and Computation ... 2
- 22-353 Recent Trends in
Mathematics 2
- III. Both of: 4 credits**
- 22-433 Mathematics Structure
I—Induction 2
- 22-434 Mathematics Structure
II—Deduction 2
- IV. Three to seven credits from:**
- 22-321 History of
Mathematics 3
- 22-322 Number Theory 3
- 22-411 Modern Analysis I 2
- 22-412 Modern Analysis II 2
- 22-413 Mathematics Applied

- Credits
- to the Physical and
Behavioral Sciences . 2
- 22-421 Modern Geometry 3
- 22-436 Modern Algebra 3
- V. All of the following: 9 credits**
- 64-414 Principles of
Curriculum
Development 3
- 65-423 Research in
Classroom Teaching
of Mathematics 3
- 69-402 Television and Related
Instructional Media ... 3
- VI. Six credits from:**
- 62-411 Comparative
Education 2
- 62-412 Selected Concepts in
the Philosophy of
Education 2
- 62-413 Teacher Interpersonal
and Intergroup
Relations 2
- 64-418 Classroom Problems
in the Teaching-
Learning Process ... 2
- 66-411 Testing and Evaluation . 2
- 69-401 The Theory of
Programmed
Instruction 2

**natural
and physical
science**



master of arts in the teaching of biology

The curriculum leading to the Master of Arts in the Teaching of Biology is designed to equip teachers to present a modern, balanced view of Biology to their students. The program stresses balance in each of the major areas of Biology, rather than intensive specialization in a narrowly limited area. Because of this balance, the curriculum also provides a sound basis for more advanced study. Most courses include active laboratory work oriented toward illustration of the newer concepts and techniques of the present biological revolution. An introduction to research methodology is provided by preparation of a library thesis, or by conduct of original laboratory or field investigation leading to preparation of a research thesis.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: 1. Admission to the program requires 15 credits of applicable undergraduate Biology (those that satisfy areas of requirements as specified below).

2. A minimum of 3 credits, including laboratory work in each of the following: Chemistry, Physics, and Earth Science.

Requirements for the Degree

Course requirements include 21 credits of graduate Biology, and a total of 36 credits of combined graduate and upper-undergraduate level Biology—including a minimum of 3 credits at advanced undergraduate or graduate level in each of the areas specified below—and 9 credits in Education. Each program is to be organized systematically under the guidance of the faculty advisor. Individual research is required, either a library thesis (on a topic selected in consultation with the advisor) or, by departmental invitation, an experimental thesis. The former is without credit; the latter carries 5 hours of credit for 51-414 Seminars in Research. A final written comprehensive examination is required in the major areas of Biology for those students who fulfill the research requirement by

submitting a library thesis; oral defense of the thesis is required for those who submit a research thesis.

Biology: 21 credits

(Examples of specific courses that would satisfy the area requirements are indicated)

	Credits
I. Animal Morphology and/or Taxonomy	
58-313 Entomology	3
58-314 Ornithology	3
58-315 Invertebrate Zoology	3
58-323 Developmental Anatomy	3
II. Plant Morphology and/or Taxonomy	
57-311 General Mycology	3
57-313 Plant Anatomy	3
57-314 Systematic Botany	3
57-318 General Plant Morphology	3
57-402 Non-Vascular Plants	3
57-403 Vascular Plants	3
III. Genetics	
56-311 Genetics	3
56-401 Analysis of Development	3
56-402 Biochemical Genetics	3
IV. Evolution	
56-312 Evolution	3
V. Molecular Biology	
56-314 Cellular Physiology	3
56-315 Biophysics	3
56-316 Biochemistry	3
56-318 General Microbiology	3
56-401 Analysis of Development	3
56-402 Biochemical Genetics	3
VI. Animal Physiology	
58-312 Animal Physiology	3
58-316 Animal Behavior	3
VII. Plant Physiology	
57-315 Plant Physiology	3
57-317 Plant Morphogenesis	3
VIII. Ecology	
56-317 Ecology	3
56-373 Biological Geography	3
57-321 Plant Ecology	3

Seminars in Research: 5 credits

At the time of acceptance for candidacy, the Biology Department may invite the student to do an experimental thesis. In this event, the student would register for the course below and upon acceptance of the thesis would be given 5 hours of credit thus reducing the Biology course requirement to 16 credits. (The library thesis does not carry course credit.)

Credits

51-414 Seminars in Research ... 5

Education: 9 credits

64-414 Principles of Curriculum Development	3
65-424 Research in Classroom Teaching of Science	3
69-402 Television and Related Instructional Media	3

master of science in biology

This program is designed to service both teachers and others who intend to work in various capacities, for which advanced biological training is necessary. Because there is program balance in each of the major areas of Biology, a sound basis is provided for further graduate study. Laboratory work and introduction to research methodology are integral to the program.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: 1. Admission to the program requires 15 credits of applicable undergraduate Biology (those that satisfy areas of requirements as specified below). 2. A minimum of 12 credits in Chemistry with laboratory, including at least one course in Organic Chemistry; a minimum of 8 credits in Physics with laboratory; a minimum of 6 credits in Mathematics.

Requirements for the Degree

Course requirements include 30 hours of graduate Biology credit at the 300 or 400 level, and a total of at least 45 hours of combined graduate and upper-undergraduate level Biology credit, including a minimum of 3 hours at advanced undergraduate or graduate level in each of the areas specified below. A minimum of 9 hours of graduate Biology credit at the 400 level is required, not including the 5 hours for experimental thesis credit. Of the 9 hours, there must be at least 1 hour and no more than 3 hours of non-research Biology seminar credit.

Each program is to be organized systematically under the guidance of the graduate advisor. Individual research is required, either a library Thesis—on

a topic selected in consultation with the advisor—or, by departmental invitation, an experimental Thesis. The former is without credit; the latter carries 5 hours of credit for 51-414 Seminars in Research. At the time of acceptance to candidacy the decision is made as to whether or not the student is to be invited to do an experimental Thesis. A final written comprehensive examination is required in the major areas of the natural sciences, especially Biology, for those students who fulfill the research requirement by submitting a library Thesis; oral defense of the Thesis is required for those who submit a research Thesis.

Biology: 30 credits

I. Animal Morphology and/or Taxonomy	
58-313 Entomology	3
58-314 Ornithology	3
58-315 Invertebrate Zoology	3
58-323 Developmental Anatomy	3
58-401 Vertebrate Osteology	3
II. Plant Morphology and/or Taxonomy	
57-311 General Mycology	3
57-313 Plant Anatomy	3
57-314 Systematic Botany	3
57-318 General Plant Morphology	3
57-402 Non-Vascular Plants	3
57-403 Vascular Plants	3
III. Genetics	
56-311 Genetics	3
56-401 Analysis of Development	3
56-402 Biochemical Genetics	3
IV. Evolution	
56-312 Evolution	3
V. Molecular Biology	
56-314 Cellular Physiology	3

	Credits
56-315 Biophysics	3
56-316 Biochemistry	3
56-318 General Microbiology .	3
56-401 Analysis of Development	3
56-402 Biochemical Genetics.	3
56-404 Advanced Cell Physiology	3
VI. Animal Physiology	
58-312 Animal Physiology ...	3
58-316 Animal Behavior	3
58-402 Comparative Animal Physiology	3
VII. Plant Physiology	
57-315 Plant Physiology	3
57-317 Plant Morphogenesis .	3

master of arts in the teaching of chemistry

This program is designed to provide abundant preparation for the teacher of Chemistry and to provide a broad base upon which the student may elect, if he wishes, to specialize in a particular area of Chemistry.

It will acquaint the student with the fundamental principles of Chemistry and allow him to apply them to a variety of situations. It will give a facility in approaching and solving scientific programs. It will provide laboratory experience acquainting him with the fundamental techniques of Chemistry.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires the following undergraduate credit:

- 8 credits in Introductory Physics
- 6 credits in Calculus
- 20 credits in undergraduate Chemistry, including two semesters of Organic Chemistry and one semester of Physical Chemistry.

Requirements for the Degree

- 15-18 credits in 300 or 400-level Chemistry courses. (Courses 54-324, 54-346, 54-352 and 54-353, or equivalents, must be completed as prerequisites or part of the graduate program.)
- 3-6 credits in Physics or Mathe-

	Credits
VIII. Ecology	
56-317 Ecology	3
56-373 Biological Geography	3
57-321 Plant Ecology	3

Seminars in Research: 5 credits

At the time of acceptance for candidacy the Biology Department may invite the student to do an experimental thesis. In this event the student would register for the course below and upon acceptance of the thesis would be given 5 hours of credit thus reducing the Biology course requirement to 25 credits. (The library thesis does not carry course credit.)

51-414 Seminars in Research ...	5
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atics, beyond the level of Analysis II and Physics II.

c. 9 credits in Education.

d. At the option of the department, a research paper or final examination, or both, may be required.

Chemistry: 15-18 credits

54-324 Instrumental Analysis ...	4
54-327 History of Physical Science	2
54-332 Identification of Organic Compounds ..	4
54-334 Advanced Organic Chemistry	4
54-346 Radiochemistry	4
54-352 Physical Chemistry Laboratory	2
54-353 Physical Chemistry II ...	3
54-401 Carbohydrates	3
54-402 Organometallic Chemistry	3
54-403 Physical Methods in Organic Chemistry	3
54-404 Chemical Thermodynamics	3
54-405 The Chemical Bond	3
54-406 Coordination Chemistry .	3

Related Fields: 3-6 credits

22-301 Ordinary Differential Equations I	3
51-341 Fortran and Numerical Analysis for Scientists .	3
59-311 Mechanics I	3
59-321 Electricity and Magnetism I	3
59-336 Modern Physics	3
59-393 Electronics	3

	Credits	Credits
Education: 9 credits		Classroom Teaching of Science
64-414 Principles of Curriculum Development	3	69-402 Television and Related Instructional Media ...
65-424 Research in		3

master of arts in the teaching of earth science

This program, embracing the fields of the geological sciences, Meteorology, Astronomy, and Oceanography, is designed to prepare the teacher of high school Earth Science. It will also be helpful to the elementary school teacher of General Science who has a strong Earth Science orientation. Still other students will find in this program the basic courses necessary for further graduate work.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires a minimum of 4 hours of course work, including laboratory, in Physics or Chemistry or Physical Science; 4 hours in Biology, and 4 hours in Earth Science or Geology.

Requirements for the Degree

Required are 24 credits in combined undergraduate and graduate work in Earth Science including 15 credits in graduate Earth Science courses from those indicated below. With permission, courses in related areas may be used as electives to complete the 24 credits required. Also required are 5 credits in Seminars in Research (including thesis) or two 3-credit courses in advanced independent study, each requiring a major paper. A final comprehensive examination or defense of thesis is required. Each program is to be organized systematically under the guidance of the faculty advisor.

The student must include in his graduate program a minimum of 3 credits in each of five of the following areas:

Earth Science: 15-18 credits

53-311 Mineralogy	3
53-312 Structural Geology	3
53-314 Paleontology	3
53-315 Glacial and Quaternary Geology ..	3
53-316 Stratigraphy	3
53-317 Principles of Sedimentation	3
53-318 World Regional Geology .	3
53-319 Petrology	3
53-321 Oceanography	3
53-322 Economic Geology	3
53-323 Field Geology	3
53-327 Geology of the National Parks	3
53-328 Marine Geology	3
53-329 Soil Science	3
53-371 Geomorphology	3
53-401 Petroleum Geology	3
59-391 Astronomy	3

Research

51-414 Seminars in Research ...	5
or	
53-326 Independent Study in Earth Science	3
(total of 6 credits)	

Education: 9 credits

64-414 Principles of Curriculum Development	3
65-424 Research in Classroom Teaching of Science	3
69-402 Television and Related Instructional Media ...	3

master of arts in the teaching of physics

This program is designed to provide the teacher of Physics with the necessary fundamentals for a wide variety of teaching situations. Opportunities exist for specialization in certain areas of Physics.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires the following undergraduate preparation:

- 8 credits in Introductory Chemistry.
- 9 credits in Calculus.
- 20 credits in undergraduate Physics including College Physics I, II, and III and 3 junior or senior level Physics courses.

Requirements for the Degree

- 18 credits in 300 and 400 level physics courses (59-312, 59-323 and 59-336 must be completed as part of the Graduate Program.)
- At least two 400 level Physics courses must be taken as part of the M.A.T. program.
- 9 credits in Education.
- At the option of the Department, a research paper or final examination or both may be required.

Physics: 18 credits

	Credits
51-341 Fortran and Numerical Analysis for Scientists .	3
59-311 Mechanics I	3
59-312 Mechanics II	3
59-321 Electricity and Magnetism I	3
59-323 Electricity and Magnetism II	3
59-324 Quantum Mechanics I ...	3
59-326 X-Ray Theory and Techniques	3
59-331 Optics	3
59-333 Vibration and Sound	3
59-335 Thermodynamics and Kinetic Theory	3



59-336 Modern Physics	Credit
59-337 Modern Physics Laboratory	
59-338 Introductory Mathematical Physics ..	
59-339 Intermediate Physics Laboratory	
59-343 Nuclear Physics	
59-344 Introduction to Solid State Physics	
59-391 Astronomy	
59-393 Electronics	
59-401 Advanced Experimental Physics	
59-402 Atomic Physics	
59-403 Solid State Physics	
59-404 Advanced Electronics for Scientists	
59-405 Elementary Particles	
59-406 Statistical Mechanics	
59-407 Relativity and Gravitation	

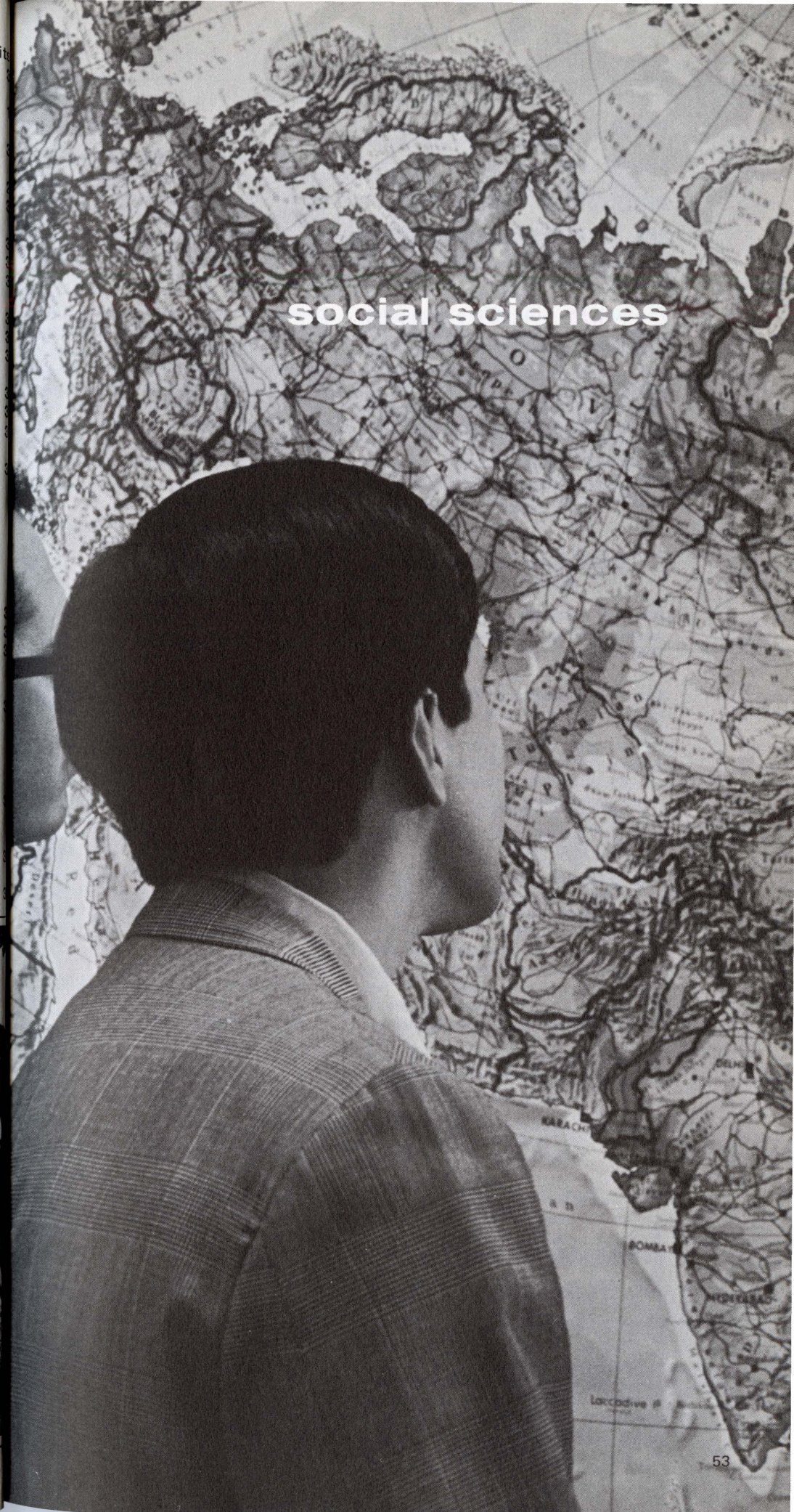
Related Fields: 3 credits

22-301 Ordinary Differential Equations I (subject to departmental approval)	
54-351 Physical Chemistry I	
54-353 Physical Chemistry II	
Other 300 or 400-level Chemistry, Mathematics, or related field courses ..	

Education: 9 credits

64-414 Principles of Curriculum Development	
65-424 Research in Classroom Teaching of Science	
69-402 Television and Related Instructional Media	

social sciences



master of arts in the teaching of american studies

The Masters program in American Studies provides an opportunity for students interested in interdisciplinary work in American civilization; most particularly, academic studies in American/History and American/Literature. The majority of courses available for this program are in these two disciplines although course work in other areas of Social Sciences and the Humanities are also available.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires undergraduate credit as follows:

- at least 9 credits in History, including 6 in American History;
- at least 6 credits from the fields of Sociology, Political Science and Economics; and
- at least 9 credits from American Literature, American Art, American Music.

A grade average of B should have been maintained in all courses listed above.

Requirements for the Degree

Course requirements include 18 credits in American studies, 6 for the thesis and 9 in Education. All programs are to

be organized systematically under the guidance of the faculty advisor. A thesis is required on a topic chosen in consultation with the advisor. It should bridge two or more of the disciplines encompassed in the program. A final oral examination is administered by the faculty of the disciplines contributing to the program.

Credits

Humanities: 9 credits

Humanities Electives (selected with guidance of advisor) 9

Social Science: 9 credits

Social Science Electives (selected with guidance of advisor) 9

Of the 18 credits in course work as indicated above, 3 credits shall consist of a choice between:

- 14-431 Bibliography and Methods of Literary Study 3
- or
- 44-451 Historiography and Historical Method 3

Thesis: 6 credits

41-433 Thesis Seminar: American Studies 6

Education: 9 credits

- 64-414 Principles of Curriculum Development 3
- 65-422 Research in Classroom Teaching of Social Studies 3
- 69-402 Television and Related Instructional Media 3

master of arts in the teaching of general social science

This program is designed so that the graduate work will relate as much as possible to an interdisciplinary area or problem of Social Science.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires 30 undergraduate credits in social science.

Requirements for the Degree

Course requirements include 21 hours in the Social Sciences, 6 in related fields, and 9 in Education. All programs are to be organized systematically under the guidance of the faculty advisor. Each student is required to take at least 9 hours of course work in one of the areas of the Social Sciences. The balance of the required hours must be taken in one, or at most two, of the other areas of the Social Sciences. Two seminar papers to be completed as part of the requirements for 41-427 Research Seminar in General Social Science (required) . . . 3 (to be taken after all other courses are completed.) A

master of arts in geography

The Geographer in his quest for the understanding of why phenomena vary spatially has become an integral part of the present society and will in the future, through simulation, offer optimum locations for man and his technology. This program is designed to provide advanced study for the training of personnel for Education, Industry, Government, and other areas where geographers are needed.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires an undergraduate major or minor in Geography. Non-majors will be required, at the discretion of the Department, to remedy any deficiencies noted in the student's geographical background. The Graduate Record Examination and the Achievement Test in Geography may be required.

Requirements for the Degree

Course requirements include a total of 27 credits in Geography and 6 for Thesis. Specific course requirements are established separately for each student, but require a chosen area of concentration in one of six fields—Cultural or Social Geography, Political Geography, Physical Geography, Eco-

nomie Geography, Urban Geography, Marine Geography—and demonstrated competence in two of these fields as established through satisfactory completion of courses. At least 15 credits must be in 400-level courses. The student must submit a Geographic Thesis that will be chosen in consultation with the program advisor and written under the supervision of the thesis advisor assigned by the Department. A final written and/or oral examination, covering the chosen area of concentration and the general knowledge of the entire field of Geography, is required. An oral defense of the Thesis is also required.

Credits

Social Science: 21 credits

Social Science electives, 300 and 400 level courses (all to be selected with guidance of advisor) 18

Cognate Courses: 6 credits

Related fields electives, 300 or 400 level (to be selected with guidance of advisor) 6

Education: 9 credits

- 64-414 Principles of Curriculum Development 3
- 65-422 Research in Classroom Teaching of Social Studies 3
- 69-402 Television and Related Instructional Media 3

nomie Geography, Urban Geography, Marine Geography—and demonstrated competence in two of these fields as established through satisfactory completion of courses. At least 15 credits must be in 400-level courses. The student must submit a Geographic Thesis that will be chosen in consultation with the program advisor and written under the supervision of the thesis advisor assigned by the Department. A final written and/or oral examination, covering the chosen area of concentration and the general knowledge of the entire field of Geography, is required. An oral defense of the Thesis is also required.

Geography: 27 credits

- 43-374 Cartography 3
- 43-351 Statistics for Geographers and Earth Scientists 3
- or
- 43-442 Geographic Problems in Quantitative Measurements 3
- 43-411 Scope and Philosophy of Geography 3
- Geography electives, 300 and 400 level courses 18

(Courses to be selected with guidance of advisor; at least 6 hours of 400-level.)

Thesis: 6 credits

- 43-431 Thesis Seminar: Geography 6

master of arts in the teaching of geography

This program is designed to enlarge the Geography background of the student and to provide for further professional development. Two sequences are available to accommodate student interest and direction.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires 15 hours of undergraduate credit in Geography.

Requirements for the Degree

I. Thesis Option, 33 credits total

Course requirements include 18 credits in Geography, 6 for Thesis, and 9 in Education. The program is to be organized systematically under the guidance of the Graduate Advisor. Each student approved by the Department to follow this sequence must submit a Geographic Thesis that will be chosen in consultation with the program advisor and written under the supervision of the thesis advisor assigned by the Department. A final comprehensive written and/or oral examination is administered at the discretion of the Graduate Faculty of the Geography Department.

Geography: 18 credits

	Credits
43-411 Scope and Philosophy of Geography (required)	3
Geography electives, 300 and 400 level courses	15

(At least two courses in a given geographic area, the remainder to be selected with guidance of advisor. Recommended courses are 43-351 Statistics for Geographers and Earth Scientists or 43-442 Geographic Problems in Quantitative Measurements, and 43-374 Cartography.)

Thesis: 6 credits

	Credits
43-431 Thesis Seminar: Geography	6

Education: 9 credits

64-414 Principles of Curriculum Development	3
65-422 Research in Classroom Teaching of Social Studies	3
69-402 Television and Related Instructional Media	3

II. Research Papers Option, 36 credits total

Course requirements include 27 credits in Geography and 9 in Education. Two research papers must be presented by the student for review by the Department. The topics must be selected with the guidance of the advisor, the papers must encompass two different areas of Geography, and they must be prepared under the guidance of two different faculty members. A final comprehensive written and/or oral examination is administered at the discretion of the Graduate Faculty of the Geography Department.

Geography: 27 credits

43-411 Scope and Philosophy of Geography (required)	3
Geography electives, 300 and 400 level courses	24

(At least one course in a given geographic area, the remainder to be selected with guidance of advisor. Recommended courses are 43-351 Statistics for Geographers and Earth Scientists or 43-442 Geographic Problems in Quantitative Measurements, and 43-374 Cartography.)

Education: 9 credits

64-414 Principles of Curriculum Development	3
65-422 Research in Classroom Teaching of Social Studies	3
69-402 Television and Related Instructional Media	3

master of arts in history

This program is designed to service teachers, as well as students who are not in the teaching profession. It would benefit secondary teachers who lack historical training in depth, and it would have special value for junior college teachers who must acquire a more sophisticated understanding of their subject matter.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Applicants must present 24 credits in History, including 6 in United States History, 6 in European History, and 6 in non-European or American History.

Requirements for the Degree

Thirty credits are required, including

18 in History, 6 for Thesis and 6 in related fields (or additional History courses). The Master's Thesis is required, and there is a final comprehensive examination covering course work and thesis.

History: 18 credits

	Credits
44-451 Historiography and Historical Method	3
Two Graduate Seminars	6
Three 300 or 400-level History electives (to be chosen with guidance of advisor)	9

Related Fields: 6 credits

Two electives in cognate fields or selected History courses (to be chosen with guidance of advisor) 6

Thesis: 6 credits

44-431 Thesis Seminar: History	6
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master of arts in the teaching of history

This program is designed to enlarge the History background of the student and to provide for further professional development.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires 24 hours of undergraduate credit in History; additional hours in Political Science are desirable.

Requirements for the Degree

Course requirements include 21 credits in History, 6 in related fields (or additional History courses) and 9 in Education. All programs are to be organized systematically under the guidance of the faculty advisor. Two seminar papers are required. A final comprehensive examination will be administered.

sive examination will be administered.

History: 21 credits

44-451 Historiography and Historical Method	3
Two Graduate Seminars	6
Four 300 or 400-level History electives (to be chosen with guidance of advisor)	12

Related Fields: 6 credits

Two electives in cognate fields or selected History courses (to be chosen with guidance of advisor) 6

Education: 9 credits

64-414 Principles of Curriculum Development	3
65-422 Research in Classroom Teaching of Social Studies	3
69-402 Television and Related Instructional Media	3

master of arts in political science

This program is designed to enlarge the Political Science background of the student and to provide for further professional development.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires 12 hours of undergraduate credit in Political Science, and an additional 12 hours in other areas of Social Science. At least a B average should have been maintained in this work.

Requirements for the Degree

Thirty hours are required with specialization in one of six areas: American Politics and Government, Urban Politics, Asian Studies, Comparative Politics, Political Theory, and International Relations. Two seminars are required, one relating to the student's major interest. Of the remaining eight courses, three may be in approved cognate fields. Upon departmental invitation, the student may do a thesis for six hours of credit in place of two courses; otherwise, an extensive paper will be required in each of the two seminars. A comprehensive final oral examination will be administered.

Political Science: 15-30 credits

Political Science electives on the 300 and 400-level, (to be selected with guidance of advisor) 15-30

American Politics and Government

45-301 Legislative Process 3
45-302 U.S. Foreign Policy Since World War II 3
45-303 Public Opinion and Propaganda 3
45-304 Constitutional Law: The Supreme Court's Role in American Government 3
45-305 Constitutional Law: Civil Liberties 3

45-311 Policy-Making in American National Government 3
45-315 Political Parties and Pressure Groups 3
45-317 Independent Study in Political Science 3
45-318 Municipal Government 3
45-328 Seminar in Domestic Politics and Government 3
45-332 Public Administration 3
45-333 State Government and Politics 3
45-334 Urban Politics 3
45-401 Seminar in American Policy-Making Process 3
45-405 Seminar in Urban Politics 3
45-409 State Parties and Politics 3

Urban Politics

45-317 Independent Study in Political Science 3
45-318 Municipal Government 3
45-328 Seminar in Domestic Politics and Government 3
45-332 Public Administration 3
45-333 State Government and Politics 3
45-334 Urban Politics 3
45-402 Seminar in Political Behavior 3
45-405 Seminar in Urban Politics 3

Asian Studies

45-317 Independent Study in Political Science 3
45-324 Communist China: Politics and Government 3
45-341 Governments in Asia 3
45-342 International Relations in Asia 3
45-343 Seminar in Asian Politics 3
45-344 Politics of the Middle East 3
45-345 Politics in Southeast Asia 3
45-346 Political Doctrines of Asia 3
45-347 Seminar in Asian Studies 3
45-348 Government and Politics of South Asia 3
45-402 Seminar in Political Behavior 3

Credits

Credits

45-403 Seminar in Contemporary Political Problems of East Asia 3
45-404 Revolutionary Movements in Asia 3
45-408 Seminar in Problems of Nation Building 3
45-411 Seminar in South Asian Politics 3

Comparative Politics

45-312 Modern European Governments 3
45-317 Independent Study in Political Science 3
45-322 Politics and Government of South America 3
45-323 Government in New Nations 3
45-324 Communist China: Politics and Government 3
45-329 Seminar in Comparative Politics 3
45-338 Politics of Sub-Sahara Africa 3
45-341 Governments in Asia 3
45-344 Politics of the Middle East 3
45-345 Politics of Southeast Asia 3
45-348 Government and Politics of South Asia 3
45-351 The Soviet Union: Government and Politics 3
45-402 Seminar in Political Behavior 3
45-408 Seminar in Problems of Nation Building 3

Political Theory

45-317 Independent Study in Political Science 3
45-321 Political Theory 3
45-335 Political Theory I: Man and the State 3
45-336 Political Theory II: Man and Society 3
45-339 Political Theory III: Contemporary Political Analysis 3

Credits

45-346 Political Doctrines of Asia 3
45-352 African Political Thought 3
45-402 Seminar in Political Behavior 3

International Relations

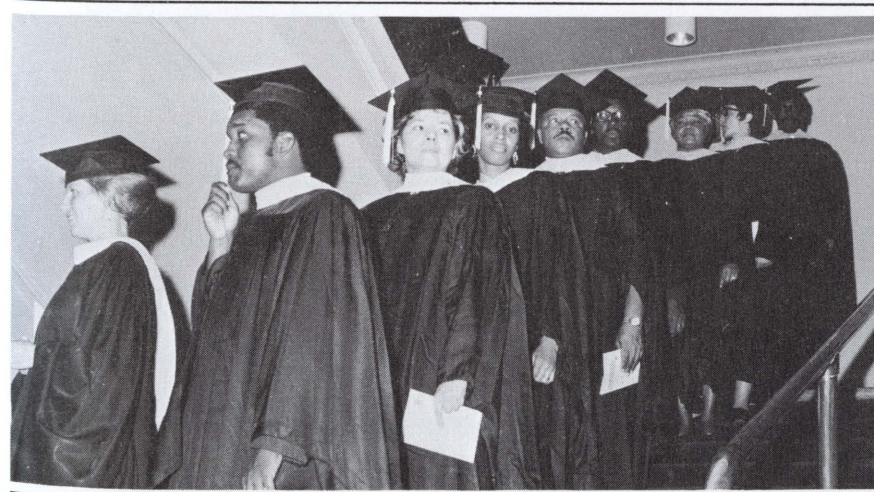
45-302 U.S. Foreign Policy Since World War II 3
45-313 Contemporary International Relations 3
45-316 War and Peace 3
45-317 Independent Study in Political Science 3
45-319 International Law and Organization 3
45-331 Seminar in International Relations 3
45-342 International Relations in Asia 3
45-344 Politics of the Middle East 3
45-345 Politics in Southeast Asia 3
45-402 Seminar in Political Behavior 3
45-404 Revolutionary Movements in Asia 3
45-406 Seminar in International Relations 3
45-407 Political Integration in Western Europe 3
45-412 Seminar in the Behavioral Aspects of International Relations 3

Cognate Courses: 0-9 credits

Related fields electives on the 300 and 400-level (to be selected with guidance of advisor) 0-9

Thesis: 6 credits

45-431 Thesis Seminar—Political Science 6
(by Departmental invitation)



special education

master of arts in special education: teaching the culturally disadvantaged

The purpose of this program is to train teachers of culturally disadvantaged children and to advance the professional training of experienced teachers of the culturally disadvantaged.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Students electing this program must have the following or their equivalents:

General Psychology
Educational Psychology or Psychology of Learning
Child Development, Child Psychology, or Psychology of Adolescence
Teaching of Reading or of the Language Arts

Requirements for the Degree

A minimum of 36 credits, including a 6-hour practicum with culturally disadvantaged children, is required of all candidates. A master's project or thesis is also required of all candidates. The thesis may be taken for 3 hours of course credit. At the time of application for degree candidacy the student **must possess an elementary or high school teaching certificate.** In addition to these requirements, candidates for the degree must show satisfactory performance on the Miller Analogies Test and at time of application for candidacy **must present two letters of recommendation from administrators who have had opportunities to observe their teaching.** Candidates may also be required to attend an interview.

Required Courses:

Waiver of required courses may be requested in areas in which competence can be demonstrated.

	Credits
37-308 Measurements and Evaluation	3
37-309 Psychology of Language and Cognitive Development	3
37-311 Psychology of Exceptional Children ..	3
37-324 Educational Implications of Black History and Culture	3

Credits

37-441 *Research Seminar in Special Education	3
OR	
37-462 *Seminar in Problems of Cultural Deprivation ...	3
37-461 Cultures of the Disadvantaged	3
38-431 Practicum I in Teaching Culturally Disadvantaged Children	3
38-441 Practicum II in Teaching Culturally Disadvantaged Children	3
47-316 Urban Ecology	3

Elective Sequence I: Human Relations**

37-402 Sensitivity Training in Human Relations	3
38-405 Seminar in School-Community Relations ..	3
Elective with approval of advisor	3

Elective Sequence II: Teaching the Gifted Child

37-401 Psychology of the Gifted Child	3
38-402 Education of the Gifted Child	3
Elective with approval of advisor	3
38-404 Research Seminar for the Gifted	3
(To be substituted for 37-441 Research Seminar in Special Education. The major project would be done through this seminar. Practicum I 38-431 and II 38-441 for students in this sequence, would focus upon curriculum, materials, and instruction for the Gifted.)	

Elective Sequence III: Diagnosis and Remediation of Learning Disabilities

37-315 Psychopathology of the Brain-Injured Child ...	3
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*A Master's Project is required: This may be accomplished through one of these seminars.

**Admission to this elective sequence will require consent of the Department.

	Credits
37-416 Seminar in Learning Disabilities	3
(May be substituted for 38-441 Practicum II in Teaching Culturally Disadvantaged Children, with approval of the Department.)	
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3
66-321 Diagnosis and Treatment of Reading Difficulties	3
Elective Sequence IV: Teaching the Socially Maladjusted Child	
37-315 Psychopathology of the Brain-Injured Child . . .	3
OR	
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3

	Credits
37-322 Mental Health and Behavior Deviations . . .	3
37-411 Seminar I in the Psychopathology of Emotionally Disturbed Children	3
37-491 Seminar in Teaching of Socially Maladjusted Children	3
(May be substituted for 38-441 Practicum II in Teaching Culturally Disadvantaged Children, with approval of the Department.)	

Elective Sequence V: Individually Patterned Elective Sequence

An elective sequence fitted to the needs of the individual student, arranged by the student with the approval of his advisor.

master of arts in special education: teaching the educable mentally handicapped child

The purpose of this program is to prepare teachers for work with educable mentally retarded children and to provide advanced training for teachers already in that field.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Students electing this program must have the following or their equivalents:

General Psychology
Educational Psychology or Psychology of Learning
Child Development, Child Psychology, or Psychology of Adolescence
Teaching of Reading or of the Language Arts

Requirements for the Degree

A minimum of 36 credits, including a 6-hour practicum with mentally handicapped children, is required of all candidates. A master's project or thesis is also required of all candidates. The thesis may be taken for 3 hours of course credit. At the time of applica-

tion for degree candidacy the student **must possess an elementary school teaching certificate.** In addition to the above requirements, candidates for the degree must show satisfactory performance on the Miller Analogies Test and at time of application for candidacy **must present two letters of recommendation from administrators who have had opportunities to observe their teaching.** Candidates may also be required to attend an interview.

Sequence I: For New Teachers of Self-Contained EMH Classrooms Waiver of required courses may be requested in areas in which competence can be demonstrated.

37-308 Measurement and Evaluation	3
37-311 Psychology of Exceptional Children . .	3
37-315 Psychopathology of the Brain-Injured Child . . .	3
37-316 Principles of Speech Pathology for the Classroom Teacher . . .	3
OR	
15-390 Speech Improvement in the Classroom	3
37-322 Mental Health and Behavior Deviations . . .	3
OR	

	Credits
37-461 Cultures of the Disadvantaged	3
37-412 Medical Aspects of the Exceptional Child	3
37-441 *Research Seminar in Special Education	3
OR	
38-414 *Seminar in Curriculum Development for Mentally Handicapped Children	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3
38-411 Teaching the Educable Mentally Handicapped Child . . .	3
38-413 Special Instructional Problems of Educable Mentally Handicapped Children	3
38-434 Practicum I in Teaching Educable Mentally Handicapped Children	3
38-444 Practicum II in Teaching Educable Mentally Handicapped Children	3

Sequences II — VI: For experienced EMH teachers or for EMH teachers with undergraduate work or previous graduate work in Special Education.

Required Courses:

Waiver of required courses may be requested in areas in which competence can be demonstrated.

37-308 Measurement and Evaluation	3
37-311 Psychology of Exceptional Children . .	3
37-315 Psychopathology of the Brain-Injured Child	3
OR	
37-312 Psychology of the Mentally Handicapped Child . . .	3
38-411 Teaching the Educable Mentally Handicapped Child . . .	3
37-441 *Research Seminar in Special Education	3
OR	
38-414 *Seminar in Curriculum Development for Mentally Handicapped Children	3

*A Master's Project is required. The project may be accomplished through one of these seminars.

	Credits
38-434 Practicum I in Teaching Educable Mentally Handicapped Children	3
38-444 Practicum II in Teaching Educable Mentally Handicapped Children	3

Elective Patterns: 15 semester hours Sequence II: Learning Disabilities (EMH-LD)

37-315 Psychopathology of the Brain-Injured Child (Required)	3
37-316 Principles of Speech Pathology for the Classroom Teacher . . .	3
OR	
15-390 Speech Improvement in the Classroom	3
37-341 Play and Creative Expression for the Academically Handicapped Child . . .	3
OR	
38-342 Vocational Preparation for the Academically Handicapped Child . . .	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3
38-413 Special Instructional Problems of Educable Mentally Handicapped Children	3
66-321 Diagnosis and Treatment of Reading Difficulties	3

Sequence III: Social Adjustment Sequence (EMH-SA)

37-315 Psychopathology of the Brain-Injured Child (Required)	3
37-322 Mental Health and Behavior Deviations . . .	3
37-411 Seminar I in the Psychopathology of Emotionally Disturbed Children	3
37-461 Cultures of the Disadvantaged	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3
One additional elective from recommended list	3

Sequence IV: Physically Handicapped Sequence (EMH-PH)

37-315 Psychopathology of the Brain-Injured Child (Required)	3
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	Credits
37-414 Medical Aspect of Crippling Conditions in Children	3
37-415 Education of the Physically Handicapped Child ...	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3
Two additional electives from recommended list	6

Sequence V: EMH Secondary Sequence

37-315 Psychopathology of the Brain-Injured Child (Required)	3
Five of the following seven courses:	
36-329 Adolescent Psychology ..	3
37-316 Principles of Speech Pathology for the Classroom Teacher ...	3
37-406 Vocational Rehabilitation	3
Home Economics or Shop Elective	3
Guidance and Counseling Elective ...	3
38-342 Vocational Preparation for the Academically Handicapped Child ...	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3

Sequence VI: Selected Alternatives

Three choices from the following alternatives:	
37-316 Principles of Speech Pathology for the Classroom Teacher ...	3
OR	
15-390 Speech Improvement in the Classroom	3
37-412 Medical Aspects of the Exceptional Child	3
OR	
37-312 Psychology of the Mentally Handicapped Child ...	3
OR	
37-315 Psychopathology of the Brain-Injured Child ...	3

	Credits
37-461 Cultures of the Disadvantaged	3
OR	
37-322 Mental Health and Behavior Deviations ...	3
Two additional electives from recommended list	6
38-413 Special Instructional Problems of Educable Mentally Handicapped Children	3
OR	
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3

Sequence VII: Free electives from recommended list

36-328 Psychology of Mental Health	3
37-312 Psychology of the Mentally Handicapped Child	3
OR	
37-315 Psychopathology of the Brain-Injured Child ...	3
37-316 Principles of Speech Pathology for the Classroom Teacher ...	3
OR	
15-390 Speech Improvement in the Classroom	3
37-322 Mental Health and Behavior Deviations ...	3
37-411 Seminar I in the Psychopathology of Emotionally Disturbed Children	3
37-412 Medical Aspects of the Exceptional Child	3
37-442 Thesis Credit in Special Education	3
37-461 Cultures of the Disadvantaged	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities ..	3
38-413 Special Instructional Problems of Educable Mentally Handicapped Children	3
66-321 Diagnosis and Treatment of Reading Difficulties	3

master of arts in special education: teaching the trainable mentally handicapped child

The purpose of this program is to prepare teachers for work with trainable mentally retarded children and to provide advanced training for teachers already in that field.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate School.

Specific: Students electing this program must have the following courses or their equivalents:

General Psychology
Educational Psychology or Psychology of Learning
Child Development, Child Psychology, or Psychology of Adolescence
Teaching of Reading or of the Language Arts

Requirements for the Degree

A minimum of 36 credits, including a 6-hour practicum with mentally handicapped children is required of all candidates. A master's project or thesis is also required of all candidates. The thesis may be taken for 3 hours of course credit. At the time of application for degree candidacy, the student **must possess an elementary school teaching certificate**. In addition to the above requirements, candidates for the degree must show satisfactory performance on the Miller Analogies Test and at time of application for candidacy **must present two letters of recommendation from administrators who have had opportunities to observe their teaching**. Candidates may also be required to attend an interview.

Required Courses:

Waiver of required courses may be requested in areas in which competence can be demonstrated.

	Credits
37-308 Measurement and Evaluation	3
37-311 Psychology of Exceptional Children ..	3
37-315 Psychopathology of the Brain-Injured Child	3

	Credits
37-316 Principles of Speech Pathology for the Classroom Teacher ...	3
OR	
15-390 Speech Improvement in the Classroom	3
37-412 Medical Aspects of the Exceptional Child	3
37-441* Research Seminar in Special Education	3
OR	
38-414* Seminar in Curriculum Development for Mentally Handicapped Children	3
37-454 Counseling the Handicapped	3
38-412 Teaching the Trainable Mentally Handicapped Child	3
38-435 Practicum I in Teaching Trainable Mentally Handicapped Children	3
38-445 Practicum II in Teaching Trainable Mentally Handicapped Children	3

Electives: 6 credits from selected list of electives

36-328 Psychology of Mental Health	3
36-437 Theories and Principles of Counseling	3
37-322 Mental Health and Behavior Deviations ...	3
37-406 Vocational Rehabilitation	3
37-411 Seminar I in the Psychopathology of Emotionally Disturbed Children	3
37-414 Medical Aspects of Crippling Conditions in Children	3
37-415 Education of the Physically Handicapped Child ...	3
37-442 Thesis Credit in Special Education	3
38-342 Vocational Preparation for the Academically Handicapped Child ...	3
66-313 Principles and Techniques of Guidance	3
Other electives with approval of advisor	

*A Master's Project is required. The project may be accomplished through one of these seminars.

master of arts in special education: teaching the emotionally disturbed child

The purpose of this program is to train teachers of emotionally disturbed children and to advance the professional training of experienced teachers in that field.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Students electing this program must have the following or their equivalents:

General Psychology
Educational Psychology or Psychology of Learning
Child Development, Child Psychology, or Psychology of Adolescence
Teaching of Reading

Requirements for the Degree

A minimum of 36 credit hours, including a 6-hour practicum with emotionally disturbed children is required of all candidates. A master's project or thesis is also required of all candidates. The thesis may be taken for 3 credits. At the time of application for degree candidacy the student **must possess an elementary or high school teaching certificate**. In addition to these requirements, candidates for the degree must show satisfactory performance on the Miller Analogies Test and at time of application for candidacy **present two letters of recommendation from administrators who have had opportunities to observe their teaching**. Candidates may also be required to attend an interview.

Required Courses:

Waiver of required courses may be requested in areas in which competence can be demonstrated.

Credits

37-311 Psychology of Exceptional Children..	3
37-322 Mental Health and Behavior Deviations...	3
37-403 Training Seminar I in Group Process	3
37-404 Training Seminar II in Group Process	3
37-405 Principles of Diagnostic Testing	3
OR	
37-308 Measurement and Evaluation	3
37-411 Seminar I in the Psychopathology of Emotionally Disturbed Children	3
37-421 Seminar II in the Psychopathology of Emotionally Disturbed Children	3
37-441 *Research Seminar in Special Education	3
37-492 **Seminar in Teaching of Emotionally Disturbed Children....	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities...	3
38-433 Practicum I in Teaching Emotionally Disturbed Children	3
38-443 Practicum II in Teaching Emotionally Disturbed Children	3

**A Master's Project is required. The project may be accomplished through this seminar.*

***May be waived for experienced teachers of Emotionally Disturbed Children. If waived, an elective may be substituted for this requirement.*

master of arts in special education: teaching the socially maladjusted child

The purpose of this program is to train teachers of socially maladjusted children and to advance the professional

training of experienced teachers in that field.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Students electing this program must have the following or their equivalents:

General Psychology
Educational Psychology or Psychology of Learning
Child Development, Child Psychology, or Psychology of Adolescence
Teaching of Reading

Requirements for the Degree

A minimum of 36 credits, including a 6-hour practicum with socially maladjusted children, is required of all candidates. A master's project or thesis is also required of all candidates. The thesis may be taken for 3 hours of course credit. At the time of application for degree candidacy the student **must possess an elementary school or high school teaching certificate**. In addition to these requirements, candidates for the degree must show satisfactory performance on the Miller Analogies Test and at time of application for candidacy **must present two letters of recommendation from administrators who have had opportunities to observe their teaching**. Candidates may also be required to attend an interview.

Required Courses:

Waiver of required courses may be requested in areas in which competence can be demonstrated.

Credits

37-308 Measurement and Evaluation	3
37-311 Psychology of Exceptional Children..	3
37-322 Mental Health and Behavior Deviations...	3
37-411 Seminar I in the Psychopathology of Emotionally Disturbed Children	3
37-441 *Research Seminar in Special Education	3
37-461 Cultures of the Disadvantaged	3
37-491 **Seminar in Teaching of Socially Maladjusted Children..	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities...	3
38-432 Practicum I in Teaching Socially Maladjusted Children	3
38-442 Practicum II in Teaching Socially Maladjusted Children	3

Elective Sequences: 6-9***

Elective Sequence I: Learning Disabilities (SA-LD)

Credits

37-315 Psychopathology of the Brain-Injured Child	3
66-321 Diagnosis and Treatment of Reading Difficulties	3

Elective Sequence II: Teaching the Gifted Child (SA-Gifted)

37-401 Psychology of the Gifted Child	3
38-403 Seminar in Curriculum and Materials for the Gifted	
OR	
38-402 Education of the Gifted Child	3
(Both, if 37-491 Seminar in Teaching of Socially Maladjusted Children is waived.)	

Elective Sequence III: Selected Electives: 6-9 credits from Sequences I and II and from the following list:

36-311 Psychology of Personality	3
36-312 Abnormal Psychology ...	3
36-328 Psychology of Mental Health	3
36-329 Adolescent Psychology ..	3
36-431 Psychoanalytic Theories of Personality	3
36-437 Theories and Principles of Counseling	3
37-316 Principles of Speech Pathology for the Classroom Teacher ...	3
OR	
15-390 Speech Improvement in the Classroom	3
37-405 Principles of Diagnostic Testing	3
37-442 Thesis Credit in Special Education	3
38-305 Pre-Practice Field Experience with Socially or Emotionally Maladjusted Children .	3
66-313 Principles and Techniques of Guidance	3

**A Master's Project is required. The project may be accomplished through this seminar.*

***May be waived for Experienced Teachers of Socially Maladjusted Children. If waived, an elective may be substituted for this requirement.*

****Additional elective if 37-491 Seminar in Teaching of Socially Maladjusted Children is waived.*

master of arts in special education: teaching children with learning disabilities

This program is designed to prepare specialists to work with children who have learning disabilities, to advance the professional background of teachers already working in the field, and to provide the classroom teacher with skills and knowledge in the field of learning disability.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Students electing this program must have the following or their equivalents:

General Psychology
Educational Psychology or Psychology of Learning
Child Development, Child Psychology, or Psychology of Adolescence
Teaching of Reading or of the Language Arts

Requirements for the Degree

A minimum of 36 credits, including a 6-hour practicum with children with learning disabilities, is required of all candidates. Nine of these hours are electives. A master's project or thesis is also required of all candidates. The thesis may be taken for 3 hours of course credit. At the time of application for degree candidacy the student **must possess an elementary or high school teaching certificate**. In addition to these requirements, candidates for the degree must show satisfactory performance on the Miller Analogies Test and at time of application for candidacy **must present two letters of recommendation from administrators who have had opportunities to observe their teaching**. Candidates may also be required to attend an interview.

Required Courses

Waiver of required courses may be requested in areas in which competence can be demonstrated.

	Credits
37-308 Measurement and Evaluation	3
37-311 Psychology of Exceptional Children ..	3
37-315 Psychopathology of the Brain-Injured Child ...	3
37-416 Seminar in Learning Disabilities	3

**A Master's Project is required. The project may be accomplished through this seminar.*

	Credits
37-441 *Research Seminar in Special Education	3
38-401 Diagnosis and Remediation of Severe Learning Disabilities	3
38-436 Practicum I in Teaching Children with Learning Disabilities (Clinical)	3
38-446 Practicum II in Teaching Children with Learning Disabilities (School)	3
66-321 Diagnosis and Treatment of Reading Difficulties	3

Electives: 9 credits

Electives from areas I, II, and/or III should be selected to deepen and expand the student's background. Other electives may be taken with the consent of the program advisor.

Area I: Psychology (at least one course)

36-317 Introduction to Statistical Methods in Psychology	3
36-328 Psychology of Mental Health	3
36-437 Theories and Principles of Counseling	3
37-309 Psychology of Language and Cognitive Development	3
37-322 Mental Health and Behavior Deviations ..	3

Area II: Communication Skills (at least one course)

15-414 Specialized Problems in Speaking and Listening	3
37-316 Principles of Speech Pathology for the Classroom Teacher ...	3
68-401 Developmental Reading Theory	3
OR	
64-306 Methods of Teaching Reading—Elementary School	2

Area III: Other Electives

36-451 Research Methodology Seminar	3
37-412 Medical Aspects of the Exceptional Child	3
37-442 Thesis Credit in Special Education	3
62-413 Teacher Interpersonal and Intergroup Relations	3



master of arts in speech

An in-depth study of the substance and skills of Speech and the Performing Arts, this program is designed for secondary school teachers of Speech, for candidates for teaching positions in higher education who require appropriate preparation for further graduate study, and for students interested in positions other than teaching.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires 15 credits in Speech, including courses that provide an introduction to the broad field of Speech and prepare the student for advanced work.

Requirements for the Degree

Course requirements for the degree include 30 credits in Speech. An organized program of course work will be selected in consultation with a faculty advisor. In addition, each candidate will submit evidence of scholarship in the form of a non-credit Master's Project, or, upon departmental invitation, a Master's Thesis. The Master's Project may be a creative project or a research paper adapted from seminars or independent study. The Master's Thesis, upon successful completion, would be awarded 6 credits. Candidates must also pass a comprehensive written examination on their course work, and—at the discretion of the Graduate Faculty in Speech—an oral examination on the course work and on the Thesis or written Project.

Credits

Speech Courses (required): 6 credits

- 15-431 Introduction to Graduate Study in Speech 3
and a Seminar in the field of the candidate's major area of study: 15-441, 15-442, 15-443 or 15-444 3

The additional 21 credits should be selected, with the approval of the advisor, from the following:

Interpretative and Performing Arts

- 15-330 Performing Arts II 3
15-331 Theatrical Backgrounds of Drama I 3
15-332 Theatrical Backgrounds of Drama II 3
15-333 Contemporary Theatre .. 3
15-334 Drama 3
15-335 History and Theory of the Dance 3
15-340 Scenic Design 3
15-342 Stage Lighting 3
15-343 History and Design of Costume for Theatre .. 3
15-345 Directing 3
15-347 Playwriting 3
15-348 Children's Theatre Workshop 3
15-355 Advanced Oral Interpretation 3
15-357 Oral Interpretation of Shakespeare 3
15-362 The Film As An Art Form . 3
15-393 Creative Dramatics 3
15-394 Specialized Problem in Creative Dramatics ... 3
15-397 Speech Activities in the Elementary School 3
15-413 Independent Study in Interpretative Arts 3
15-421 Children's Theatre 3
15-423 Independent Study in Performing Arts 3
15-425 Interpretation of Prose for Children 3
15-426 Interpretation of Poetry for Children 3
15-427 Choral Reading 3
15-442 Seminar-Research Problems in Performing Arts 3
15-443 Seminar-Research Problems in Interpretative Arts 3
75-398 Speech Activities in the Secondary School 3

Public Address and Group Communication

- 15-306 Studies in Speech 3
15-308 Independent Study in Speech 3
15-309 Independent Study in Theatre Arts 3
15-310 Persuasion 3
15-311 Advanced Public Speaking 3
15-317 Argumentation and Debate 3

Credits

- 15-320 Classical Rhetoric 3
15-322 Modern Rhetoric 3
15-323 British Public Address ... 3
15-324 American Public Address 3
15-328 Rhetoric—Selected Studies 1
15-411 Discussion and Debate in the Elementary School 3
15-434 Independent Study in Group Communication 3
15-441 Seminar-Research Problems in Group Communication 3

Psychology of Communication

- 15-306 Studies in Speech 3
15-308 Independent Study in Speech 3
15-309 Independent Study in Theatre Arts 3
15-390 Speech Improvement in the Classroom 3
15-414 Specialized Problems in Speaking and Listening 3
15-444 Seminar-Research Problems in the Psychology of Communication 3
15-451 Independent Study in

Credits

- the Psychology of Communication 3
15-488 Public School Practices in Speech Correction .. 3
37-309 Psychology of Language and Cognitive Development 3
37-316 Principles of Speech Pathology for the Classroom Teacher ... 3
37-317 Psychology of Language and Communication ... 3

Mass Media

- 15-308 Independent Study in Speech 3
15-345 Directing 3
15-347 Playwriting 3
15-360 Advanced Television 3
15-362 The Film As An Art Form . 3
15-365 Mass Media II 3
15-434 Independent Study in Group Communication 3
15-441 Seminar—Research Problems in Group Communication 3

Master's Thesis

- 15-445 Thesis Seminar: Speech (by Departmental invitation) 6

master of arts in the teaching of speech

This program is designed for teachers who wish to develop professionally in communicating effectively and responsibly in one or more media. Emphasis may center on the message, the medium, or man in communicative situations. The program can serve the oral communication needs and interests of the classroom teacher at the elementary or secondary levels in all subject matter areas, or the program can prepare the teacher in one of the Speech arts or the Speech sciences.

Requirements for Admission to the Program

General: Students must fulfill the requirements for admission to the Graduate College.

Specific: Admission to the program requires 15 credits of undergraduate work in Speech, including Oral Interpretation of Literature, and Speech Activities in the Elementary or the Sec-

ondary School. The remaining credits should include courses that provide an introduction to the broad field of Speech and prepare the student for advanced work.

Requirements for the Degree

Course requirements for the degree include 21 credits in Speech and 9 in Education. An organized program of course work will be selected in consultation with a faculty advisor. In addition, each candidate will submit evidence of scholarship in the form of a Master's project, earning no course credit, consisting of (a) a creative project, (b) a research paper adapted from seminars or independent study, or (c) a thesis, written by invitation only. Candidates must also pass a comprehensive written examination on their course work, and—at the discretion of the graduate faculty in Speech—an oral examination on course work and on the thesis or written project.

Credits

Speech Courses (required): 6 credits

- 15-431 Introduction to
Graduate Study in
Speech 3
and a seminar in the field of the
candidate's major
area of study:
15-441, 15-442,
15-443 or 15-444 3

A minimum of 15 credits approved by
the advisor from the following:

Interpretative and Performing Arts

- 15-330 Performing Arts II 3
15-331 Theatrical Backgrounds
of Drama I 3
15-332 Theatrical Backgrounds
of Drama II 3
15-333 Contemporary Theatre .. 3
15-334 Drama 3
15-335 History and Theory of
the Dance 3
15-340 Scenic Design 3
15-342 Stage Lighting 3
15-343 History and Design of
Costume for Theatre .. 3
15-345 Directing 3
15-347 Playwriting 3
15-348 Children's Theatre
Workshop 3
15-355 Advanced Oral
Interpretation 3
15-357 Oral Interpretation of
Shakespeare 3
15-362 The Film As An Art Form . 3
15-393 Creative Dramatics 3
15-394 Specialized Problems in
Creative Dramatics ... 3
15-397 Speech Activities in the
Elementary School 3
15-413 Independent Study in
Interpretative Arts 3
15-421 Children's Theatre 3
15-423 Independent Study in
Performing Arts 3
15-425 Interpretation of Prose
for Children 3
15-426 Interpretation of Poetry
for Children 3
15-427 Choral Reading 3
15-442 Seminar-Research
Problems in
Performing Arts 3
15-443 Seminar-Research
Problems in
Interpretative Arts 3
75-398 Speech Activities in the
Secondary School 3

**Public Address and Group
Communication**

- 15-306 Studies in Speech 3
15-308 Independent Study in
Speech 3
15-309 Independent Study in
Theatre Arts 3
15-310 Persuasion 3
15-311 Advanced Public
Speaking 3
15-317 Argumentation and
Debate 3

- Credits
- 15-320 Classical Rhetoric 3
15-322 Modern Rhetoric 3
15-323 British Public Address ... 3
15-324 American Public
Address 3
15-328 Rhetoric—Selected
Studies 1
15-411 Discussion and Debate
in the Elementary
School 3
15-434 Independent Study in
Group
Communication 3
15-441 Seminar-Research
Problems in Group
Communication 3

Psychology of Communication

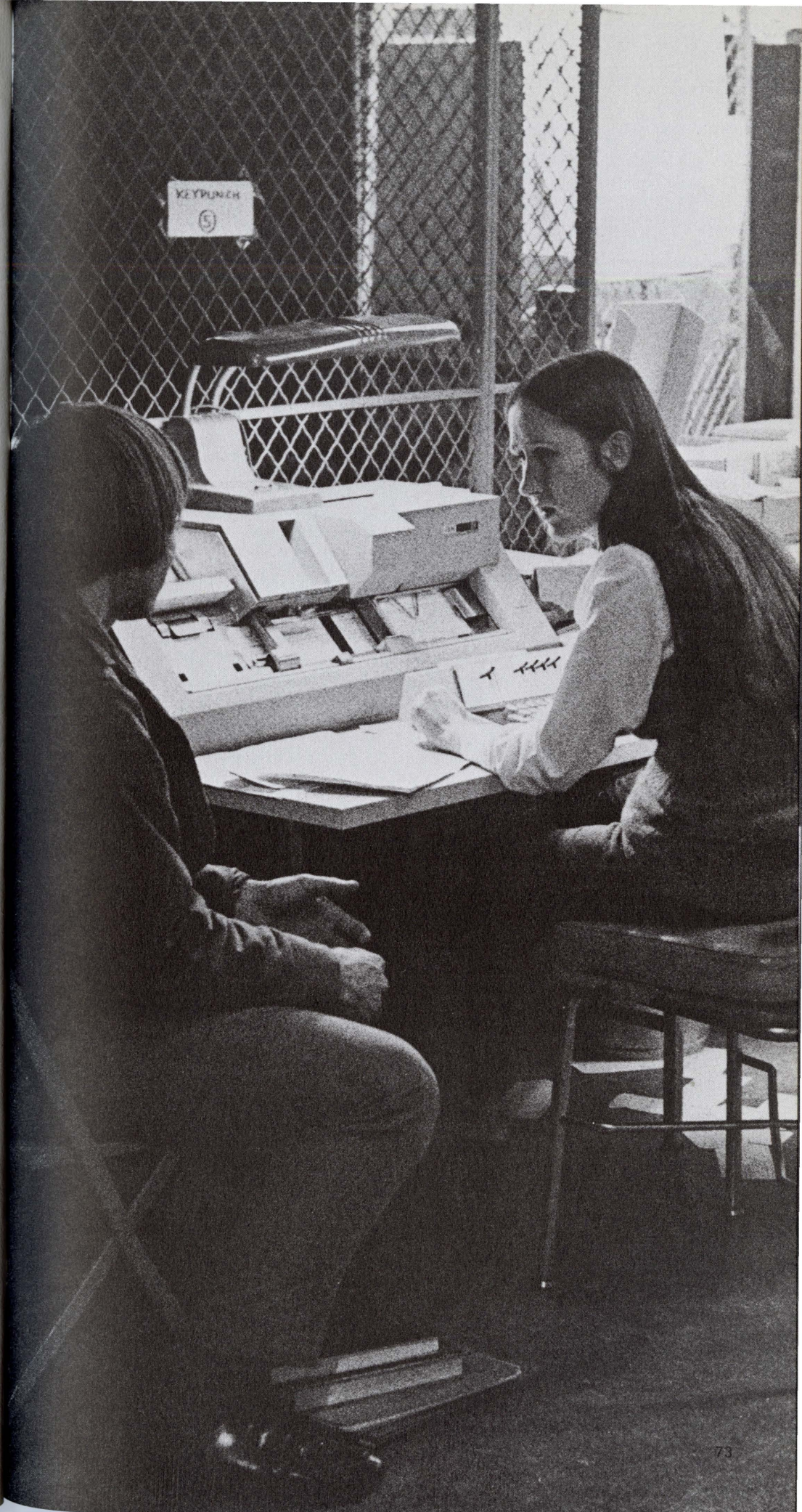
- 15-306 Studies in Speech 3
15-308 Independent Study in
Speech 3
15-309 Independent Study in
Theatre Arts 3
15-390 Speech Improvement in
the Classroom 3
15-414 Specialized Problems in
Speaking and
Listening 3
15-444 Seminar-Research
Problems in the
Psychology of
Communication 3
15-451 Independent Study in
the Psychology of
Communication 3
15-488 Public School Practices
in Speech Correction .. 3
37-309 Psychology of Language
and Cognitive
Development 3
37-316 Principles of Speech
Pathology for the
Classroom Teacher ... 3
37-317 Psychology of Language
and Communication ... 3

Mass Media

- 15-308 Independent Study in
Speech 3
15-345 Directing 3
15-347 Playwriting 3
15-360 Advanced Television 3
15-362 The Film As An Art Form . 3
15-365 Mass Media II 3
15-434 Independent Study in
Group
Communication 3
15-441 Seminar-Research
Problems in Group
Communication 3

Education: 9 credits

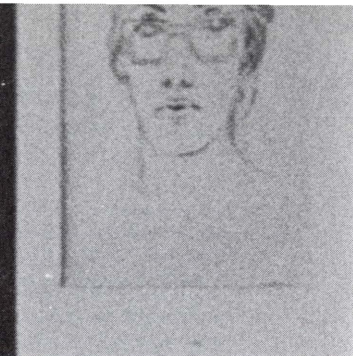
- 64-414 Principles of
Curriculum
Development 3
65-421 Research in
Classroom Teaching
of Language Arts 3
69-402 Television and Related
Instructional Media ... 3



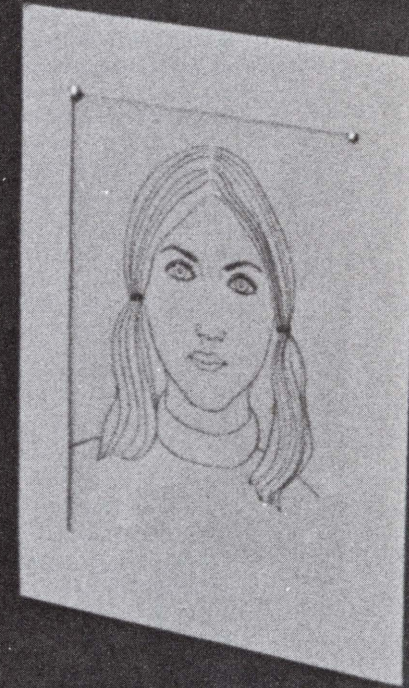
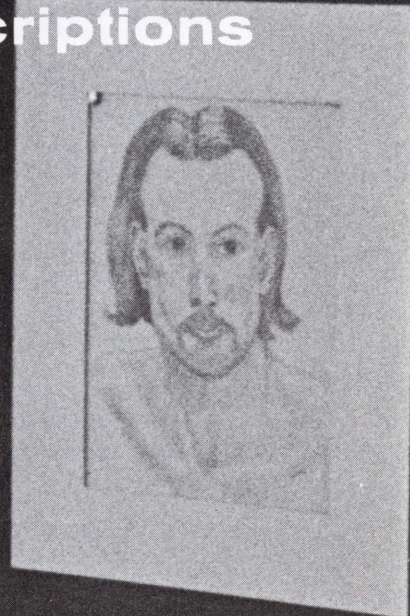
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course descriptions



To all students as they see it...



11-311 Individual Research in the Arts 3 cr.

Individual investigation into a topic of the student's choice, involving relationships among the arts or between the arts and other disciplines.

Prerequisite: Consent of instructor.

11-312 Studies in Parallel Developments in the Arts 3 cr.

Examination of one major artistic development (such as Impressionism, Classicism, Romanticism), emphasizing its nature in the several arts, its expression in content and form, its inception and growth as affected by intellectual and social processes.

Prerequisite: Consent of instructor.

11-313 The Art of Africa and Oceania 3 cr.

Survey of the art of Africa and Oceania. Examination of actual objects in the Field Museum and in the Art Institute of Chicago is required.

11-314 The Art of Pre-Columbian Indian, American Indian, and Eskimo 3 cr.

Survey of the art of Pre-Columbian Indian, American Indian and Eskimo. Examination of actual objects in the Field Museum is required.

Prerequisite: 11-101 Visual Foundations of Art or graduate standing.

11-315 The Art of the Far East 3 cr.

Major arts of Far Eastern cultures; iconography and aesthetics, social and technical aspects, development of various styles; lectures, seminars, films, museum visits.

Prerequisite: 12-313 Social Aspects of Historical Art Forms and 12-314 Social Aspects of Contemporary Art Forms or consent of instructor.

11-316 The Art of the Renaissance 3 cr.

Painting, sculpture and architecture of Europe from the fifteenth century to the nineteenth; iconography and aesthetics, social and technical aspects, development of style; lectures, seminars, films, museum visits.

Prerequisite: 12-313 Social Aspects of Historical Art Forms or consent of instructor.

11-317 The Art of the United States of America 3 cr.

Survey of American art of the nineteenth and twentieth centuries, with special emphasis to be given to significant developments since World War II.

Prerequisite: 12-211 Art in Society or consent of instructor.

11-318 Ancient and Medieval Art 3 cr.

Survey of ancient and medieval painting, sculpture and architecture.

Prerequisite: 12-313 Social Aspects of Historical Art Forms or consent of instructor.

11-321 Commonwealth of the Arts 3 cr.

Relationships among the arts developed in part from insights gained in prerequisite courses.

Prerequisite: 11-101 Visual Foundations of Art, 13-101 Introduction to Music, 14-101 Literature and Writing I, 14-102 Literature and Writing II.

11-331 Humanities Institute 2 cr.

The relationships that exist among the arts: art, music and literature; relationships discovered on the basis of in-depth analysis of individual art works and in connection with selected readings in the philosophy of art.

Prerequisite: Consent of instructor.

11-341 Architecture I 3 cr.

Survey of architectural forms and concepts from ancient times to the beginning of the nineteenth century.

Prerequisite: 12-313 Social Aspects of Historical Art Forms and 12-314 Social Aspects of Contemporary Art Forms.

11-342 Architecture II 3 cr.

Architecture from the early nineteenth century to the present with emphasis on the Chicago School of Architecture and its contributions.

Prerequisite: 12-313 Social Aspects of Historical Art Forms and 12-314 Social Aspects of Contemporary Art Forms, or consent of instructor.

12-311 Physical Aspects of Two-Dimensional Art 3 cr.

Nature of two-dimensional materials and the physical forces that determine their use; investigation of how expanding knowledge of materials and mechanics affects techniques and forms of art; print-making design problems concerning a variety of tools; problems of evaluation.

Prerequisite: 11-101 Visual Foundations of Art.

12-312 Physical Aspects of Three-Dimensional Art 3 cr.

Nature of three-dimensional materials; the physical properties of materials; survey of the uses of materials and tools in our society; assessment of the basic relationships of technical sculpture processes to materials and tools in solving three-dimensional design problems to best advantage.

Prerequisite: 11-101 Visual Foundations of Art.

12-313 Social Aspects of Historical Art Forms 3 cr.

Comparative historical studio investigation of art forms of specific cultures with emphasis on economic, technological, political and religious factors affecting the art forms.

Prerequisite: 12-211 Art in Society.

12-314 Social Aspects of Contemporary Art Forms 3 cr.

Using a comparative cultural basis, examination of the values art expresses; investigation of visual art forms produced by contemporary social needs and the corresponding role of the artist in new institutions; design and social functions, including problems in designing for use; art and communication; the visual symbol; problems of evaluation.

Prerequisite: 12-211 Art in Society.

12-315 Perceptual Aspects of Art I 3 cr.

Systems of perceptual interpretation and structure with emphasis on drawing; man's perceptual growth, stressing the influence of physical, psychological and intellectual factors in structuring his visual experiences, design and perception, concepts of abstraction, problems of evaluation.

Prerequisite: 11-101 Visual Foundations of Art.

12-316 Perceptual Aspects of Art II 3 cr.

Studio examination of the technical development of visual communication by means of design, symbol and image; exploration of painting media.

Prerequisite: 11-101 Visual Foundations of Art.

12-317 Visual Communication Fundamentals 3 cr.

Introduction to techniques and concepts of two-dimensional visual communication; historical and contemporary social aspects; typography, layout, display, image-making; lectures, seminars and workshop.

Prerequisite: 12-311 Physical Aspects of Two-Dimensional Art, 12-312 Physical Aspects of Three-Dimensional Art, 12-313 Social Aspects of Historical Art Forms, 12-314 Social Aspects of Contemporary Art Forms, 12-315 Perceptual Aspects of Art I, and 12-316 Perceptual Aspects of Art II.

12-318 Advanced Visual Communication 3 cr.

Advanced techniques and concepts of visual communication, including three-dimensional design problems; visual design for contemporary technological communications media; symbol systems and image making; photography, model making, television and film design for educational purposes; lectures, seminars and workshop; individual design problems.

Prerequisite: 12-317 Visual Communication Fundamentals.

12-319 Advanced Sculpture I 3 cr.

Studio problems emphasizing personal exploration in an area of student choice.

Prerequisite: Either 12-216 Sculpture Techniques and Processes I: Modeling and Casting, or 12-217 Sculpture Techniques and Processes II: Subtractive, or 12-218 Sculpture Techniques and Processes III: Welding and Construction.

12-320 Advanced Sculpture II 3 cr.

Studio problems emphasizing personal exploration in an area of student's choice.

Prerequisite: 12-319 Advanced Sculpture I.

12-321 Advanced Sculpture III 3 cr.

Studio problems emphasizing personal exploration in an area of student's choice.

Prerequisite: 12-320 Advanced Sculpture II.

12-322 Studio in Drawing 3 cr.

Guided study in drawing with depth approach using traditional and experimental media.

Prerequisite: In-service teacher.

12-323 Studio in Painting 3 cr.

Guided study in painting with depth approach using traditional and experimental media.

Prerequisite: In-service teacher.

12-324 Studio in Sculpture 3 cr.

Guided study in sculpture with depth approach using traditional and experimental media.

Prerequisite: In-service teacher.

12-326 Modern European Sculpture and Architecture 3 cr.

A study of the development of modern sculpture and architecture in Italy, France, Germany, and England in the 19th and 20th centuries. Particular attention to masterpieces in sculpture and architecture which have influenced trends in contemporary art. Slide lectures, filmstrips, museum visits.

Prerequisite: 12-211 Art in Society or consent of instructor.

12-327 Sculpture and Architecture of the United States 3 cr.

A detailed study of the sculpture and architecture of the United States from the Colonial period through the twentieth century.

Prerequisite: 12-313 Social Aspects of Historical Art Forms or 12-314 Social Aspects of Contemporary Art Forms or 12-326 Modern European Sculpture and Architecture or consent of instructor.

12-331 Drawing I 3 cr.

Interpretive drawing experiences with a variety of media.

Prerequisite: 12-315 Perceptual Aspects of Art I.

12-332 Drawing II 3 cr.

Advanced interpretive drawing studio experiences with a variety of media.

Prerequisite: 12-331 Drawing I.

12-333 Graphics I—Relief Printing 3 cr.

Introduction to the processes of relief printing and serigraphy; experimentation with and analysis of expressive qualities of design elements in relief and stencil printing media.

Prerequisite: 12-311 Physical Aspects of Two-Dimensional Art.

12-334 Graphics II—Intaglio 3 cr.

Introduction to the processes of intaglio printing; experimentation with and analysis of expressive qualities of etching and engraving processes in visual design.

Prerequisite: 12-311 Physical Aspects of Two-Dimensional Art.

12-335 Graphics III—Lithography 3 cr.

Introduction to the planographic process of printing; experimentation with and analysis of lithography as a process for the solution of visual design problems.

Prerequisite: 12-311 Physical Aspects of Two-Dimensional Art.

12-336 Advanced Graphics 3 cr.

Workshop in design and expression through one or more of the graphic processes; advanced work in the processes of relief, stencil, intaglio and/or planographic printing.

Prerequisite: 12-311 Physical Aspects of Two-Dimensional Art and either 12-333 Graphics I, 12-334 Graphics II, or 12-335 Graphics III.

12-337 Industrial Design 3 cr.

Workshop experiences and lectures to provide the knowledge and skills necessary in understanding and manipulating the concepts and tools essential for a basis in industrial design; employment of creative exploration of hand and machine tools to the end of forming useful artifacts.

Prerequisite: 12-312 Physical Aspects of Three-Dimensional Art.

12-341 Advanced Painting I 3 cr.

Advanced studio problems emphasizing individual exploration in an area of student choice.

Prerequisite: Either 12-213 Painting Techniques and Processes I: General Aqueous Media, 12-214 Painting Techniques and Processes II: General Non-Aqueous Media, or 12-215 Painting Techniques and Processes III: Contemporary Media.

12-342 Advanced Painting II 3 cr.

Advanced studio problems emphasizing individual exploration in an area of student choice.

Prerequisite: 12-341 Advanced Painting I.

12-343 Advanced Painting III 3 cr.

Advanced studio problems emphasizing individual exploration in an area of student choice.

Prerequisite: 12-342 Advanced Painting II.

12-351 Seminars in Visual Art 1 cr.

Intensive studies in specialized areas with extensive use of studio and outside source materials.

Prerequisite: Consent of art undergraduate advisory committee.

12-352 Independent Study in Visual Art 3 cr.

Individual investigation into a topic of the student's choice; staff guidance.

Prerequisite: Consent of art undergraduate advisory committee.

12-361 Ceramics I 3 cr.

Introduction to the history of ceramics; sequential studio problems in hand building methods, surface treatment and glazing of ceramics.

Prerequisite: 12-312 Physical Aspects of Three-Dimensional Art.

12-362 Ceramics II 3 cr.

Introduction to the chemistry of clay bodies and glazes; sequential studio problems in using the wheel in building with clay.

Prerequisite: 12-361 Ceramics I.

12-363 Ceramics III 3 cr.

Chemistry of clay bodies and glazes; advanced studio problems in ceramics with emphasis on experimental sculpture and casting.

Prerequisite: 12-362 Ceramics II.

12-364 Color 3 cr.

Color phenomena through lecture and student problem-solving approach.

Prerequisite: 12-316 Perceptual Aspects of Art II.

12-371 Textiles I 3 cr.

Basic studio problems in constructing and weaving with simple looms; threading and weaving with at least a four-harness loom.

Prerequisite: 12-311 Physical Aspects of Two-Dimensional Art.

12-372 Textiles II 3 cr.

Advanced studio problems in textile surface enrichment with emphasis on silk screen, stitchery, batik and tie-dye.

Prerequisite: 12-311 Physical Aspects of Two-Dimensional Art or 12-371 Textiles I.

12-388 Contemporary Art Education in Grades Three to Eight 3 cr.

Development of inquiry and understanding of the many problems of communication in teaching art in grades three to eight.

Prerequisite: 11-101 Visual Foundations of Art.

12-394 Contemporary Art Education in the Kindergarten-Primary Grades 3 cr.

The important role of visual art in the growth and development of the child in kindergarten and the primary grades; influences of recent developments in art and art education in selecting and organizing visual fundamentals and related learnings; emphasis on the functions of the teacher in the motivational, developmental and culminating stages.

Prerequisite: 11-101 Visual Foundations of Art.

12-397 Art Workshop in Kindergarten-Primary Grades 3 cr.

Contemporary trends in visual art curricula for kindergarten and primary grades; understanding of the visual art concepts, design problems and the media included in the sequential visual art programs by means of visual art workshop experiences.

Prerequisite: In-service teacher.

12-398 Art Workshop in Intermediate Grades 3 cr.

Contemporary trends in visual art curricula for the intermediate grades; understanding of the visual art concepts, processes and media included in the current sequential visual art programs by means of visual art workshop experiences.

Prerequisite: In-service teacher.

12-399 Art Workshop in the Upper Grades 3 cr.

Development of understanding of contemporary art education curricula by means of practical visual art workshop experience and multimedia communication of recent films, filmstrips, displays, etc.

Prerequisite: In-service teacher.

13-301 Counterpoint I 3 cr.

Writing in two and three parts in various styles and modes; study of species and modal procedures; ear training and sight singing.

Prerequisite: 13-201 Music Theory II.

13-302 Counterpoint II 3 cr.

Writing in four parts; double counterpoint, canon and fugue; contrapuntal analysis.

Prerequisite: 13-301 Counterpoint I.

13-305 Form and Analysis I 3 cr.

Structural and stylistic features in their musical context; motif, phrase and period; binary and ternary form, theme and variations, rondo; sonata form and unique forms.

Prerequisite: 13-201 Music Theory III.

13-308 Orchestration 3 cr.

Instrumental timbres and the capabilities of instruments; scoring for instruments in a variety of combinations,

including the orchestra and instrumental-vocal combinations.

Prerequisite: 13-122 Music Theory II or consent of instructor.

13-314 Music Before 1600 3 cr.

Within a historical framework, a consideration of structural, stylistic and formal aspects of the musical art of the Ancient Greek civilization, the Early Christian Era, the Middle Ages, and the Renaissance.

Prerequisite: 13-101 Introduction to Music or consent of instructor.

13-315 Music of the Baroque Era 3 cr.

Within a historical framework, a consideration of structural, stylistic and formal aspects of the musical art of the Baroque Era.

Prerequisite: 13-101 Introduction to Music or consent of instructor.

13-316 Music of the Classical Era 3 cr.

Within a historical framework, a consideration of structural, stylistic and formal aspects of the musical art of the Classical Era.

Prerequisite: 13-101 Introduction to Music or consent of instructor.

13-317 Music of the Romantic Era 3 cr.

Within a historical framework, a consideration of structural, stylistic and formal aspects of the musical art of the Romantic Era.

Prerequisite: 13-101 Introduction to Music or consent of instructor.

13-318 Music of the Twentieth Century 3 cr.

Within a historical framework, a consideration of structural, stylistic and formal aspects of the musical art of the twentieth century.

Prerequisite: 13-101 Introduction to Music or consent of instructor.

13-319 Music of America 3 cr.

Development of music in America from the pre-revolutionary period to the contemporary period.

Prerequisite: 13-101 Introduction to Music or consent of instructor.

13-321 Seminar in Music History 3 cr.

Intensive studies in specialized topics.

Prerequisite: Consent of instructor.

13-322 Independent Study in Music 3 cr.

Individual investigation into a topic of the student's choice; staff guidance.

Prerequisite: Consent of instructor.

13-351 Applied Music VII 2 cr.

Individual study for continued development of performing skills and musical artistry; knowledge of the

repertoire for the specific voice or instrument at each level of performing ability.

Prerequisite: Audition for Committee on Applied Music.

13-352 Applied Music VIII 2 cr.

Individual study for continued development of performing skills and musical artistry; knowledge of the repertoire for the specific voice or instrument at each level of performing ability.

Prerequisite: Audition for Committee on Applied Music.

13-391 Contemporary Music Education in Grades Kindergarten-Three 3 cr.

Procedural methods for teaching music, including the Orff approach; a study of the child voice; application of techniques for teaching rote, note reading and two-part songs; use of instruments to enrich vocal, reading and listening experiences; techniques for development of performance media such as assemblies, playlets and programs.

Prerequisite: 13-101 Introduction to Music.

13-392 Contemporary Music Education in Grades Three-Eight 3 cr.

Procedures and materials for teaching a basic music curriculum in the intermediate self-contained classroom and the upper grade general music class; an adaptation of the Orff and Kodaly approaches for the older child; techniques for voice development, classification, two-three part singing and ensembles; use of instruments to enrich vocal, reading and listening experiences; techniques for development of performance media.

Prerequisite: 13-101 Introduction to Music.

13-393 Workshop in General Music Grades Seven-Twelve 2 cr.

Thorough exposition of methods and materials utilized in the teaching of general music on the upper grade and secondary level; workshop approach used in stressing the development of skills and attitudes through an experience-created curriculum.

Prerequisite: In-service teacher or consent of instructor.

13-394 Workshop in Music in the Intermediate Grades Four-Six 3 cr.

Current trends in music curricula for grades four through six; approaches, materials and institutional media for the development of skills, the understanding of concepts and the content included in a sequential music program.

Prerequisite: In-service teacher or consent of instructor.

14-309 Medieval Literature 3 cr.

English medieval literature exclusive of Chaucer, covering the period from 1100 to 1500; includes prose, poetry and drama; organized around the central motifs of medieval literary thought; includes discussion of the cultural and social backgrounds of the period.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-311 Shakespeare 3 cr.

Representative sonnets, comedies, histories and tragedies; the Elizabethan theatre and Shakespeare's contemporaries.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-312 Literature of Colonial Times 3 cr.

Selected prose and poetry of the Puritan and Revolutionary eras.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-313 American Literary Renaissance: 1830-1860 3 cr.

Selected topics for the study of Hawthorne, Melville, Emerson, Thoreau, Whitman and Dickinson.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-314 Chaucer and His Age 3 cr.

Selections from The Canterbury Tales, together with Troilus and Criseyde, to be read in the original; Chaucer's significance examined in relation to the language and social background of the period.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-315 Literature of the English Renaissance 3 cr.

Prose, poetry and drama of the English Renaissance in the sixteenth century; Shakespeare's dramatic works excluded.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-316 American Literature from the Civil War to World War I 3 cr.

Selected topics for the study of Twain, James, Howells, Crane, Norris, Dreiser and other writers.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-317 Modern American Drama 3 cr.

The major lines of development of modern American drama from O'Neill to such contemporary writers as Albee and Kopit.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-321 Literature of the Romantic Movement 3 cr.

English poetry and prose from 1780 to 1830; principal authors studied are Blake, Burns, Wordsworth, Coleridge, Byron, Shelley, Keats, Lamb, Hazlitt and DeQuincey.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-325 Readings in World Literature 3 cr.

Intensive study of fiction and poetry representative of an important literary movement, historical period, thematic concern.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-326 World Drama I—Aeschylus to Tolstoi 3 cr.

European drama from ancient times to the beginnings of realism, against a background of the development of the theatre; representative works by the chief playwrights of Greece, Italy, Spain, France, Germany and Russia.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-327 World Drama II—Ibsen to Beckett 3 cr.

Drama of the last century, with emphasis on thematic content and theatrical techniques; representative plays by Ibsen, Strindberg, Chekhov, Shaw, Pirandello, Yeats, Synge, O'Neill, Eliot, Sartre, Brecht, Beckett and others, together with statements by the playwrights concerning their work.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-328 Seventeenth Century Literature 3 cr.

Studies in seventeenth century literature exclusive of Milton.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-329 Milton 3 cr.

Milton's work and the intellectual milieu of the period.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-331 Biblical and Mythological Backgrounds of English and American Literature 3 cr.

History, versions, scholarly backgrounds of the Bible; selected readings from the historical, prophetic and poetical books of the Bible, with a view to correlations with literature; mythology, especially the Greek, Roman and Scandinavian.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-332 Elizabethan and Jacobean Drama 3 cr.

Major dramatists, excluding Shakespeare, in Elizabethan and Stuart

drama, 1550-1642, including Kyd, Marlowe, Webster, Jonson, Beaumont and Fletcher, and Shirley from the origin of professional and court drama until the closing of the theatres.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-341 Restoration and Eighteenth Century Literature I 3 cr.

Political activity in England that led to the restoration of Charles II in England; his court; the Restoration playwrights; the bawdy Restoration stage; reaction to the looseness of the stage; the new sentimental drama; the newspaper and the essay.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-342 Restoration and Eighteenth Century Literature II 3 cr.

Intensive study of the contrasts in the Age of Enlightenment; the interrelationship of politics and the writers; a view of neoclassic literature; the beginnings of the novel; eighteenth century criticism and biography, theory and practice.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-348 Literature of Victorian Age I 3 cr.

Selected Victorian poetry and nonfiction prose, with consideration of the social background.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-349 Literature of Victorian Age II 3 cr.

Continued study of selected Victorian poetry and nonfiction prose, with consideration of the social background.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-351 Development of the English Novel I 3 cr.

Forerunners of the English novel and the rough beginning of the new form; the beginnings of psychological realism in the English novel to the novels of Dickens.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-352 Development of the English Novel II 3 cr.

English novel from the dawn of the Industrial Revolution to the novels of James Joyce, with special attention paid to the influence of society on the novel, and the revolutionary innovators of the novel-form.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-355 Introduction to Oriental Literature 3 cr.

Introduction to Oriental literature in translation, including works of vari-

ous genres, from Chinese, Japanese, Indian and Near Eastern literature.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-356 Greek Literature in Translation 3 cr.

A survey of Greek literature in translation from Homer to Galen, introducing the student to the drama, history, poetry, and philosophy of ancient Greece. The course will be concerned with the problems of literary analysis; the relationship of the literature to the social, cultural and political movements of the period; and its relevance to the modern literary experience.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-357 Latin Literature in Translation 3 cr.

A survey of Latin Literature in translation from Plautus to St. Augustine, introducing the student to prose and poetry of ancient Rome. The course will be concerned with the problems of literary analysis; the historical and cultural background in which the works were produced; and the relationship of Latin literature to the foundations of Western literature.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-359 Independent Study in Literature 3 cr.

A non-graded, independent study program on the tutorial model, limited to 10 students per course. The nature of the course to be initiated at the student's suggestion to a particular instructor, and to be worked-out and designed in discussions with the instructor.

Prerequisite: Consent of instructor, student in good standing, and approval of department chairman.

14-361 Development of the American Novel I 3 cr.

The novel as a developing form from Charles Brockden Brown to Herman Melville; theme and technique in the American novel before the Civil War.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-362 Development of the American Novel II 3 cr.

The novel as a developing form from Mark Twain to William Faulkner.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-363 Contemporary English and American Literature I 3 cr.

Development of poetry in England from Yeats to writers of the 1960's against a background of historical and literary movements; particular emphasis on Yeats, Frost, Eliot, Pound, Stevens, Williams, Auden, Roethke and Lowell.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-364 Contemporary English and American Literature II: Novel 3 cr.

Development of the modern novel from Conrad to writers of the 1960's against a background of historical and literary movements; particular emphasis on Conrad, James, Joyce, Lawrence, Faulkner, Hemingway and Wolf.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-366 Midwestern Literature 3 cr.

A survey of Middle Western literature from frontier days to the present stressing the Chicago Renaissance writers and Mark Twain.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-368 Theory and Practice in Literary Criticism I 3 cr.

The literary theories of such writers as Plato, Aristotle, Longinus, Horace, Minturno, Castelvetro, Sydney, Dryden, Pope and Johnson; application of these theories to selected works of literature.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-369 Theory and Practice in Literary Criticism II 3 cr.

The literary theories of such critics as Wordsworth, Coleridge, Ruskin, Arnold, Pater, Ransom, Blackmur, James, Frye and others; application of these theories to selected works of literature.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-372 Utopian Literature 3 cr.

A survey of Utopian literature from ancient times to the contemporary period featuring the work of Plato, Augustine, More, Spenser, Swift, Bellamy, Huxley and others. Books will be examined both as works of philosophical speculation and as examples of effective literary style.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-373 Yiddish Literature in Translation 3 cr.

The manifestations of Yiddish literature and the Yiddish language from its beginning to the present time from Eastern Europe and West Germany to the East Side and West Roosevelt Road.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-375 Essentials of Journalism 3 cr.

Essentials of newswriting, layout, copy and proof reading, feature and editorial writing, libel, and sound newspaper practices; special problems of the school newspaper.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-376 Advanced Rhetoric 3 cr.

Interdependence of rhetoric, grammar, logic, semantics, psychology and criticism in the communication of ideas; written composition on an advanced level; assessment of the written work; practice in writing various types, with a focus on the student's interest; designed for students preparing to teach composition.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-377 Black Literature—Twentieth Century Influences 3 cr.

An introduction to and survey of some of the more important movements and works of Black literature.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-381 English Trimester 12 cr.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-382 Drama Workshop I 3 cr.

A workshop with readings in which the student develops skills in writing various forms of drama.

Prerequisite: 14-235 Preparatory Workshop I or consent of instructor.

14-384 Poetry Workshop I 3 cr.

A workshop with readings in which the student develops skills in writing poetry.

Prerequisite: 14-235 Preparatory Workshop I or consent of instructor.

14-385 Poetry Workshop II 3 cr.

A workshop with readings in which the student explores a wide range of the techniques of poetry.

Prerequisite: 14-384 Poetry Workshop I.

14-386 Fiction Workshop I: Creative Writing 3 cr.

A workshop with readings in which the student develops skills in writing prose fiction.

Prerequisite: 14-235 Preparatory Workshop I or consent of instructor.

14-387 Fiction Workshop II 3 cr.

A workshop with readings in which the student writes extensively in various forms of prose fiction.

Prerequisite: 14-386 Fiction Workshop I.

14-391 Children's Literature 3 cr.

Preparation for effective teaching of literature in the elementary school; wide reading of books for young children; story selection and story telling; authors and illustrators of children's books; classroom methods in stimulating creative expression; guidance of

individual reading; reading guidance in the classroom.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-392 Journalism I 1 cr.

Journalism I is an introductory course, stressing good newspaper practice; the actual writing of news stories; getting interviews; and writing stories for the school paper.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-393 Journalism II 1 cr.

The student is writing stories for the school paper; learning good copy reading and proof reading techniques; being introduced to specialized newspaper writing (features, columns, etc.) and to newspaper photography.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-394 Journalism III 1 cr.

This aspect of the course stresses actual newspaper make-up. The theory part will take place in the classroom and the practical aspect will be handled by the instructor and editor(s) of the newspaper at the printers.

Prerequisite: 14-102 Literature and Writing II or equivalent.

14-421 The Metaphysical Poets 3 cr.

The metaphysical tradition in seventeenth century poetry and its impact on modern poetry, including the work of Doone, Herbert Crashaw, Vaughan and Traherne, and such critical studies as those of Johnson, Grierson, Eliot, Leavis and Williamson.

Prerequisite: Graduate standing.

14-431 Bibliography and Methods of Literary Study 3 cr.

Materials, methods and tools of literary research; use of libraries; preparation of scholarly papers.

Prerequisite: Graduate standing.

14-432 The Literary Experience in the Elementary School 3 cr.

Creativity in general and literary creativity in particular; imagination, its development and expression; aspects of literature in the elementary classroom; aesthetics; language arts among the arts; individual and group projects in poetry and prose geared to the elementary level.

Prerequisite: Graduate standing.

14-441 Seminar in Sixteenth Century Literature: Varies 3 cr.

Advanced study of the works of a single author; individual assignments culminating in a paper; discussion of the investigations to constitute much of the work of the seminar meetings; author chosen for study to be announced in the printed schedule of classes.

Prerequisite: Graduate standing.

14-442 Seminar in Seventeenth Century Literature: Varies 3 cr.

See 14-441 for course description.

14-443 Seminar in Eighteenth Century Literature: Varies 3 cr.

See 14-441 for course description.

14-444 Seminar in Romantic Literature: Varies 3 cr.

See 14-441 for course description.

14-445 Seminar in Victorian Literature: Varies 3 cr.

See 14-441 for course description.

14-446 Seminar in Contemporary English Literature: Varies 3 cr.

See 14-441 for course description.

14-447 Seminar in Contemporary American Literature: Varies 3 cr.

See 14-441 for course description.

14-448 Seminar in Nineteenth Century American Literature: Varies 3 cr.

See 14-441 for course description.

14-449 Studies in American Literature: Varies 3 cr.

Advanced study of selected American writers; author or authors chosen to be announced in schedule of classes.

Prerequisite: Graduate standing.

14-450 Studies in English Literature: Varies 3 cr.

Advanced study of selected English writers; author or authors chosen to be announced in schedule of classes.

Prerequisite: Graduate standing.

14-451 Studies in Shakespeare 3 cr.

A close study and in-depth analysis of the major plays of Shakespeare with attention to pertinent Shakespearean scholarship on questions of text, source, interpretation, philosophic background, dramatic technique, etc.

Prerequisite: Graduate standing and 14-431 Bibliography and Methods of Literary Study.

14-452 Studies in Elizabethan Lyric 3 cr.

A study of Sixteenth Century lyric poetry, with emphasis on the development of the sonnet in English, including the poetry of Wyatt, Surrey, Sidney, Spenser, Drayton, Daniel, and Shakespeare.

Prerequisite: Graduate standing.

14-453 Thesis Seminar: Literature 6 cr.

Guidance of students conducting research and writing a thesis to fulfill requirements for the Master of Arts in Literature.

Prerequisite: Acceptance to master's degree candidacy in Literature.

14-454 Seminar in World Literature: Varies 3 cr.

Advanced study of the works of a single author; individual assignments culminating in a paper; discussion of the investigations to constitute much of the seminar meetings; author chosen for study to be announced in the printed schedule of classes.

Prerequisite: Graduate standing.

14-455 Studies in World Literature: Varies 3 cr.

Advanced study of selected writers in the field of World Literature.

Prerequisite: Graduate standing.

15-306 Studies in Speech 3 cr.

Research and intensive studies in selected problems in speech in the elementary classroom.

Prerequisite: Consent of instructor.

15-308 Independent Study in Speech 3 cr.

Study, research, discussion, reports and presentations in selected contemporary areas of speech education; public speaking, reading aloud, discussion and debate, persuasion, et cetera.

Prerequisite: Consent of instructor.

15-309 Independent Study in Theatre Arts 3 cr.

Individual investigation into a topic of the student's choice; staff guidance.

Prerequisite: Consent of instructor.

15-310 Persuasion 3 cr.

Theories and practices of modern persuasion; experience in making and judging persuasive speeches.

Prerequisite: 15-101 Foundations of Communication.

15-311 Advanced Public Speaking 3 cr.

Advanced work in the theory, composition, delivery and criticism of public speeches, designed for those with a professional interest in public speaking and offering substantially more intense preparation than the beginning course.

Prerequisite: 15-210 Public Speaking.

15-320 Classical Rhetoric 3 cr.

Rhetorical theories from Greece and Rome emphasizing Plato, Aristotle, Cicero, and Quintilian.

Prerequisite: Junior standing or consent of instructor.

15-322 Modern Rhetoric 3 cr.

Rhetorical theories from the Middle Ages to modern times, emphasizing the study of works by outstanding rhetoricians.

Prerequisite: Junior standing or consent of instructor.

15-323 British Public Address 3 cr.

Rhetorical theories and practice of British orators; careful examination of speeches of such figures as Chatham, Pitt, Fox, Burke, Churchill and others.

Prerequisite: 15-101 Foundations of Communication.

15-324 American Public Address 3 cr.

Rhetorical theories and practice of American orators; careful examination of speeches of such figures as George Washington, Abraham Lincoln, Franklin D. Roosevelt, John F. Kennedy, Martin Luther King and others.

Prerequisite: 15-101 Foundations of Communication.

15-328 Rhetoric—Selected Studies 1 cr.

A special limited project.

Prerequisite: 15-101 Foundations of Communication and consent of instructor.

15-330 Performing Arts II 3 cr.

Historical approach to study of dance, drama, opera, films and television; comparison of forms and styles to develop a frame of reference for understanding contemporary art forms and to prepare students for individual and group activities in these areas; attendance at opera, dance, and theatre required.

15-331 Theatrical Backgrounds of the Drama I 3 cr.

A chronological survey of the development of theatre and drama of the Western world from the early Greek festivals to the Elizabethan theatre. Emphasis on special staging techniques of lighting, costume, scene design, movement and acting.

Prerequisite: 15-130 Performing Arts I.

15-332 Theatrical Backgrounds of the Drama II 3 cr.

A chronological survey of the development of theatre and drama in the Western world from the seventeenth century to the present day. Emphasis on special staging techniques of lighting, costume, scene design, movement and acting.

Prerequisite: 15-130 Performing Arts I.

15-333 Contemporary Theatre 3 cr.

Intensive study of contemporary plays with emphasis on problems of production, scenery, lighting, music, costumes and special effects.

Prerequisite: 15-231 Introduction to Theatre, or consent of instructor.

15-334 Drama 3 cr.

An in-depth study of the major works of a single dramatist, the relationship of those works to the period in which they were produced, and their place in

the history of dramatic literature.

Prerequisite: 15-130 Performing Arts I or 15-231 Introduction to Theatre.

15-335 History and Theory of the Dance 3 cr.

Major emphasis upon Western dance but accompanied by frequent comparisons with other traditions; extensive use of illustrative films; the role of dance music; training in elementary dance movement notation, with stress upon importance of acquiring a degree of literacy in this field as prerequisite to serious study of any form of dance.

15-340 Scenic Design 3 cr.

Development of artistic potential in scenic design through the use of sketches and models and practical experience in scene painting.

Prerequisite: 15-240 Stagecraft or consent of instructor.

15-342 Stage Lighting 3 cr.

Theoretical and practical exposure to lighting for the stage; application of knowledge gained in the classroom in laboratory periods on stage in preparation for major and experimental productions.

Prerequisite: 15-240 Stagecraft or consent of instructor.

15-343 History and Design of Costume for Theatre 3 cr.

History of costumes from the Egyptians to the present day; concentration on the design and adaptation of costume for theatrical productions.

15-345 Directing 3 cr.

Principles and techniques of the director's art.

Prerequisite: 15-240 Stagecraft or 15-245 Acting I.

15-347 Playwriting 3 cr.

A study of the art of drama with practice in the writing of plays for dramatic production. An attempt will be made to provide laboratory productions of worthy students work.

Prerequisite: Consent of instructor.

15-348 Children's Theatre Workshop 3 cr.

Surveys the area of theatre for children from creative dramatics to theatre in the secondary schools; all significant facets of play production covered; field trips; attendance at public performances.

Prerequisite: 15-345 Directing or 15-393 Creative Dramatics.

15-355 Advanced Oral Interpretation 3 cr.

Literary analysis of poetry and prose; presentation of individual and multiple reading projects.

Prerequisite: 15-255 Oral Interpretation of Literature.

15-357 Oral Interpretation of Shakespeare 3 cr.

Selected comedies, tragedies and histories, tracing the development of the dramatist; emphasis on special performance techniques to illuminate a thorough study of the plays through oral readings.

Prerequisite: 15-255 Oral Interpretation of Literature.

15-360 Advanced Television 3 cr.

Conception and execution of a variety of programs; closed and open circuit; technical production emphasized within forms of the documentary, instructional and dramatic.

Prerequisite: 15-260 Introduction to Radio, Television and Film.

15-362 The Film As An Art Form 3 cr.

The film as an art form of intellectual significance; emphasis upon the analysis of film classics in terms of substance, form, techniques, and media.

15-365 Mass Media II 3 cr.

Advanced study of the socio-psychology impact of mass media through an analysis of modern theories of communication and their various dimensions.

Prerequisite: 15-265 Mass Media I.

15-371 Speech and Hearing: The Physical Structural Determinants 3 cr.

A study of the anatomical structure-functions of the speech and hearing mechanisms in acts of respiration, phonation, resonance, articulation, auditory perception and language formulation.

Prerequisite: 15-270 Introduction to the Field of Communicative Disorders.

15-372 Speech and Hearing: Developmental Determinants 3 cr.

An introductory course which traces the speech, hearing, thought and communication functions from development and integration in infancy through decline and disintegration in old age. The implications of development and decline for speech and language pathology.

Prerequisite: 15-270 Introduction to the Field of Communicative Disorders or may be taken concurrently or consent of instructor.

15-373 Speech and Hearing: Social-Psychological Determinants 3 cr.

A consideration of the normal social and psychological structures which underlie the functions of speech, hearing and communication. The influence of social and psychological pathology on speech and language as well as a study of the somatopsychology of

individuals with normal and pathological speech and hearing.

Prerequisite: 15-270 Introduction to the Field of Communicative Disorders or may be taken concurrently or consent of instructor.

15-375 Speech Pathology I 3 cr.

Descriptions, classification, etiology and remediation of pathologies of articulation and voice. The student is introduced to diagnostic and therapeutic work in communicative disorders. Observation and limited participation in diagnosis and therapy.

Prerequisite: 15-270 Introduction to Field of Communicative Disorders, 15-371 Speech and Hearing: The Physical Structural Determinants, 15-372 Speech and Hearing: Developmental Determinants, 15-373 Speech and Hearing: Social-Psychological Determinants, and 28-211 Introduction to Phonology.

15-390 Speech Improvement in the Classroom 3 cr.

Training in the prevention, diagnosis and referral of speech problems; consideration of proper classroom handling of major speech difficulties; planning a program of speech improvement and demonstration of procedures.

Prerequisite: 15-202 Voice and Diction or consent of instructor.

15-393 Creative Dramatics 3 cr.

Develops creatively through body rhythm, pantomiming, characterization, improvisation. Performance opportunities with material useful in the classroom.

Prerequisite: 15-101 Foundations of Communication.

15-394 Specialized Problems in Creative Dramatics 3 cr.

Develops leaders in creative drama competent to handle the needs of children in a wide span of age groups (grades 1-12) as well as special groups (gifted, mentally retarded, and/or culturally disadvantaged).

Prerequisite: 15-393 Creative Dramatics.

15-397 Speech Activities in the Elementary School 3 cr.

Analysis of speech needs of children; emphasis on speech improvement; basic skills; informal talks, group discussion, choice speaking, oral reading, creative dramatics, children's theatre and assembly programs; analysis and development of material for classroom use.

Prerequisite: 15-101 Foundations of Communication.

15-411 Discussion and Debate in the Elementary School 3 cr.

Principles and practices of effective leadership and participation in debate in small group discussions.

Prerequisite: Graduate standing and 15-215 Group Discussion or 15-317 Argumentation and Debate.

15-413 Independent Study in Interpretative Arts 3 cr.

Selected topics in methods and materials for reading aloud.

Prerequisite: Graduate standing and consent of instructor.

15-414 Specialized Problems in Speaking and Listening 3 cr.

Selected topics in methods and materials related to speaking and listening; instructional problems, type of programs, trends in instruction, sources, resources and research; individual projects to adapt resources and methodology to a particular school and classroom needs, such as problems of teaching speaking and listening in the Inner City.

Prerequisite: Graduate standing.

15-421 Children's Theatre 3 cr.

Selection, direction and production of plays for children; co-ordinated with college play production activity.

Prerequisite: Graduate standing and in-service teacher.

15-423 Independent Study in Performing Arts 3 cr.

Selected topics in methods and materials for dramatic activities.

Prerequisite: Graduate standing and consent of instructor.

15-425 Interpretation of Prose for Children 3 cr.

Techniques for sharing children's classics creatively with special emphasis on the Newbery and Caldecott award books.

Prerequisite: Graduate standing and 15-255 Oral Interpretation of Literature.

15-426 Interpretation of Poetry for Children 3 cr.

Aims, materials and methods for presenting poetry aloud and co-ordinating it with general elementary school curriculum.

Prerequisite: Graduate standing and 15-255 Oral Interpretation of Literature.

15-427 Choral Reading 3 cr.

Materials, methods and uses of choric interpretation.

Prerequisite: Graduate standing and 15-255 Oral Interpretation of Literature.

15-431 Introduction to Graduate Study in Speech 3 cr.

Problems, methods and resources involved in graduate study and research in all areas of speech.

Prerequisite: Graduate standing and 12 credits in speech.

15-434 Independent Study in Group Communication 3 cr.

Selected topics in theory and practice of group dynamics.

Prerequisite: Graduate standing and consent of instructor.

15-441 Seminar—Research Problems in Group Communication 3 cr.

Review of research scholarship in group communication; completion of original research study.

Prerequisite: Graduate standing and six graduate credits in speech.

15-442 Seminar—Research Problems in Performing Arts 3 cr.

Review of recent scholarship in the performing arts; completion of original research study.

Prerequisite: Graduate standing and six graduate credits in speech.

15-443 Seminar—Research Problems in Interpretative Arts 3 cr.

Review of research scholarship in the interpretative arts; completion of original study.

Prerequisite: Graduate standing and six graduate credits in speech.

15-444 Seminar—Research Problems in the Psychology of Communication 3 cr.

Review of research scholarship in the psychology of communication; completion of original research study.

Prerequisite: Graduate standing and six graduate credits in speech.

15-445 Thesis Seminar: Speech 6 cr.

Guidance of students conducting research and writing a thesis to fulfill requirements for the master's degree in the field of Speech and the Performing Arts.

Prerequisite: Acceptance to master's degree candidacy in Speech and approval of graduate advisor.

15-446 Theatre Management 3 cr.

Managerial policies and practices in educational and community theatres with emphasis upon common problems and their solution.

Prerequisite: Graduate standing and nine credits in Performing Arts or consent of instructor.

15-451 Independent Study in the Psychology of Communication 3 cr.

Investigation of selected topics in methods and materials relating to the psychology of speech.

Prerequisite: Graduate standing and consent of instructor.

15-488 Public School Practices in Speech Correction 3 cr.

Survey of materials and procedures used in the organization and administration of a speech correction program in the public schools.

Prerequisite: Graduate standing and in-service teacher.

16-302 Logic I 3 cr.

An introductory course in symbolic logic, dealing with the propositional calculus, quantification theory, and the logic of relations and classes.

16-303 Logic II 3 cr.

A study of the theory and development of axiomatic systems, including the problems of definability, completeness, and consistency.

Prerequisite: 16-302 Logic I.

16-306 Logic III 3 cr.

A systematic inquiry into some of the philosophical problems of logic, such as the nature of propositions, the logical paradoxes, undecidability, types of logic, and the relation of logic to truth, language, and existence.

Prerequisite: 16-303 Logic II.

16-313 Recent Theories of Value 3 cr.

The course work centers around several modern theories which attempt to give rational unity to the separate fields of ethics and aesthetics by means of logical principles. The values that are involved in human judgments and situations will be thoroughly investigated both abstractly and concretely from a philosophical point of view.

Prerequisite: 16-212 Social Ethics or 16-213 Ethics.

16-332 Contemporary Philosophy 3 cr.

A critical survey of the salient schools of contemporary philosophy, notably idealism, pragmatism, logical positivism, analytic philosophy, phenomenology and existentialism.

Prerequisite: 16-102 Introduction to Philosophy or one course in the history of philosophy.

16-333 American Philosophy 3 cr.

An intensive study of the salient trends prevalent in the modern American philosophical scene, notably pragmatism, idealism, naturalism, positivism, philosophical analysis, and phenomenology.

Prerequisite: 16-332 Contemporary Philosophy.

16-335 Analytic Philosophy 3 cr.

A critical survey of the development of analytic philosophy in the twentieth century.

Prerequisite: 16-332 Contemporary Philosophy.

16-337 Existentialism 3 cr.

An intensive study of the major themes discussed by existentialists thinkers from Kierkegaard to Sartre.

Prerequisite: 16-332 Contemporary Philosophy.

16-339 Nineteenth-Century Philosophy 3 cr.

An intensive study of the thought of the great European philosophers of

the nineteenth century from Fichte to Nietzsche.

Prerequisite: 16-102 Introduction to Philosophy or one course in the history of Philosophy.

16-345 Social and Political Philosophy 3 cr.

A systematic investigation of some of the salient issues, currently discussed by social and political philosophers, such as the nature and origin of the state, political obligation, justice, human rights, authority, liberty, and the evaluation of social and political institutions.

Prerequisite: 16-212 Social Ethics or 16-213 Ethics.

16-371 Theory of Knowledge 3 cr.

A systematic inquiry into the nature of knowledge, with a consideration of such topics as ways of knowing, perception, memory, personal identity, and other minds.

Prerequisite: 16-102 Introduction to Philosophy.

16-375 Philosophy of Science 3 cr.

An examination of some of the main problems currently discussed by philosophers of science, such as the methodology and foundations of empirical science, the meaning and verification of scientific statements, theories, laws, hypotheses, and explanation.

Prerequisite: 16-102 Introduction to Philosophy.

16-381 Independent Study in Philosophy 3 cr.

Readings, conferences, and reports on a special topic under departmental supervision. Open only to junior or senior students majoring in philosophy.

Prerequisite: Consent of the instructor.

21-372 Fundamental Skills and Methods of Teaching Modern Foreign Language in Elementary Schools 3 cr.

Fundamental audio-lingual skills presented and practiced in accordance with latest linguistic principles; actual practical application of materials used in the modern foreign language classroom.

Prerequisite: Twenty-one credit hours beyond Basic Program in major field.

22-301 Ordinary Differential Equations I 3 cr.

Introduction to differential equations; methods of solution of differential equations.

Prerequisite: 22-216 Calculus and Analytic Geometry III.

22-302 Ordinary Differential Equations II 3 cr.

Classical equations such as the hypergeometric differential equation, the Legendre differential equation, Legendre

Polynomials; Bessel's differential equations; Bessel functions.

Prerequisite: 22-301 Ordinary Differential Equations I.

22-303 Partial Differential Equations 3 cr.

Introduction to partial differential equations; methods of finding solutions.

Prerequisite: 22-301 Ordinary Differential Equations I.

22-304 Numerical Methods in Differential Equations 3 cr.

Numerical solution of ordinary differential equations; boundary value and eigenvalue problems; the methods of Ringe-Kutta; methods based on numerical integration.

Prerequisite: 22-301 Ordinary Differential Equations I.

22-305 Probability Theory and Applications I 3 cr.

Combinatorial analysis, convolutions, random walk and ruin, functions of random variables, special densities recurrent events, renewal theory.

Prerequisite: 22-216 Calculus and Analytic Geometry III.

22-312 Foundations of Geometry 3 cr.

Development of a geometry from postulates and undefined terms; the effect of variation postulates.

Prerequisite: 22-251 Foundations of Mathematics.

22-321 History of Mathematics 3 cr.

Chronological survey of growth of the philosophy of mathematics; famous mathematicians and their contribution to the development of modern mathematics.

Prerequisite: 10 credit hours in mathematics or graduate standing.

22-322 Number Theory 3 cr.

Properties of rational integers, congruences, quadratic residues, Diophantine equations.

Prerequisite: 22-216 Calculus and Analytic Geometry III.

22-323 Seminars in Mathematics 1 cr.

Intensive studies in selected areas.

Prerequisite: Consent of instructor.

22-324 Individual Research in Mathematics 3 cr.

Individual investigation into a topic of interest of the student's choice; staff guidance.

Prerequisite: Consent of instructor.

22-325 Foundations of Analysis I 3 cr.

Foundations of the calculus; introduction to functions of a real variable;

continuous functions, limits, complex variables.

Prerequisite: 22-216 Calculus and Analytic Geometry III and 22-251 Foundations of Mathematics.

22-326 Foundations of Analysis II 3 cr.

Continuation of the topics treated in 22-325; the Riemann-Stieltjes integral; line and surface integrals; Green's theorem; uniform convergence of a sequence of functions.

Prerequisite: 22-325 Foundations of Analysis I.

22-327 Vector Analysis 3 cr.

Basic definitions including the algebra of vectors; vector differential calculus; vector integral calculus.

Prerequisite: 22-216 Calculus and Analytic Geometry III.

22-328 Complex Variables 3 cr.

Introduction to the functions of a complex variable; Cauchy-Riemann equations; Cauchy integral theorems and series expansions.

Prerequisite: 22-325 Foundations of Analysis I.

22-331 Foundations of Algebra I 3 cr.

Algebraic systems arising in modern mathematics; groups, rings, field and vector spaces; matrices and determinants.

Prerequisite: 22-251 Foundations of Mathematics.

22-332 Foundations of Algebra II 3 cr.

Continuation of topics from 22-331; Galois theory.

Prerequisite: 22-331 Foundations of Algebra I or consent of instructor.

22-333 Linear Spaces and Matrix Theory 3 cr.

Fundamental properties of linear spaces, linear transformations and matrices.

Prerequisite: 22-331 Foundations of Algebra I.

22-334 Mathematical Statistics I 3 cr.

Distributions, models for random experiments, sampling theory, generating functions, order statistics, interval estimation.

Prerequisites: 22-216 Calculus and Analytic Geometry III and 22-251 Foundations of Mathematics.

22-337 Theory of Equations 3 cr.

Detailed study of methods leading to the solution of an equation or a system of equations.

Prerequisite: 22-216 Calculus and Analytic Geometry III.

22-338 Advanced Calculus for Applications I 3 cr.

Real Vector Spaces, Linear Transformations and Matrices, Laplace Trans-

form, Fourier Series, Orthogonal Series of Polynomials.

Prerequisite: 22-216 *Calculus and Analytic Geometry III* or equivalent.

22-339 Advanced Calculus for Applications II 3 cr.

Boundary-Value Problems for Partial Differential Equations, Laplace's Equation, Bessel's Equation and Bessel Functions, Spherical Harmonics, Functions of a Complex Variable, Schwarz-Christoffel's Transformations, Selected Additional Topics.

Prerequisite: 22-338 *Advanced Calculus for Applications I*.

22-340 Basic Computer Educational Data Processing Concepts 3 cr.

Description of the evolution of data processing methods and computer concepts, from the manual manipulation of data to the stored program computer; application to various disciplines; introduction to problem analysis, fundamentals of input and output operations, preparation of data and elementary programming concepts; demonstrations of computers and machines.

Prerequisite: 22-105 *Trigonometry*.

22-345 Differential Geometry 3 cr.

Classical theory of curves and surfaces in three-dimensional Euclidean space by vector methods; some properties of geodesics.

Prerequisite: 22-325 *Foundations of Analysis I*.

22-351 Modern Mathematics Pedagogy 2 cr.

Topics relative to the teaching of mathematics in grades seven through twelve.

Prerequisite: M.Ed. students only.

22-352 Numerical Analysis and Computation 2 cr.

Algorithm construction, successive approximations; relaxation methods and a study of errors; Horner's and Newton's methods for solving equations; Cramer's rule for solving systems of linear equations.

Prerequisite: M.Ed. students only.

22-353 Recent Trends in Mathematics 2 cr.

Extended applications of mathematical thinking; operations research; mathematical models; information theory; theory of games and linear programming.

Prerequisite: M.Ed. students only.

22-355 Modern Mathematics for the Primary Grades 2 cr.

Evolution of mathematical thought and its implications for the teaching of mathematics in the primary grades; recent experimental studies and re-

search in primary teaching will be appraised.

Prerequisite: Not open to undergraduate students.

22-356 Modern Mathematics for the Middle Grades 2 cr.

Designed to reinforce the mathematical background of the elementary school teacher; emphasis on the pedagogical, historical and mathematical problems involved in the transition from the traditional to the modern program in arithmetic.

Prerequisite: Not open to undergraduate students.

22-361 Set Theory 3 cr.

Introduction to set theory; cardinal and ordinal arithmetic; order-types of the natural, rational and real numbers; the axiom of choice and its consequences; the Continuum hypothesis.

Prerequisite: 22-251 *Foundations of Mathematics*.

22-362 Metric Spaces and Topology 3 cr.

Metric spaces with an introduction to abstract topological spaces; topics include sequences, continuous functions, separability, completeness, compactness and connectedness.

Prerequisite: 22-325 *Foundations of Analysis I*.

22-401 Number Theory for the Elementary School Teacher 3 cr.

A study of topics from Number Theory geared toward the level that can be used at the elementary school, grades 5 to 8.

Prerequisite: Graduate standing and 8 credit hours in the M.Ed. program in Mathematics.

22-402 Modern Algebra for the Elementary School Teacher 3 cr.

A study of topics from Modern Algebra geared toward the level that can be used at the elementary school, grades 5 to 8.

Prerequisite: Graduate standing and 8 credit hours in the M.Ed. program in Mathematics.

22-403 Modern Geometry for the Elementary School Teacher 3 cr.

A study of topics from Modern Geometry geared toward the level that can be used at the elementary school, grades 5 to 8.

Prerequisite: Graduate standing and 8 credit hours in the M.Ed. program in Mathematics.

22-411 Modern Analysis I 2 cr.

Continuous function, limit of a sequence and limit of a function; topology of the real line; derivative functions; concept of area; Riemann integral.

Prerequisite: Graduate standing and 8 credit hours in the M.Ed. program in Mathematics.

22-412 Modern Analysis II 2 cr.

Continuation of Modern Analysis I; some Algebraic systems.

Prerequisite: 22-411 *Modern Analysis I*.

22-413 Mathematics Applied to the Physical and Behavioral Sciences 2 cr.

Topics in business administration, economics, biology, learning theory, psychology, etc.

Prerequisite: 22-412 *Modern Analysis II*.

22-415 Functions of a Complex Variable 3 cr.

Complex number system; analytic functions; geometry of some elementary functions; integration theory; residue theory; introduction to conformal mappings.

Prerequisite: Graduate standing and 22-328 *Complex Variables* or equivalent.

22-416 Functions of a Real Variable 3 cr.

Introduction to the fundamentals of analysis; limit concept; derivatives; Riemann integral, Lebesgue integral and other topics.

Prerequisite: Graduate standing and 22-325 *Foundations of Analysis I* or equivalent.

22-417 Mathematical Statistics II 3 cr.

Limiting distributions, sufficient statistics, completeness, stochastic independence, certain best tests, sequential probability ratio test, uniformly most powerful tests.

Prerequisite: Graduate standing and 22-334 *Mathematical Statistics I*.

22-418 Mathematical Statistics III 3 cr.

Selected topics in Statistics; statistical models with applications to business and industry.

Prerequisite: Graduate standing and 22-417 *Mathematical Statistics II*.

22-421 Modern Geometry 3 cr.

Classification of geometrical systems; introduction to Euclidean and non-Euclidean geometries, projective geometry; finite geometries.

Prerequisite: Graduate standing and 22-312 *Foundations of Geometry* or consent of instructor.

22-422 Differential Geometry 3 cr.

Theory of curves and surfaces in two- and three-dimensional Euclidean space; the Frenet formulas, curvature, geodesics.

Prerequisite: 22-345 *Differential Geometry*, graduate standing.

22-423 Projective Geometry 3 cr.

The projective plane, the principle of duality; projectivities, Desargue's the-

orem; Pappus' theorem, collineations and correlations.

Prerequisite: Graduate standing and 22-312 *Foundations of Geometry* or equivalent.

22-424 Probability Theory and Application II 3 cr.

Algebraic treatment of finite and denumerable Markov Chains, time dependent stochastic processes, ergodic properties of irreducible chains, approximations.

Prerequisite: Graduate standing and consent of instructor.

22-425 Optimal Control Theory 3 cr.

Systems of linear differential equations; Laplace transforms, transfer functions; phase plane analysis and stability questions, Liapunov functions; optimization of control functions and functionals; the Pontryagin principle, dynamic programming, variational techniques; discrete time versions, computer implementation.

Prerequisite: Graduate standing and 22-301 *Ordinary Differential Equations I* and 22-333 *Linear Spaces and Matrix Theory*.

22-426 Selected Topics in Probability Theory 3 cr.

Selected topics in pure and applied probability theory, model formulation.

Prerequisite: Graduate standing and 22-424 *Probability Theory and Applications II* or equivalent.

22-431 Linear Algebra 3 cr.

Vector, matrices and linear equations, determinants; vector spaces and linear transformations.

Prerequisite: Graduate standing and 22-333 *Linear Spaces and Matrix Theory* or 22-436 *Modern Algebra*.

22-433 Mathematics Structure I—Induction 2 cr.

Topics in discovery; arithmetical, geometrical and algebraic applications of inductive methods. This course does not apply to the M.S. Program in Mathematics.

Prerequisite: Graduate standing.

22-434 Mathematics Structure II—Deduction 2 cr.

Axiomatic approach to mathematics; sets and logic, construction of number systems; Euclidean plane geometry. This course does not apply to the M.S. Program in Mathematics.

Prerequisite: Graduate standing.

22-436 Modern Algebra 3 cr.

Postulational approach to abstract algebraic systems; groups, rings, integral domains, fields, vector spaces, linear transformations and matrices; analysis of real and complex number systems as examples.

Prerequisite: Graduate standing and 22-331 *Foundations of Algebra I* or equivalent.

22-441 Theory of Groups 3 cr.
Elementary properties of groups; normal subgroups and quotient groups; isomorphisms; homomorphisms and their kernels; direct sums or products of groups.

Prerequisite: Graduate standing and 22-436 Modern Algebra.

22-442 Theory of Rings 3 cr.
Abstract rings; ideals; rings of polynomials and matrices; divisibility, linear associative algebras, imbedding theorems; modules, Wedderburn's structure theorems.

Prerequisite: Graduate standing and 22-436 Modern Algebra.

22-443 Theory of Fields 3 cr.
Finite fields; extension fields, simple extensions, degree of an extension, splitting fields for polynomials; introduction to Galois theory.

Prerequisite: Graduate standing and 22-436 Modern Algebra.

22-451 Advanced Numerical Analysis 3 cr.
Finite differences; interpolation; approximate solutions of equations; theory of errors.

Prerequisite: Graduate standing and 22-325 Foundations of Analysis I.

22-453 Measure and Integration 3 cr.
Metric and other spaces; measure of a set; the integral in an abstract space; area of a surface.

Prerequisite: Graduate standing and 22-416 Functions of a Real Variable.

22-459 Calculus of Variations 3 cr.
Maxima and minima problems; general problems in the calculus of variations; the brachistochrone problem; surfaces of minimum area.

Prerequisite: Graduate standing and 22-416 Functions of a Real Variable.

22-461 Topology 3 cr.
Point set topology and metrization theorems.

Prerequisite: Graduate standing and 22-362 Metric Spaces and Topology or 22-416 Functions of a Real Variable or equivalent.

22-494 Thesis Seminar—Mathematics 6 cr.
Guidance of the student who is doing research and writing a thesis for the M.S. in Mathematics.

Prerequisite: Acceptance to degree candidacy for the M.S. in Mathematics and approval of the Mathematics Department.

23-312 Spanish Theatre 3 cr.
Reading of dramatic masterpieces from Spain; emphasis on idiomatic expressions and structure of the Spanish language; conducted in Spanish.

Prerequisite: 23-314 Conversation and Composition I.

23-313 Intensive Course in the Reading of Spanish 3 cr.

One trimester intensive study of the literature of Spain and Hispanic America with weekly tests designed to judge the advancement of individual students; test materials will consist of questions on previously read material aimed at determining the student's reading comprehension; problems of translation involving advanced concepts and vocabulary of social sciences; examinations of oral comprehension and expression through the use of the language laboratory; required of all students who do not successfully complete an examination in reading comprehension and who wish to register for the advanced literature courses offered in Spanish.

23-314 Conversation and Composition I 3 cr.

Original oral and written compositions, conversation, analysis of grammatical problems, use of idiomatic expressions; cultural content oriented to Spain; conducted in Spanish.

Prerequisite: 23-201 Spanish III.

23-315 Latin American Theatre 3 cr.

Reading of outstanding dramas from Latin-America; emphasis on idiomatic usage and structure of the Spanish language; conducted in Spanish.

Prerequisite: 23-314 Conversation and Composition I.

23-316 Latin American Literature 3 cr.

Reading and discussion of contemporary short stories and novels by outstanding Latin-American writers; emphasis on idiomatic usages and structure of Spanish; conducted in Spanish.

Prerequisite: 23-314 Conversation and Composition I.

23-317 Spanish Literature 1700-1898 3 cr.

Reading of novels and short stories of Spain; emphasis on idiomatic Spanish; structure practice; conducted in Spanish.

Prerequisite: 23-314 Conversation and Composition I.

23-318 Spanish Literature Contemporary 3 cr.

Reading of generation of 1898-present; emphasis on development of linguistic skills; conducted in Spanish.

Prerequisite: 23-314 Conversation and Composition I.

23-319 Applied Spanish Linguistics 3 cr.

Latest linguistic principles in teaching modern foreign languages applied in the preparation of teaching materials.

Prerequisite: Consent of instructor.

23-322 Independent Study in Spanish 3 cr.

Individual investigation into a topic of the student's choice; staff guidance.

Prerequisite: Consent of instructor.

23-323 Advanced Conversation and Composition II 3 cr.

Study of advanced grammar, problems in comparative usage in English and Spanish; frequent oral and written compositions; exercises designed to improve understanding, speaking, reading and writing proficiency; cultural content oriented to Latin America; conducted in Spanish.

Prerequisite: 23-314 Conversation and Composition I.

23-324 Advanced Composition and Syntax 3 cr.

Advanced study of Spanish composition utilizing complex grammatical structures with special attention given to style; concentration on practical usages of Spanish syntax by analyzing and preparing given scripts and passages; conducted in Spanish.

Prerequisite: 23-323 Advanced Conversation and Composition II.

23-326 Modern Readings in Spanish 3 cr.

Reading of short stories and other selected short readings with emphasis on reading for comprehension, acquisition of an extensive vocabulary and further development of speaking proficiency; conducted in Spanish.

Prerequisite: 23-314 Conversation and Composition I or consent of instructor.

23-328 Masterpieces of Spanish Literature 3 cr.

Reading of selected masterpieces from the twelfth through the twentieth centuries; lectures on historical background, literary movements and authors; reports and outside readings conducted in Spanish.

Prerequisite: 23-326 Modern Readings in Spanish.

23-331 Hispanic World Cultures 3 cr.

Contrasting and comparing Hispanic and United States cultures, focusing upon the societal aspects of each with the intent to promote understanding and appreciation of such similarities and differences; conducted in Spanish.

Prerequisite: 23-326 Modern Readings in Spanish.

23-332 Generacion Del 1898 3 cr.

Analysis of the general character of the period called Generation of 1898 in Spanish literature; authors examined are Unamuno, Antonio Machado,

Azorin, Pio Baroja and Valle-Inclán.

Prerequisite: 23-313 Intensive Course in the Reading of Spanish.

23-333 La Novela Hispanoamericana 3 cr.

A course offered in the study of the Latin American novel through several literary movements, Modernism, Regionalism, Social Protest and Contemporary. Special emphasis is given to the authors, their ideologies and their styles. Special focus will be upon the societal aspects of the cultures of the individual countries and the manner in which they are reflected in the separate novels. The course will be conducted in Spanish.

Prerequisite: Consent of instructor.

23-334 Literatura Negroide 3 cr.

A course offered in the study of Black literature, of Latin America, its characteristics and peculiarities. Special emphasis is given to the authors, their personalities and ideas. Also to be considered will be the countries in which the works are written and with which they deal and the factors that influenced such works. Attention will be given to literary analysis and criticism considering the aesthetic and human values of each work. Course conducted in Spanish.

Prerequisite: Consent of instructor.

23-335 La Novela Romantica Latinoamericana 3 cr.

A course in the study of Romanticism and its peculiarities in Latin America. Special concern is shown for the romantic attitude and literary Romanticism. The slavery novel that is romantic in character; the Indian novel of the same character; the romantic historical novel and the novel of transition from Romanticism to Realism. Course conducted in Spanish.

Prerequisite: Consent of instructor.

23-336 Spanish Literature: Research and Documentation 3 cr.

A course offered in the study of perceptive and stylistic literature, both prose and verse, with a view toward its characteristics, metric combinations and the like. Literary classifications of prose and verse will also be undertaken. Special attention will be given to analysis of literary works and those elements that must be taken into account for such study and criticism. Students orientated toward preparing reports for the course through the proper use of resource books, methods of critical writing. Also to be considered will be proper oral reports of literary works. Course will be conducted in Spanish.

Prerequisite: Consent of instructor.

23-353 Conversational Spanish for Teachers 3 cr.

Emphasis on improving teacher's personal command of the language for more effective audio-lingual classroom presentation.

Prerequisite: Two years of college Spanish.

24-311 Russian Conversation and Composition I 3 cr.

Cultural material used to further audio-lingual skills, with emphasis on writing.

Prerequisite: 24-201 Russian III.

24-312 Russian Conversation and Composition II 3 cr.

Continuation of 24-311.

Prerequisite: 24-311 Russian Conversation and Composition I.

24-313 Russian Literature—Prose and Poetry of the Nineteenth and Twentieth Centuries 3 cr.

Reading and discussion of selected materials.

Prerequisite: 24-201 Russian III.

24-314 Russian Drama—Nineteenth and Twentieth Centuries 3 cr.

Reading and discussion of selected works of the most significant representatives of the Russian theatre.

Prerequisite: 24-312 Russian Conversation and Composition II or consent of instructor.

24-315 History of Russia and Outstanding Features of Soviet Society 3 cr.

Reading and discussion of selected materials in Russian.

Prerequisite: 24-312 Russian Conversation and Composition II or consent of instructor.

24-316 Seminars in Russian 3 cr.

Intensive studies in selected problems.

Prerequisite: Consent of instructor.

24-317 Independent Study in Russian 3 cr.

Individual investigation into a topic of the student's choice; staff guidance.

Prerequisite: Consent of instructor.

24-324 The Structure of Russian Language 3 cr.

Complete system of the structure and function of Russian, particularly in the area of morphology.

Prerequisite: 24-201 Russian III.

24-325 Advanced Russian Syntax 3 cr.

Concentration upon the most characteristic features of Russian sentences, simple, compound and complex.

Prerequisite: 24-324 The Structure of Russian Language or consent of instructor.

24-326 Modern Soviet Russian Prose 3 cr.

The new Russian literature that emerged after the first decade of the twentieth century and was a direct product of the new Russian society; themes, ideas, situations and characters of the post-revolutionary literature; Soviet Russian prose and its modern language.

Prerequisite: 24-313 Russian Literature—Prose and Poetry of the Nineteenth and Twentieth Centuries or 24-314 Russian Drama—Nineteenth and Twentieth Centuries.

25-311 Conversation and Composition I 3 cr.

Development of oral and written communication skills on an advanced level, based upon readings, recitation and short stories; heavy emphasis on listening comprehension as the reading comprehension is being developed without resorting to frequent translation.

Prerequisite: 25-201 French III.

25-312 Conversation and Composition II 3 cr.

Development of oral and written communication skills on an advanced level, with further emphasis on reading comprehension; cultural content oriented to French contemporary life.

Prerequisite: 25-311 Conversation and Composition I.

25-313 Etude de Morphologie de Syntaxe et de Style 3 cr.

Identification, analysis and use of French structures; extensive exercises in grammatical and logical analyses; selected translations based on comparative stylistics; illustration and use of various techniques for the solution of textual difficulties; conducted in French.

Prerequisite: 25-312 Conversation and Composition II.

25-317 La Phonétique Française 3 cr.

Analysis, description, classification and correction of the sounds of the French language, including articulatory phonetics as well as acoustic phonetics.

Prerequisite: 25-201 French III.

25-318 La Génération du 1890 3 cr.

Literary works of the late nineteenth century until World War I; the Movement of Naturalism and Symbolism; survey of intellectual life and the impact that new ideas in psychology and sociology had on French literature.

Prerequisite: 25-312 Conversation and Composition II.

25-319 Histoire et Civilisation Française 3 cr.

Panoramic view of the history of

France and her civilization from Gallo-Roman times to the era of the Common Market.

Prerequisite: 25-313 Etude de Morphologie de Syntaxe et de Style.

25-321 Initiation à la Littérature Française I—XVII Siecle 3 cr.

Historical survey of the principal literary, linguistic and philosophic currents of the seventeenth century; analysis and discussion of selected works illustrating these forms and representative of the major literary figures of the century.

Prerequisite: 25-312 Conversation and Composition II.

25-322 Initiation à la Littérature Française II—XVIII Siecle 3 cr.

Historical survey of the principal literary, philosophic and social movements of France's eighteenth century; analysis and discussion of selected works illustrating these currents and representing the contributions of the major literary figures of the century.

Prerequisite: 25-312 Conversation and Composition II.

25-328 Masterpieces of French Literature 3 cr.

Outline of French literature; outstanding authors and their works from the Middle Ages through the movement of Symbolism; analysis of the influence of the social, political and religious structures on French literature; drama, essays, poetry, novels; conducted in French.

Prerequisite: 25-311 Conversation and Composition I.

25-331 Les Philosophes et Moralistes du XVII Siecle 3 cr.

Insight to the *esprit* of the seventeenth century; reading and interpretation of selected texts by Descartes, Pascal, La Rochefoucauld and La Bruyere.

Prerequisite: 25-313 Etude de Morphologie de Syntaxe et de Style or consent of instructor.

25-333 Initiation à la Littérature Française III—XIX Siecle 3 cr.

Historical survey of the principal literary, philosophic and social movements and ideas of France's nineteenth century; analyses, discussions and critiques of selected works illustrating these movements and ideas and representing the contributions of the major literary figures of the century.

Prerequisite: 25-312 Conversation and Composition II.

25-351 La Littérature Contemporaine 3 cr.

Survey of the major contemporary

movements of French literature; novel, theatre and poetry.

Prerequisite: 25-313 Etude de Morphologie de Syntaxe et de Style.

25-353 Conversational French for Teachers 3 cr.

Objectives, methods and materials used in the audio-lingual approach; guidance in use of newly developed audio-lingual material.

Prerequisite: Consent of instructor.

25-354 Le Théâtre Classique 3 cr.

Classical era in French literature; study of plays by the three outstanding dramatists, Corneille, Racine and Moliere.

Prerequisite: 25-313 Etude de Morphologie de Syntaxe et de Style or consent of instructor.

25-372 Applied French Linguistics 3 cr.

Target and source languages, human learning, techniques of teaching, testing; a systematic treatment of new techniques related to the theory of language learning and a discussion of technological aids.

Prerequisite: Twenty-one credit hours beyond Basic program in French.

27-301 German Conversation and Composition I 3 cr.

Development of oral and written communication skills on an advanced level, based upon readings, recitation, and short stories; heavy emphasis on listening comprehension as the reading comprehension is being developed without resorting to frequent translation.

Prerequisite: 27-201 German III or consent of instructor.

27-302 German Conversation and Composition II 3 cr.

Development of oral and written communication skills on an advanced level with further emphasis on reading comprehension, content of reading oriented toward German culture and history from its beginning up to today.

Prerequisite: 27-301 German Conversation and Composition or consent of instructor.

27-303 Intensive Course in the Reading of German 3 cr.

One trimester of intensive study of written material, with the object of developing the student's immediate comprehension of the content, analyzing grammar, vocabulary and style of a given text on an advanced level. Frequent testing of the student's advancement in reading comprehension.

Prerequisite: 27-301 German Conversation and Composition I.

27-304 History and Culture of the German-speaking Countries 3 cr.

Panoramic view of the history and culture of German speaking countries from the time of the Germanic tribes

to the twentieth century.

Prerequisite: 27-302 German Conversation and Composition II.

27-305 Introduction to German Literature 3 cr.

A survey of the literature of German people from the beginning to the present.

Prerequisite: 27-302 German Conversation and Composition II and 27-303 Intensive Course in the Reading of German.

27-307 German Literature of the 18th Century 3 cr.

A study of representative works, in various genres, of the literary periods of Enlightenment, Storm and Stress, and Classicism, with particular emphasis on the latter.

Prerequisite: 27-302 German Conversation and Composition II and 27-303 Intensive Course in the Reading of German.

27-308 German Romanticism 3 cr.

Presentation of the most important German works of the romantic period. Understanding of the ideas expressed in the literary works and their influence on all areas of intellectual activity.

Prerequisite: 27-305 Introduction to German Literature.

27-309 German Literature of the 19th Century: Post-Romantic Period 3 cr.

A survey of German literature of the post-romantic period through Naturalism.

Prerequisite: 27-302 German Conversation and Composition II and 27-303 Intensive Course in the Reading of German.

27-311 German Literature of the 20th Century 3 cr.

A study of contemporary literature, in various genres with emphasis on the ideas expressed.

Prerequisite: 27-305 Introduction to German Literature.

28-322 Advanced Structure: Selected Studies 3 cr.

A special, limited project, similar to work done in 28-213, American English—Advanced Structure.

Prerequisite: 28-213 American English: Advanced Structure.

28-411 Transformational Analysis 3 cr.

History, theory and practice of transformational-generative grammar.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

28-415 Phonetics and Phonology 3 cr.

Intensive analysis of the sounds of speech, giving special attention to the organs involved in the articulation of speech sounds, auditory discrimination, phonetic and phonemic transcrip-

tion, different transcription systems and the development of grammatical theory reading regarding descriptive phonology.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

28-417 Linguistics for the Classroom Teacher 3 cr.

Specific implementation of applied linguistics in language arts instruction at the various grade levels.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

28-419 Fundamentals of Modern Linguistics 3 cr.

Descriptive linguistic study of language; phonemics and phonemic transcriptions; morphemics; word classes; syntactic structures and sentence patterns, dialects; intonations.

Prerequisite: Graduate standing.

28-421 Seminar in Linguistic Theory 3 cr.

Selected problems in syntax, phonology, or in general linguistic theory.

Prerequisite: Graduate standing, 28-411 Transformational Analysis and consent of instructor.

28-423 Independent Study in Linguistic Theory 3 cr.

Guided Studies in the field of American English syntax.

Prerequisite: Graduate standing and 28-411 Transformational Analysis.

28-424 Structure of Language: Varies 3 cr.

Phonological and grammatical structure of a selected language, and its genetic relations to others of its family.

Prerequisite: Graduate standing and 28-411 Transformational Analysis.

28-425 Typology of Grammatical Systems 3 cr.

Survey of language classification schemes, their historical development, and the structural typologies associated with current theories of language structure.

Prerequisite: Graduate standing and consent of graduate advisor.

28-426 Independent Study in Linguistic Typology 3 cr.

Guided studies in selected areas of linguistic typology.

Prerequisite: Graduate standing, and admission to the Master of Arts in General Linguistics or consent of graduate advisor.

28-444 Lexicography 3 cr.

Review of the problems and trends of word study in the past, especially of the notions surrounding the concepts of authority and usage of language, followed by a scrutiny of the various types and sources of English vocabulary; recent linguistic insights consid-

ered in the light of their value for various kinds of handbooks.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

28-447 Standard English as a Second Dialect 3 cr.

Training in discrimination and classification of non-standard language and in the preparation and administering of remedial drills to acquire standard English.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

28-451 Independent Study in Applied Linguistics 3 cr.

In-depth study of selected topics; staff guidance.

Prerequisite: Graduate standing, consent of instructor and 28-419 Fundamentals of Modern Linguistics.

28-453 Seminar in Applied Linguistics 3 cr.

Detailed study, individual problems involving instructional materials and techniques for teaching reading, writing, speakings, and listening; interrelationships with other areas of learning; individual projects and reports.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-312 The Development of American English 3 cr.

Historical and structural approach to American English with attention to regional dialects and dialect geography; study of works on the language by such figures as Noah Webster and H. L. Mencken.

29-313 Language and Culture 3 cr.

Cultural, anthropological, psychological and linguistic study of various aspects of the interconnections of language and culture.

29-314 Linguistic Analysis—Poetry 3 cr.

Poetry as an artistic, aesthetic mode of language, with attention to techniques and forms, through application of linguistic principles and method.

Prerequisite: 28-101 Introduction to General Linguistics.

29-315 History of the English Language—Selected Studies 1 cr.

A special, limited project, similar to the work done in 28-212 History of the English language.

Prerequisite: 28-101 Introduction to General Linguistics.

29-316 Linguistic Analysis—Prose 3 cr.

Prose works studied as they present various modes of language, with at-

tention to forms, techniques and styles, through application of linguistic principles and methods.

Prerequisite: 28-101 Introduction to General Linguistics.

29-323 Independent Study in Linguistic Analysis of Literature 3 cr.

Advanced study and individual problems in poetry, prose, drama, rhetoric; cultural-anthropological emphasis, with attention to linguistic analysis of language, form, style, technique.

Prerequisite: 28-101 Introduction to General Linguistics.

29-324 American Lexicography 3 cr.

Survey of earlier English lexicographical history and a detailed study of the development of dictionary making in the United States, from Noah Webster to the present; practical and theoretical linguistic considerations in lexicography; a study of the major current college desk dictionaries.

29-325 The Child's Acquisition of Language 3 cr.

Study of research in a child's acquisition of the ability to recognize and produce the phonemes and morphemes of his native language; consideration of the way in which a child comes to know and use syntactical patterns; developmental study of the child's production of syntactic patterns and his manipulation of transformations.

Prerequisite: 28-101 Introduction to General Linguistics.

29-326 Teaching English to Non-English Speakers 3 cr.

Linguistic principles and techniques related to the teaching of English as a second language and teaching a second dialect of English; meant for those students who are not yet teaching in the field.

29-343 Middle and Early Modern English Linguistics 3 cr.

Survey of the phonology, morphology, syntax and stylistics of middle and early modern English as these are represented in the writings of such authors as Chaucer, Wycliffe, Spenser and Shakespeare.

29-344 Comparative Linguistics 3 cr.

Place of historical and comparative studies in the broader field of linguistics; principles of linguistic history and of linguistic comparison, concerning phonology, morphology, syntax and lexicon; evolution and language, linguistic relativity, glottochronology.

29-401 Linguistic, Logic and Computers 3 cr.

All interdisciplinary inquiry into the nature of human intelligence and how that intelligence is extended to the structure of the digital computer; a systematic study of binary operations as evinced in formal Aristotelian logic; English syntax, and information processing machines.

Prerequisite: Graduate standing, and admission to the Master of Arts in General Linguistics or consent of graduate advisor.

29-402 Introduction to Old English 3 cr.

The linguistic structure of Old English; orthography and scribal practices; reading of selected prose.

Prerequisite: Graduate standing, and admission to the Master of Arts in General Linguistics or consent of graduate advisor.

29-403 Seminar in Writing Systems 3 cr.

The formal classification of writing systems, historical development and diffusion of the major types of writing, problems in deciphering unknown or disguised systems.

Prerequisite: Graduate standing, and admission to the Master of Arts in General Linguistics or consent of graduate advisor.

29-404 Field Methods in Linguistics 3 cr.

Collection and recording of reliable linguistic data and the processing and preliminary analysis of such data through readings, lectures, discussions and actual experience in working with informants.

Prerequisite: Graduate standing, and admission to the Master of Arts in General Linguistics or consent of graduate advisor, and 28-415 Phonetics and Phonology.

29-412 American English—History and Growth 3 cr.

Phonology, morphology, syntax, lexicon of English in the United States as well as its cultural history with reference to the mother country and the New World, both in colonial and post-revolutionary times; consideration of the linguistic works of Noah Webster, H. L. Mencken, et al.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-415 Thesis Seminar: Linguistics 6 cr.

Guidance of students conducting research and writing a thesis to fulfill the requirements for the Master of Arts in English Linguistics.

Prerequisite: Acceptance to Master's degree candidacy in English Linguistics.

29-416 The English Language—History and Development 3 cr.

Survey of English phonology, morphology, syntax, lexicon and cultural

history through old English, middle English, early modern English and recent modern English, using literary documents for the older periods, and literary, as well as spoken records, for the most recent times.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-417 Middle English 3 cr.

Survey of the grammatical trends, sources of vocabulary and dialect divisions of middle English; examination of the principal textual genres and related stylistic features of surviving documents.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-422 Comparative-Historical Linguistics 3 cr.

Historical development and linguistic relationship of language families with special emphasis on the comparative method, etymology, phonetic, analogic and semantic change, cultural and dialect borrowing and dialect geography.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-428 Linguistic Analysis of Literature 3 cr.

Selected items in poetry, prose or drama, using recent linguistic contribution as a major tool in the study of such matters as metrics, syntax, lexicon, intonations.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-429 Psycholinguistics 3 cr.

Theoretical studies in the area of linguistics and psychology; possible implications of the form of grammar for the language learning process; survey of relevant research.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-431 Introduction to Indo-European Linguistics 3 cr.

Survey of IE family of languages, contrastive examination of their grammars; reconstruction of the respective Proto-languages and Proto-Indo-European; Neogrammarian and Geneva-Prague structural approaches to reconstruction; archeological correlations.

Prerequisite: Graduate standing and consent of graduate advisor.

29-445 Semology 3 cr.

Survey of the types of meaning in natural languages with special reference to English and of the means that have been employed to study these, especially in English; attention given to the inter-relationship between structural and semantic meaning; implicit and repressed meaning; obliga-

tion semantic notions in grammatical categories.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-446 Socio-Linguistics 3 cr.

Measuring and establishing the correlates between linguistic behavior and social level; special attention given to the study of social dialects within an urban setting including social factors affecting language acquisition, and linguistic behavior of groups of different cultural backgrounds.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-449 History of Linguistics 3 cr.

Survey of the study of language from ancient times, through medieval and early modern periods, to the nineteenth and twentieth centuries; some attention to ancients such as Panini and Dionysius Rex, but major emphasis upon developments of the nineteenth and twentieth centuries, in the work of such linguists and movements as Grimm, Schleicher, de Saussure, Swadesh, Prague School, the Copenhagen School, Bloomfield, Sapir, the structuralists and the transformationalists.

Prerequisite: Graduate standing and 28-419 Fundamentals of Modern Linguistics.

29-451 Seminar in Historical Linguistics 3 cr.

Intensive work on selected topics; individual and group projects.

Prerequisite: Graduate standing, and 28-411 Transformational Analysis or 28-419 Fundamentals of Modern Linguistics.

29-452 Seminar in Language and Literature 3 cr.

Selected problems in stylistics, prosody and syntactic analysis of literature.

Prerequisite: Graduate standing, and 28-411 Transformational Analysis and 29-428 Linguistic Analysis of Literature or consent of instructor.

29-453 Seminar in Linguistics and Related Fields 3 cr.

Advanced work and individual projects in a selected area of linguistic specialization, such as psycholinguistics, sociolinguistics, mathematical linguistics, etc.

Prerequisite: Graduate standing and consent of instructor.

29-461 Independent Study in Historical Linguistics 3 cr.

Guided studies in history of particular languages or groups of languages.

Prerequisite: Graduate standing, and 28-419 Fundamentals of Modern Linguistics, and 29-416 The English Language—History and Development or consent of instructor.

29-462 Independent Study in Language and Literature 3 cr.

Guided studies in the field of linguistics and literature.

Prerequisite: Graduate standing, and 29-428 Linguistic Analysis of Literature or 28-411 Transformational Analysis or 28-419 Fundamentals of Modern Linguistics.

29-481 Teaching American English as a Second Language 3 cr.

Principles and practice of instructing non-native speakers, or helping bilingual children and adults to achieve socially and educationally accepted standards of modern American English; instruction is linguistically oriented and some elementary background in modern linguistic methods is desirable, though not required.

Prerequisite: Graduate standing.

31-314 Seminar in Learning I 3 cr.

Discussion and inquiry into problems of learning.

Prerequisite: 36-327 Psychology of Learning.

31-315 Seminar in Learning II 3 cr.

Advanced and specialized work.

Prerequisite: 31-314 Seminar in Learning I.

31-316 Research Seminar in Learning I 3 cr.

Experimental method applied in a group research project in a specialized aspect of learning.

Prerequisite: Consent of instructor.

31-317 Research Seminar in Learning II 3 cr.

Advanced and specialized work.

Prerequisite: 31-316 Research Seminar in Learning I.

31-318 Independent Study in Learning I 3 cr.

Guided studies in selected problems in learning.

Prerequisite: 36-327 Psychology of Learning.

31-319 Independent Study in Learning II 3 cr.

Advanced and specialized work.

Prerequisite: 31-318 Independent Study in Learning I.

31-371 Juvenile Delinquency 3 cr.

Personality dynamics in delinquency, family and sociological correlates of delinquent behavior; review of theoretical viewpoints and recent research; implications for prevention and treatment.

Prerequisite: 36-201 General Psychology.

32-311 Independent Study in Human Growth and Behavior I 3 cr.

Instructor-student planned projects in human development.

Prerequisite: 32-318 Human Growth and Behavior.

32-312 Seminar in Human Development I 3 cr.

Specialized areas of developmental psychology, such as perception, motor, emotional, intellectual, language, and personality development or topics such as prenatal and postnatal behavior, effects of early experiences, biological or cultural influence on development and behavior studied in depth.

Prerequisite: Fifteen credits in Human Personality and consent of instructor.

32-313 Seminar in Human Development II 3 cr.

Advanced and specialized work.

Prerequisite: 32-312 Seminar in Human Development I.

32-315 Independent Study in Human Growth and Behavior II 3 cr.

Advanced and specialized work.

Prerequisite: 32-311 Independent Study in Human Growth and Behavior I.

32-316 Research Seminar in Human Development I 3 cr.

Experimental method applied in a group research project in a specialized area of human development.

Prerequisite: Consent of instructor.

32-317 Research Seminar in Human Development II 3 cr.

Advanced and specialized work.

Prerequisite: 32-316 Research Seminar in Human Development I.

32-318 Human Growth and Behavior 3 cr.

Interrelationship between developmental tasks and principles of learning; scientific methods in human development; general principles of development with emphasis on mental and physical-motor growth.

Prerequisite: 36-201 General Psychology.

32-371 Field Experiences in Human Development I 3 cr.

Field and laboratory experiences through participation and observation in Chicago area social agencies; the direct learning of principles that explain the development of the child in the urban setting; provides contact with children as a bridge to student teaching; integrated with other selected courses in human development.

Prerequisite: 36-212 Child Psychology, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors and consent of instructor.

32-372 Field Experiences in Human Development II 3 cr.

Advanced and specialized work.

Prerequisite: 32-371 Field Experiences in Human Development I.

36-301 Developmental Psychology 3 cr.

Longitudinal study of the development of behavior throughout the life span, including physiological factors and their bearing on the psycho-social adjustment of the individual in childhood, adolescence, adulthood and later maturity.

Prerequisite: 36-201 General Psychology.

36-309 Introduction to Culture and Personality 3 cr.

Cultural influences on personality development; the psychological-biological nature of man, aspects that differentiate man from other animals; illustrative materials drawn from both literate and non-literate peoples.

36-311 Psychology of Personality 3 cr.

Contemporary theories of personality development and dynamics; definitions of healthy personality; the self-structure, defense, conscience and guilt, interpersonal behavior and healthy interpersonal relationships; personality assessment.

Prerequisite: 36-201 General Psychology.

36-312 Abnormal Psychology 3 cr.

Overview of psychopathology; similarities and differences between "normal" and "abnormal" groups.

Prerequisite: 36-201 General Psychology.

36-313 Social Psychology 3 cr.

Psychological processes in individual and group social behavior.

Prerequisite: 36-201 General Psychology.

36-316 Physiological Psychology 3 cr.

Relationships of human personality and human physiology; the physiological bases of human behavior; emphasis on learning and neural structure.

Prerequisite: 36-201 General Psychology.

36-317 Introduction to Statistical Methods in Psychology 3 cr.

A first course in statistical methods for students in psychology and education; statistical procedures and the scientific methods in educational and psychological research; elementary statistical concepts, probability and sampling, correlation methods and tests of significance.

Prerequisite: 36-201 General Psychology, plus proficiency in high school algebra.

36-318 Introduction to Experimental Psychology 3 cr.

Theories and experimental designs leading to observations and conclusions in areas such as sensation and perception, learning, emotions, personality, motor skill, etc.; student lab-

oratory work in experimentation is developed.

Prerequisite: 36-201 General Psychology.

36-319 Independent Study in Human Personality 3 cr.

Instructor-student planned projects in selected areas of human personality.

Prerequisite: Consent of instructor.

36-323 Seminar in the Study of Human Personality I 3 cr.

Intensive studies; problems of theorizing and investigating in special areas of human personality.

Prerequisite: Consent of instructor.

36-324 Seminar in the Study of Human Personality II 3 cr.

Advanced and specialized work.

Prerequisite: 36-323 Seminar in the Study of Personality I.

36-325 Research Seminar in Social Aspect of Human Personality 3 cr.

Intensive studies in specialized areas of social psychology.

Prerequisite: Consent of instructor.

36-326 Research Methods in the Study of Human Personality 3 cr.

Use of various research techniques in the study of human personality.

Prerequisite: Consent of instructor.

36-327 Psychology of Learning 3 cr.

Learning theories related to behavior, personality and teaching.

Prerequisite: 36-213 Educational Psychology for Psychology Majors or 62-201 Educational Psychology.

36-328 Psychology of Mental Health 3 cr.

Human personality from the mental health point of view.

Prerequisite: 36-201 General Psychology.

36-329 Adolescent Psychology 3 cr.

Nature of adolescent development and adjustment; physical, intellectual, emotional and social aspects.

Prerequisite: 36-201 General Psychology.

36-331 Tests and Measurements 3 cr.

Principles and methods of measurement and evaluation; elementary statistical concepts; reliability and validity; interpretation of test results; standards for psychological and educational tests; principles of test construction; use of psychological and educational tests in school testing programs; laboratory in teacher-made tests.

Prerequisite: 36-201 General Psychology.

36-332 Introduction to Psychological Counseling 3 cr.

A study of various approaches to psy-

chological counseling; the nature of the counseling process; theoretical bases of psychological counseling; the relationship of counseling to personal adjustment.

Prerequisite: 36-311 Psychology of Personality or 36-312 Abnormal Psychology or consent of instructor.

36-333 Culture and Personality—The Uses of Folklore 3 cr.

Interpersonal relationships of man as a member of society, emphasizing the study of "national character"; intensive analysis of psychological functioning in a selected social group.

36-334 Child Development in Cross-Cultural Perspective 3 cr.

Comparative studies of child rearing practices in varying cultural and sub-cultural milieus, including those in the United States; effects of such differences in terms of subsequent adult personality for the cultures under consideration; problems of "normal" and "abnormal" behavior.

36-335 History of Psychology 3 cr.

Psychology as a science; from Wundt to present day applications and implications; systems examined; theories described and evaluated; impact of modern methods of inquiry; impact of various physiological theories on modern life.

Prerequisite: 36-201 General Psychology.

36-336 Childhood Psychosis, Autism and Schizophrenia 3 cr.

A study of the types of childhood psychoses. The following will be considered in detail: the nuclear schizophrenic child as described by Bender; Kanner's early infantile autism; the symbiotic psychotic child as described by Mahler; and the child with schizophrenic adjustment to neurological dysfunction. Observation required.

Prerequisite: 36-201 General Psychology.

36-351 Senior Seminar in Psychology 3 cr.

Research and preparation of papers that will be read to and criticized by members of the seminar; provides for individual work by the student; guidance through criticism by fellow students and faculty; first-hand experience with a research problem.

Prerequisite: 36-201 General Psychology, 36-317 Introduction to Statistical Methods in Psychology, and 36-318 Introduction to Experimental Psychology.

36-412 Advanced Child Psychology 3 cr.

Focus on methodological problems specific to research and service in the child area; review and discussion in depth of significant areas of research

and service in the field of child psychology, including current research.

Prerequisite: Graduate standing, 36-212 Child Psychology.

36-414 Advanced Adolescent Psychology 3 cr.

Comprehensive presentation of theory, research and service in adolescent development; focus on intellectual, social, personal, physical and emotional growth, problems of personality, adjustment, interpersonal relationships, identity and approaching adulthood.

Prerequisite: Graduate standing, and 36-329 Adolescent Psychology.

36-421 Introduction to Clinical Psychology 3 cr.

Includes history of clinical psychology as a science and as a profession; the use of diagnostic tools, clinical evaluation, psychotherapy, research in clinical problems and interpretation of clinical reports in the assessment of individuals.

Prerequisite: Graduate standing and 36-331 Tests and Measurements.

36-422 Projective Techniques 3 cr.

Basic theory and assumptions underlying projective methods. Instruction in the administration and scoring of several frequently used projective tests. The use of projectives in practice and research.

Prerequisite: Graduate standing, eighteen hours of Psychology, and 36-311 Psychology of Personality or 36-312 Abnormal Psychology.

36-425 Didactic Group Psychotherapy I 3 cr.

Group Psychotherapy viewed and studied by those experiencing the process; concepts of commonality of problems, identification, catharsis, transference and insight emerge during the course of therapy; designed to encourage understanding of self and others; for those who intend to work with severely emotionally disturbed children.

Prerequisite: Acceptance for degree candidacy in the graduate program for Teachers of Emotionally Disturbed Children.

36-426 Didactic Group Psychotherapy II 3 cr.

Presupposes and continues 36-425 Didactic Group Psychotherapy I.

Prerequisite: Acceptance for degree candidacy in the graduate program for Teachers of Emotionally Disturbed Children, and 36-425 Didactic Group Psychotherapy I.

36-431 Psychoanalytic Theories of Personality 3 cr.

Systematic comparison of the central concepts of Freudian and Neo-Freudian analytic psychology; special emphasis placed upon the contributions of ego psychology; implications for learning and for normal and abnormal personality development.

Prerequisite: Graduate standing and 36-311 Psychology of Personality.

36-436 The Counselor and the Counseling Process 3 cr.

Emphasis on the inherent potential within each student for understanding young people; stress upon the role of the person who is the counselor, his values, attitudes, strengths and shortcomings, and how these enter into the counseling process; vehicle of teaching to be readings and conduct of the class as a task-oriented process group.

Prerequisite: Acceptance to the Master's degree program in Guidance and Counseling and completion of twelve credits, and 36-437 Theories and Principles of Counseling.

36-437 Theories and Principles of Counseling 3 cr.

Theories and principles in personal and therapeutic counseling of various theoretical systems; essentials of the counseling process.

Prerequisite: Graduate standing.

36-441 Seminar in Personality Dynamics 3 cr.

An intensive study and evaluation of the basic viewpoints of contemporary theories of personality; emphasis upon the development of a conceptual framework within which theoretical systems and problems can be considered.

Prerequisite: Graduate standing and 36-311 Psychology of Personality.

36-451 Research Methodology Seminar 3 cr.

Formulation of hypotheses and researchable questions; statistical procedures as related to design of experiments, with particular reference to the major types of experimental design in human research.

Prerequisite: Graduate standing and 36-331 Tests and Measurements.

36-453 Research Seminar in Guidance and Counseling 3 cr.

Designed to acquaint the student with research findings and appropriate research techniques in the areas of guidance and counseling; critical evaluation of research emphasized.

Prerequisite: Graduate standing and 66-451 Practicum I in Guidance and Counseling.

37-308 Measurement and Evaluation 3 cr.

Overview of measurement methods. Basic statistical concepts. Principles of test construction and interpretation. Individual and group tests of aptitude, achievement, and personality. Personality assessment and diagnostic testing. Principles and problems in program evaluation.

Prerequisite: 36-201 General Psychology or equivalent.

37-309 Psychology of Language and Cognitive Development 3 cr.

The acquisition of language. Cultural and social class influences. Words, meanings and concepts. Stages in

cognitive development. Language learning and problem-solving. Implications for instruction.

Prerequisite: 36-212 Child Psychology or equivalent.

37-311 Psychology of Exceptional Children 3 cr.

Identification of atypical children; problems in identification, differential diagnosis and treatment of the mentally retarded, culturally disadvantaged, creative, intellectually gifted, emotionally handicapped and physically handicapped; implications for personality development and learning.

Prerequisite: 36-212 Child Psychology and 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors.

37-312 Psychology of the Mentally Handicapped Child 3 cr.

Criteria of mental deficiency, identification, differential diagnosis, etiology, guidance, treatment and parental counseling; implications of recent research for improvement of instruction, differential diagnosis, treatment and rehabilitation; the role of parent groups and social agency resources; functions and services of professional personnel.

Prerequisite: 37-311 Psychology of Exceptional Children.

37-313 Psychology of the Gifted 3 cr.

Problems of identification and characteristics; correlates of productivity and creativity; implications of research findings.

Prerequisite: 37-311 Psychology of Exceptional Children.

37-315 Psychopathology of the Brain-Injured Child 3 cr.

Relationship among brain injury, emotional disturbance and cultural deprivation as causal factors in mental retardation; a developmental approach to the effects of brain injury on intellectual and personality development; detailed consideration of handicaps of perception, concept formation, motor expression, speech and language; implications of brain injury for the child's behavior, his education and the integration of his family.

Prerequisite: 37-311 Psychology of Exceptional Children.

37-316 Principles of Speech Pathology for the Classroom Teacher 3 cr.

Pathologies of speech and language structure—phonemic, morphologic and syntactic—as they appear in articulation, voice, stuttering, cleft palate, cerebral palsy, aphasia, deafness and cultural deprivation; physical, social and psychological determinants of the pathologies; consideration of the teaching role in understanding, man-

agement and cooperation with the speech pathologist.

Prerequisite: 37-311 Psychology of Exceptional Children.

37-317 Psychology of Language and Communication 3 cr.

Communicative behavior; experimental phonetics, speech perception, statistical approach to language, individual differences, verbal behavior of children, role of learning and the social approach.

Prerequisite: 36-201 General Psychology.

37-319 Independent Study in Exceptionality I 3 cr.

Special projects on exceptional children under supervision of a faculty advisor.

Prerequisite: 37-311 Psychology of Exceptional Children and consent of instructor.

37-320 Independent Study in Exceptionality II 3 cr.

Research or study projects on exceptional children in collaboration with or under supervision of a faculty advisor.

Prerequisite: 37-319 Independent Study in Exceptionality I.

37-321 Research Seminar in Exceptionality 3 cr.

Experimental method applied in a group research project in a specialized area of exceptionality.

Prerequisite: 37-311 Psychology of Exceptional Children and consent of instructor.

37-322 Mental Health and Behavior Deviations 3 cr.

The concept of mental health. Interaction of family social, cultural, physical and psychological factors affecting the adjustment and mental health of the child; preventive and treatment programs; meeting the child's emotional needs in regular and special classes.

Prerequisite: 37-311 Psychology of Exceptional Children.

37-324 Educational Implications of Black History and Culture 3 cr.

African backgrounds; the culture of slavery; Black culture in the rural South and in the Northern urban inner city; migration and cultural change; the role of Black in industry, literature, art and politics; development of the Black middle class; historical significance of the struggle for power. Exceptional implications will be drawn.

37-325 Language Instruction for the Disadvantaged 3 cr.

Language behavior of the disadvantaged; implications of research for instructional approaches; programs of cognitive and language development.

Prerequisite: 64-302 Methods of Teaching Language Arts—Elementary School.

37-351 Diagnosis of Children with Severe Learning Disabilities and/or Central Nervous System Dysfunction 3 cr.

Suspected etiology of severe learning disabilities — medical, psychological, neurological, sociological. Instructional implications of various theoretical frameworks for the problems of learning disability.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, 37-315 Psychopathology of the Brain Injured Child, 64-306 Methods of Teaching Reading in the Elementary School or 63-214 Teaching Reading in the Primary Grades.

37-401 Psychology of the Gifted Child 3 cr.

The gifted and creative in our society and how they are identified, with consideration of their psychological, social, and educational characteristics; implications for instruction, administration, counseling and guidance.

Prerequisite: Graduate standing and 37-311 Psychology of Exceptional Children.

37-402 Sensitivity Training in Human Relations 3 cr.

Through intensive small group interaction modeled upon the T-Group, students will be given an opportunity to enhance their knowledge and skills in interpersonal relationships; special focus will be on sensitivity in human relations.

Prerequisite: Admission to the program, Master of Arts in Special Education: Teaching the Culturally Disadvantaged.

37-403 Training Seminar I in Group Process 3 cr.

The introductory phase in a two-trimester sequence in the intensive study of small group phenomena through exploration of individual and group interactional processes; theory sessions, verbal and non-verbal communication, simulation and games, role playing and analysis of fantasy productions will be utilized.

Prerequisite: Admission to the program, Master of Arts in Special Education: Teaching the Emotionally Disturbed Child.

37-404 Training Seminar II in Group Process 3 cr.

The second phase of a two-trimester sequence; concepts of the first phase will be applied and tested in the planning and producing of a relevant group project; group cohesion, morale, cooperation, conflict-management, and performance evaluation will be experienced.

Prerequisite: Admission to the program, Master of Arts in Special Education: Teaching the Emotionally Disturbed Child, and 37-403 Training Seminar I in Group Process.

37-405 Principles of Diagnostic Testing 3 cr.

Techniques of testing and interpretation of tests in educational diagnosis; familiarity with the content of such tests as the Binet, WISC, and Merrill-Palmer, with special emphasis on edu-

cational interpretation; techniques and practice in administering individual diagnostic tests in the areas of psycholinguistics, motor development, sensory-perception, and academic achievement; methods of informal assessment; interpretation of clinical reports.

Prerequisite: Graduate standing, and 37-308 Measurement and Evaluation.

37-406 Vocational Rehabilitation 3 cr.

Issues in rehabilitation; counseling the handicapped; rehabilitation services, resources and agencies; representative rehabilitation programs; the role of home and school.

Prerequisite: Graduate standing, and approval of Department of Special Education.

37-411 Seminar I in the Psychopathology of Emotionally Disturbed Children 3 cr.

A short intensive review of the psychoanalytic ego-psychology frame of reference; the psychodynamics and symptomatology of the neurosis and adjunctive disorders manifested in classroom or institutional settings; an inter-disciplinary approach will be utilized.

Prerequisite: Graduate standing and 37-322 Mental Health and Behavior Deviations.

37-412 Medical Aspects of the Exceptional Child 3 cr.

Designed to provide the teacher of exceptional children some understanding of the problems as seen by the physician, particularly the pediatrician and neurologist; the way the physician approaches these problems, secures data, and formulates a diagnosis, as well as medical management will be discussed; a brief review of growth and development, as well as neuro-anatomy and neuro-physiology, will be presented.

Prerequisite: Graduate standing, 37-311 Psychology of Exceptional Children, and 37-315 Psychopathology of the Brain Injured Child.

37-413 Diagnosis and Planning for Childhood Learning Disabilities 3 cr.

Discussion of current concepts of learning disability; demonstration and discussion of current diagnostic approaches to learning disabilities; discussion of case materials illustrating remedial planning from diagnostic findings; demonstration and discussion of meaningful communication of diagnostic findings and remedial plans to the child, the parents and the teacher.

Prerequisite: Master's degree in Psychology of Education and one year of work experience as a school psychologist, or permission of staff.

37-414 Medical Aspects of Crippling Conditions in Children 3 cr.

Review of anatomy; neuromotor disorders; poliomyelitis; amputations; congenital anomalies; bone and joint infections; epiphyseal injuries and de-

rangements; fractures, dislocations and sprains; tumors; heart disease; cerebral palsy; tuberculosis of the lungs and other chronic chest conditions; kidney infections; asthma and allergies; convulsive disorders.

Prerequisite: Graduate standing, 37-311 Psychology of Exceptional Children and approval of department.

37-415 Education of the Physically Handicapped Child 3 cr.

Education of the physically handicapped in a variety of settings; administrative planning for the physically handicapped child; hospital and home instruction; organization and planning of classes; education of the physically handicapped in regular classes and special schools; instruction at the nursery-kindergarten, primary, elementary and high school levels; administrative considerations; multiple handicaps; diagnosis; educational methods; occupational therapy; physical therapy; personal and educational counseling.

Prerequisite: Graduate standing, 37-311 Psychology of Exceptional Children, and approval of department.

37-416 Seminar in Learning Disabilities 3 cr.

An in-depth analysis of recent research and current problems in the field of learning disabilities, theoretical frameworks, diagnostic tools, and teaching strategies to be analyzed.

Prerequisite: Graduate standing, 37-308 Measurement and Evaluation; 37-311 Psychology of Exceptional Children; 66-321 Diagnosis and Treatment of Reading Difficulties; 37-315 Psychopathology of the Brain-Injured Child; 38-401 Diagnosis and Remediation of Severe Learning Disabilities; to be taken concurrently with Practicum I or Practicum II.

37-421 Seminar II in the Psychopathology of Emotionally Disturbed Children 3 cr.

The psychodynamics and symptomatology of psychoses as manifested in the infant, the child, and the adolescent; diagnostic procedures and case study; experiential backgrounds of the seminar participants will be utilized.

Prerequisite: Graduate standing, and 37-411 Seminar I in the Psychopathology of Emotionally Disturbed Children.

37-441 Research Seminar in Special Education 3 cr.

Research literature on special problems in exceptionality. Collaborative research under the supervision of a faculty advisor.

Prerequisite: Graduate standing, 37-311 Psychology of Exceptional Children, and consent of instructor.

37-442 Thesis Credit in Special Education 3 cr.

Research project within the area of applicant's field of specialization.

Prerequisite: Completion of all required courses in the Master's degree sequence in Special Education, acceptance for degree candidacy, and consent of advisor.

37-454 Counseling the Handicapped 3 cr.

Approaches considerations and specific problems pertinent to the adjustment, training and rehabilitation of individuals who have experienced disablement; understanding the impact of their disability upon attitudes, behaviors and adjustment processes; clinical and counseling approaches; review of research; problem and approaches to counseling handicapped children and their parents.

Prerequisite: Graduate standing, 36-437 Theories and Principles of Counseling, 37-311 Psychology of Exceptional Children, and 37-322 Mental Health and Behavior Deviations.

37-461 Cultures of the Disadvantaged 3 cr.

The concepts of "culturally disadvantaged," "culture" and "sub-culture" treated and applied to various groups such as the disadvantaged Negro, Appalachian White, Puerto Rican, Mexican-American and American Indian; the values and attitudes of each group studied, analyzed and compared in order to gain an understanding of how disadvantaged sub-cultures cope with their existing situations.

Prerequisite: Graduate standing.

37-462 Seminar in Problems of Cultural Deprivation 3 cr.

Problems and field techniques treated in depth in order to prepare the student to conduct an individual research project; research based on library and field work that integrates the theoretical, empirical and practical experiences of the individual; special attempt made to allow the student to gain field experience in culturally disadvantaged areas through contacts with settlement houses, social agencies and churches.

Prerequisite: Graduate standing, and 37-461 Cultures of the Disadvantaged, 47-316 Urban Ecology, or consent of instructor.

37-491 Seminar in Teaching of Socially Maladjusted Children 3 cr.

Special instructional problems and problems of classroom management of socially maladjusted children; collaboration of school and social agencies; preventive and intervention techniques.

Prerequisite: Acceptance for degree candidacy in the Master's program for Teachers of Socially Maladjusted Children and completion of all required courses in that sequence.

37-492 Seminar in Teaching of Emotionally Disturbed Children 3 cr.

Special instructional problems and problems in classroom management of emotionally disturbed children; collaboration with social agencies and therapeutic personnel.

Prerequisite: Acceptance for degree candidacy in the Master's program for Teachers of Emotionally Disturbed Children and completion of required courses in that sequence.

38-301 Pre-Practice Field Experience with Culturally Disadvantaged Children 3 cr.

Types of services available for the culturally disadvantaged child and his family; the need for these and other resources in culturally disadvantaged areas; visitation and evaluation of existing agencies and organizations for the culturally disadvantaged child; visits to classrooms in different community areas.

Prerequisite: Consent of Special Education Advisor.

38-302 Practice Teaching with Educable Mentally Handicapped Children 6 cr.

Supervised teaching of the educable mentally handicapped child, combined with seminar discussions; examination of the problems of diagnosis, theoretical approaches, and suggested teaching techniques; curriculum, and organization of instruction; pupil and parent counseling.

Prerequisite: Student teaching, and 38-343 Teaching the Educable Mentally Handicapped Child.

38-303 Practice Teaching with Culturally Disadvantaged Children 6 cr.

Supervised classroom teaching experience combined with seminar discussions. The school as a social system; classroom management; the teacher's personal attitudes and cultural orientation; understanding the dynamics of the adjustment problems of the culturally disadvantaged; adapting the curriculum and instructional materials to cultural differences; pupil and parent counseling.

Prerequisite: Student teaching, 38-301 Pre-practice Field Experience with Culturally Disadvantaged Children.

38-304 Practice Teaching of Children with Learning Disabilities 6 cr.

Practice teaching combined with seminar discussions. Bridging the theoretical aspects of learning disabilities with an understanding of their practical application within the classroom; field trips to varying settings concerned with these children, i.e., schools, hospitals, social agencies.

Prerequisite: Student teaching, 37-351 Diagnosis of Children with Severe Learning Disabilities and/or Central Nervous Dysfunction, 37-315 Psychopathology of the Brain Injured Child, and 38-344 Remediation in Teaching Children with Severe Learning Disabilities.

38-305 Pre-practice Field Experience with Socially or Emotionally Maladjusted Children 3 cr.

Visitations to a variety of schools and other agencies serving socially or emotionally maladjusted children; teacher aide assignments giving the student

opportunity to provide educational assistance to pupils; field work supplemented by college seminars.

Prerequisite: Consent of Special Education Advisor.

38-306 Practice Teaching with Socially or Emotionally Handicapped Children 6 cr.

Supervised classroom teaching experience combined with seminar discussions. The school as a social system; classroom management; the teacher's personal qualities; culture and personality dynamics; educational technology; pupil and parent counseling.

Prerequisite: Student teaching and 38-305 Pre-practice Field Experience with Socially or Emotionally Maladjusted Children.

38-341 Play and Creative Expression for the Academically Handicapped Child 3 cr.

Activities and experiences designed to provide basic understanding of the role of play and creative expression in a curriculum for the academically handicapped. Methods and materials which enable play and creative expression to motivate, implement, and integrate the academic program.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors.

38-342 Vocational Preparation for the Academically Handicapped Child 3 cr.

Methods, materials and procedures, and prevocational preparation needed by the academically handicapped child as a basis for acquiring the skills and experiences necessary for vocational competence.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors.

38-343 Teaching the Educable Mentally Handicapped Child 3 cr.

The educable mentally handicapped in school and society; their abilities and limitations; instructional objectives; adapting curriculum and materials to their needs; materials and methods of instruction; classroom management; evaluation procedures.

Prerequisite: 37-312 Psychology of the Mentally Handicapped.

38-344 Remediation in Teaching Children with Severe Learning Disabilities 3 cr.

Special methods, materials, and approaches for the teaching of children with learning disabilities in the areas of reading, language, mathematics, writing, and non-verbal areas; various organizational and administrative so-

lutions for meeting the needs of these children.

Prerequisite: 37-351 Diagnosis of Children with Severe Learning Disabilities and/or Central Nervous System Dysfunction, 37-315 Psychopathology of the Brain Injured Child, and 63-214 Teaching Reading in the Primary Grades.

38-401 Diagnosis and Remediation of Severe Learning Disabilities 3 cr.

Causative and inhibiting factors underlying severe disabilities in reading and other basic communication skills; analysis of disabilities and methods of remedial instruction; implications of recent research.

Prerequisite: Graduate standing, and 64-302 Methods of Teaching Language Arts—Elementary School or 64-306 Methods of Teaching Reading—Elementary School.

38-402 Education of the Gifted Child 3 cr.

Issues in the education of the gifted; administrative and instructional provisions; findings from evaluation research; instructional approaches in language arts, mathematics, science, social studies, and fine arts for the gifted; discovery and inquiry; motivation and underachievement; fostering creativity.

Prerequisite: Graduate standing, 37-311 Psychology of Exceptional Children, and 37-401 Psychology of the Gifted Child.

38-403 Seminar in Curriculum and Materials for the Gifted 3 cr.

An intensive review and evaluation of instructional materials in specific curriculum areas with special reference to their appropriateness for use with gifted and creative children.

Prerequisite: Graduate standing, and 37-401 Psychology of the Gifted Child or 38-402 Education of the Gifted Child.

38-404 Research Seminar for the Gifted 3 cr.

A study of the research literature on gifted children; emphasis on research methodology, interpretation of data, and application to educational problems and provisions concerning the gifted; original research projects will be encouraged.

Prerequisite: Graduate standing, 37-401 Psychology of the Gifted Child, and 38-402 Education of the Gifted Child.

38-405 Seminar in School-Community Relations 3 cr.

School-community relationships analyzed from a systems theory framework; psychological and socio-cultural systems; the school and the school community as social systems; authority structure, communication networks, sources of stress, methods of decision making and problem-solving; analysis of school-community interaction.

Prerequisite: Admission to the program, Master of Arts in Special Education: Teaching the Culturally Disadvantaged.

38-411 Teaching the Educable Mentally Handicapped Child 3 cr.

Historical and societal perceptions of the educable mentally handicapped child; curriculum, materials, organization of instruction, teaching methods and techniques based on a consideration of the needs and characteristics of this type of atypical child.

Prerequisite: Graduate standing, and 37-311 Psychology of Exceptional Children or 37-315 Psychopathology of the Brain Injured Child or EMH class assignment and consent of advisor.

38-412 Teaching the Trainable Mentally Handicapped Child 3 cr.

The Trainable Mentally Handicapped class in the modern program of public education; objectives of instruction, organization of instructional programs, methods and techniques for teaching groups of the more severely retarded children; parent counseling, workshops, recreation.

Prerequisite: Graduate standing, 37-311 Psychology of Exceptional Children or 37-315 Psychopathology of the Brain Injured Child or TMH class assignment and consent of advisor.

38-413 Special Instructional Problems of Educable Mentally Handicapped Children 3 cr.

Special problems in the instruction of the educable mentally handicapped child; curriculum building, academic workshops, counseling, guidance, community relations, evaluation and needed research.

Prerequisite: Graduate standing, 38-411 Teaching the Educable Mentally Handicapped Child or 37-315 Psychopathology of the Brain Injured Child, Educable Mentally Handicapped class assignment, and consent of Program advisor.

38-414 Seminar in Curriculum Development for Mentally Handicapped Children 3 cr.

Group and individual research and discussion designed to help prospective teachers of educable mentally handicapped children use curriculum guides and materials to assist in adjusting academic plans to the individual; discovering motivating factors; assembling, adapting and creating materials; consideration of possible utilization of varied methods of teaching.

Prerequisite: Graduate standing, and 38-413 Special Instructional Problems of Educable Mentally Handicapped Children.

38-431 Practicum I in Teaching Culturally Disadvantaged Children 3 cr.

Plan 1: Professional assignment plan; teaching in a school serving culturally disadvantaged children with visitations by a faculty practicum supervisor and seminar participation; seminar discussions with focus upon instructional problems, methods, materials, approaches to solutions to instructional

problems, evaluation and research, implications of culture, urban ecology, and special focus upon language and concept development.

Plan 2: A team-teaching arrangement with culturally disadvantaged children for students without teaching assignments to schools serving culturally disadvantaged children; joint supervision of team-teaching by faculty practicum supervisor, school administrator, and critic teacher; seminar discussions to focus on instructional problems, methods and materials, classroom management approaches to solutions to instructional problems, evaluation and research; special focus upon implications of culture, urban ecology, and language and concept development.

Prerequisite: Acceptance for Master's degree candidacy for teachers of culturally disadvantaged children and completion of all required courses.

38-432 Practicum I in Teaching Socially Maladjusted Children 3 cr.

Plan 1: Professional assignment with faculty visitation and seminar.

Plan 2: Team-teaching plan; joint supervision by faculty practicum supervisor, school administrator and critic teacher; group and individual instruction of socially maladjusted children; instructional problems, methods, materials, implications of culture, classroom management, pupil and parent counseling, collaboration with social agencies, preventive and intervention techniques.

Prerequisite: Acceptance for Master's degree candidacy for teachers of socially maladjusted children, and completion of required courses.

38-433 Practicum I in Teaching Emotionally Disturbed Children 3 cr.

Plan 1: Professional assignment with faculty visitation and seminar.

Plan 2: Team-teaching arrangement with joint supervision by faculty practicum supervisor, school administrator and critic teacher; small group and individual instruction of emotionally disturbed children; instructional problems, methods and materials, classroom management, pupil and parent counseling, collaboration with mental health personnel, therapeutic and intervention techniques.

Prerequisite: Acceptance for Master's degree candidacy for teachers of emotionally disturbed children, and completion of required courses.

38-434 Practicum I in Teaching Educable Mentally Handicapped Children 3 cr.

Plan 1: Professional assignment with faculty visitation and seminar.

Plan 2: Team-teaching arrangement with joint supervision by faculty practicum supervisor, school administrator and critic teacher; seminar discussions to focus upon instructional problems, methods, materials, solutions to instructional problems, classroom man-

agement, evaluation, and research.

Prerequisite: Acceptance for Master's degree candidacy for teachers of educable mentally handicapped children, and completion of required courses.

38-435 Practicum I in Teaching Trainable Mentally Handicapped Children 3 cr.

Plan 1: Professional assignment with faculty visitation and seminar.

Plan 2: Team-teaching plan with joint supervision by faculty practicum supervisor, school administrator and critic teacher; seminar discussions to focus upon objectives of instruction, instructional methods, materials, classroom management, evaluation, and parent counseling and collaboration with parent groups.

Prerequisite: Acceptance for Master's degree candidacy for teachers of educable mentally handicapped children, and completion of required courses.

38-436 Practicum I in Teaching Children with Learning Disabilities (Clinical) 3 cr.

Supervised clinical experience in working with children who have learning disabilities.

Prerequisite: Graduate standing; 37-308 Measurement and Evaluation; 37-311 Psychology of Exceptional Children; 68-321 Diagnosis and Treatment of Reading Difficulties; 37-315 Psychopathology of the Brain-Injured Child; 38-401 Diagnosis and Remediation of Severe Learning Disabilities.

38-441 Practicum II in Teaching Culturally Disadvantaged Children 3 cr.

Community resources and personnel serving culturally disadvantaged communities; field work studies of attitudes, values, and other aspects of cultures of disadvantaged children and their implications for education.

Prerequisite: Master's degree candidacy in program and completion of all required courses.

38-442 Practicum II in Teaching Socially Maladjusted Children 3 cr.

Continuation of 38-432 Practicum I, with continued emphasis upon instructional problems, problems of classroom management, implication of culture, pupil and parent counseling, agency collaboration, and preventive and intervention techniques.

Prerequisite: Master's degree candidacy in program and completion of all required courses.

38-443 Practicum II in Teaching Emotionally Disturbed Children 3 cr.

Continuation of 38-433 Practicum I, with continued emphasis upon instruction, pupil and parent counseling, collaboration with mental health personnel, therapeutic and intervention techniques.

Prerequisite: Master's degree candidacy in program and completion of all required courses.

38-444 Practicum II in Teaching Educable Mentally Handicapped Children 3 cr.

Visits to and observations of community educational, medical, diagnostic, rehabilitation and other social service facilities for EMH children and youth; focus on pupil and parent counseling and collaboration with social agencies.

Prerequisite: Master's degree candidacy in program and completion of all required courses.

38-445 Practicum II in Teaching Trainable Mentally Handicapped Children 3 cr.

Plan 1: Professional assignment.

Plan 2: Team-teaching plan; visits to and observation of community educational, medical, diagnostic, rehabilitation and other social service agencies serving TMH children and youth and their parents; continued emphasis upon collaboration with social service agencies, parent groups, and parent counseling.

Prerequisite: Master's degree candidacy in program and completion of all required courses.

38-446 Practicum II in Teaching Children with Learning Disabilities (School) 3 cr.

Teaching experience with children with learning disabilities in a group setting in a school environment. **Plan 1:** Professional assignment with faculty visitation and seminar. **Plan 2:** Team-teaching with joint supervision by faculty practicum supervisor and school personnel.

Prerequisite: Graduate standing; 37-308 Measurement and Evaluation; 37-311 Psychology of Exceptional Children; 68-321 Diagnosis and Treatment of Reading Difficulties; 37-315 Psychopathology of the Brain-Injured Child; 38-401 Diagnosis and Remediation of Severe Learning Disabilities; 38-436 Practicum I in Teaching Children with Learning Disabilities (Clinical).

41-314 Scope and Methods of the Social Sciences 3 cr.

Distinctive research emphases and methodological approaches of the various social sciences and related behavioral sciences; selected aspects of the philosophy of science and their implications for research.

Prerequisite: Consent of instructor.

41-315 Field Seminar and Comparative Studies 1-6 cr.

Individual study and group meetings in interdisciplinary field course; special emphases on geography, archaeology, ethnology, geology, art, language, comparative education, society and its institutions, social services, history, etc. From one to six credit hours to be arranged with Department Chairman and Registrar.

41-425 Institute for Social Studies Teachers 3 cr.

An institute designed to familiarize social studies teachers with the behavioral-anthropological approach to the

social studies; learning materials—films, film strips, tapes, etc.—specifically prepared for this purpose to be used by participants in their own teaching situations.

Prerequisite: Graduate standing, and currently teaching on the elementary level or consent of staff.

41-426 Workshop in the New Social Studies 3 cr.

An examination and evaluation of selected concepts and practices that comprise recent developments in social studies; topics to include the inquiry method, simulation and games, Black History, Latin-American studies, urbanism; demonstrations by experienced teachers to illustrate how these concepts and practices may be implemented in the classroom.

Prerequisite: Graduate standing, and valid teacher's certificate or consent of instructor.

41-427 Research Seminar in General Social Science 3 cr.

Culminating course in the program, Master of Arts in the Teaching of General Social Science; the preparation of two research papers dealing with interdisciplinary problems in the social sciences to be required.

Prerequisite: Completion of all other requirements for the M.A.T. in General Social Science and/or consent of the program director.

41-431 Thesis Seminar—General Social Science 6 cr.

Guidance of students conducting research and writing a thesis to fulfill the requirements for the Master of Arts degree in the Teaching of General Social Science.

Prerequisite: Acceptance to Master's degree candidacy in General Social Science.

41-433 Thesis Seminar—American Studies 6 cr.

Guidance of students conducting research and writing a thesis to fulfill the requirements for the Master of Arts degree in the Teaching of American Studies.

Prerequisite: Acceptance to Master's degree candidacy in American Studies.

42-301 Peoples of Africa—The Anthropology of Africa 3 cr.

An ethnographic survey of Africa with emphasis on the peoples and cultures of Africa south of the Sahara Desert.

42-302 Peoples of Asia—The Anthropology of Asia 3 cr.

An ethnographic survey of Asia with emphasis on the peoples and cultures of China, India, and Central Asia.

42-303 Peoples of Oceania—The Anthropology of Oceania 3 cr.

An ethnographic survey of the peoples and cultures of the Pacific Island areas of Melanesia, Polynesia, and Micronesia.

**42-304 Peoples of Southeast Asia—
The Anthropology of
Southeast Asia 3 cr.**

An ethnographic survey of Southeast Asia with emphasis on the peoples and cultures of Burma, the Malayan Peninsula, the area formerly known as French Indochina, Indonesia, and the Philippine Islands.

**42-311 Kinship and Social
Structure 3 cr.**

Structure of society in terms of kinship groups; analysis and comparison of the social and political life of non-literate and western peoples.

Prerequisite: 42-212 Cultural Anthropology.

**42-314 Religion, Society,
and the Individual 3 cr.**

Religion as a social institution intensively analyzed as to its functions in nonliterate and western societies; theoretical orientations from which religious institutions may be analyzed.

**42-315 Family, Society and
the Individual 3 cr.**

Analysis of the family as a social system functioning within a large social framework; the two-directional role of the family, as the primary socializing agency acting on the individual and as the basic social unit interacting with increasingly complex levels of social structure, examined and evaluated in a variety of cultural frameworks; the generalizations developed through the use of this comparative approach used as a "filter" to view the forms, functions and problems of the American family in a time perspective that emphasizes the changing nature of American society.

42-325 Old World Prehistory 3 cr.

Intensive study of the beginnings of man's cultural development and of the cultural processes that led to food production, urbanization and civilization in the Old World.

Prerequisite: 42-212 Cultural Anthropology and 42-215 Human Origins, or consent of instructor.

42-326 New World Prehistory 3 cr.

Intensive study of the problem of man's origins in the New World and of his cultural development there; special attention focused on the cultural factors that led to the development of the three centers of New World civilization: Aztec, Maya, and Inca.

Prerequisite: 42-212 Cultural Anthropology and 42-215 Human Origins, or consent of instructor.

**42-327 Indigenous Peoples of
North America 3 cr.**

Survey of the cultures of the North American Indian tribes by culture area as well as by individual tribes. Also, using the pre-contact cultures as a base, culture change as a result of contact will be studied.

42-341 Culture of Poverty 3 cr.
(See 91-341)

**42-343 Culture and Personality—
Theory and Application 3 cr.**

Impact of culture on the development of the individual.

**42-344 Racial and Cultural
Minorities 3 cr.**

Survey of the problems of dominant and minority group relations throughout the world as a basis for a more specific look at the same problems on the American scene; racial and cultural factors involved in group relationship evaluated in the light of current research and theory.

42-345 Physical Anthropology 3 cr.

Evidence from the skeleton and other tissues of the human body will be examined in lecture and laboratory to provide an introduction to the kinds of human variation and to the interrelationship of these variations with the environment.

Prerequisite: 42-215 Human Origins and 3-6 hours in Biology.

**42-351 Independent Study in
Anthropology 3 cr.**

Independent study of methods, concepts and special topics in Anthropology, Archaeology, Ethnology, Physical Anthropology, etc. This is primarily research of a more advanced nature in areas where there are existing courses or in areas in which there are no existing courses.

Prerequisite: 42-212 Cultural Anthropology and consent of instructor.

**42-352 Archaeological
Methods 3 cr.**

Study of the techniques of the recovery, analysis and interpretation of archaeological data. Course will include actual demonstration of some of the equipment employed in archaeological field work. It will also deal with the theoretical value and limitations of the data, and some of the contributions of science to its interpretation.

Prerequisite: 42-212 Cultural Anthropology or consent of instructor.

42-354 Economic Anthropology 3 cr.

Economic aspects of culture using cross-cultural analyses; particular emphasis placed on the implications of these analyses for an understanding of the newly emerging nations of the world.

Prerequisite: 43-111 Comparative World Cultures I, 42-113 Introduction to Anthropology, an introductory course in Economics or consent of instructor.

**42-355 History of Anthropological
Theory 3 cr.**

Brief historical survey of the major developments of anthropological the-

ory that led to present-day theoretical formulations.

Prerequisite: 42-212 Cultural Anthropology and 42-215 Human Origins or consent of instructor.

**42-362 Senior Seminar in
Anthropology 3 cr.**

Review of the field, followed by preparation, discussions and critique of a senior project based on library, field or laboratory work.

Prerequisite: Senior standing in Anthropology.

43-301 Historical Geography 3 cr.

History of geography and the geography of history; historical succession of geographical environments; influence of the geography on the past upon contemporary geographical phenomena; urban development.

Prerequisite: A course in introductory geography.

**43-311 World Regional
Geography 3 cr.**

Major geographic regions of the world with particular emphasis upon the relationships existing between the physical and cultural elements of the environment and the activities of man; world transportation and trade routes; the interdependence of peoples, and the contributors of the major regions to world commerce; a prerequisite for studying all the advanced regional courses for geography majors; this course (or 43-111 Comparative World Cultures I) is a prerequisite for the advanced regional courses for geography majors; credit cannot be received for both 43-111 and 43-311.

43-312 Economic Geography 3 cr.

The worldwide production, distribution and consumption of the principal commercial products of the farm, range, forest, mine and sea.

43-313 Cultural Geography 3 cr.

World cultural regions and their relationships to each other; world population distribution; the significance of population densities; rural and urban settlement types; determinants of settlement patterns; habitat geography.

43-314 Political Geography 3 cr.

Differences in territorial control that exists from place to place in relation to landforms, population distribution, economic activities, etc., areas of current friction between nations.

**43-315 World Agricultural
Geography 3 cr.**

World distribution of crops and domesticated animals in relation to natural and cultural conditions.

Prerequisite: 43-312 Economic Geography or consent of instructor.

43-316 Industrial Geography 3 cr.

Geography of transportation, trade and manufacturing industry.

Prerequisite: 43-312 Economic Geography or consent of instructor.

43-317 Urban Geography 3 cr.

An application of geography to the interpretation of urban settlement using both topical and regional approaches; emphasis on major local cities, field trips.

**43-318 Conservation of Natural
Resources 3 cr.**

Concepts and principles in the management of natural resources: air, water, minerals, soil, forests, grasslands and wildlife.

**43-319 Resource Development
Policy and Planning 3 cr.**

Physical, economic, social and political factors involved in policy determination and planning for natural resource development; special emphasis upon relations between public and private enterprise, and policies for international resource development.

Prerequisite: Consent of instructor.

**43-322 Aerial Photographic
Interpretation in
Geography 3 cr.**

The development and use of aerial photographs and proper techniques for geographic interpretation of landscape, cultural and economic features.

Prerequisite: 43-271 Physical Geography, or 43-312 Economic Geography or consent of instructor.

43-324 Oceanography I 3 cr.

A study of ocean boundaries and bottom topography. Origin and evolution of ocean basins. Nature and characteristics of coastal and marine sediments. Man and his relation to the oceans. The gathering of oceanological data and the development of the marine sciences.

Prerequisite: 43-311 World Regional Geography or 43-111 Contemporary World Cultures I; recommended 43-271 Physical Geography, 51-121 Earth, or 53-211 Physical Geology, and 22-101 Mathematical Concepts.

43-325 Oceanography II 3 cr.

The study of the physical and chemical properties and characteristics of sea water. Hydrodynamics—currents, waves, tides, circulation. Life conditions in the ocean environment, relationship to marine biology. A survey of the application of oceanography and of its economic aspects: statistical methods used and marine cartography.

Prerequisite: 43-324 Oceanography I; recommended are high school physical science and/or biology.

43-331 Geography of Illinois 3 cr.

Detailed study of geographical factors and regional patterns within the State of Illinois; field trips.

Prerequisite: 43-333 *Geography of Anglo-America*.

43-332 Geography of Africa 3 cr.

General survey of Africa's geographical background as an environment for human activity.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-333 Geography of Anglo-America 3 cr.

Introduction to the regional approach in geography with Anglo-America and especially the United States as the example.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-334 Geography of Asia 3 cr.

Present importance of the various nations of Asia with reference to the geographic factors of landform, climate, natural vegetation, soil, economic development, social and political structure, as well as to the regional setting and relation.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-335 Geography of Australia and the Islands of the Pacific 3 cr.

Geographic study of Australia, New Zealand, Melanesia, Micronesia and Polynesia.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-336 Geography of Caribbean America 3 cr.

Analysis of the physical settings, population characteristics, economic development and political relations of Mexico, Central America and the West-Indian islands.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-337 Geography of Europe 3 cr.

Countries of Europe showing the geographic basis for their social, economic and political development, as well as the regional settings and relations.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-338 Geography of the Mediterranean 3 cr.

Geographical study of the Mediterranean countries in Europe, Asia and Africa.

Prerequisite: 43-337 *Geography of Europe* or consent of instructor.

43-339 Geography of South America 3 cr.

Geographic study of the natural environment, population characteristics, agricultural and industrial production and political relationships of the South American countries.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-341 Geography of Southeast Asia 3 cr.

Geographic study of the Philippines, Indonesia, Vietnam, Laos, Cambodia, Malaysia, Thailand and Burma.

Prerequisite: 43-334 *Geography of Asia* or consent of instructor.

43-342 Geography of the Soviet Union 3 cr.

The U.S.S.R. from both a topical and regional approach; emphasis on internal strength and exterior relations.

Prerequisite: 43-334 *Geography of Asia* and 43-337 *Geography of Europe* or consent of instructor.

43-343 Polar Geography 3 cr.

Geographical study of Antarctica and the North Polar area.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-344 Geography of China, Japan and India 3 cr.

Geographic study of China, Japan and India; emphasis on their overall physical patterns and human resources, as well as relations with the rest of the world.

Prerequisite: 43-334 *Geography of Asia* or consent of instructor.

43-345 Geography of the Middle East 3 cr.

Geographic study of Turkey, Iraq, Iran, Afghanistan, Syria, Lebanon, Jordan, Israel, the Arabian Peninsula, and Egypt.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-346 Geography of Metropolitan Chicago 3 cr.

Appraisal of the geographical factors for developing Chicago and its individual environments; detailed study of the communities within Chicago and its suburbs in Illinois, Indiana and Wisconsin; field trips.

Prerequisite: 43-111 *Comparative World Cultures I* or 43-311 *World Regional Geography* or consent of instructor.

43-347 Regional Geography of Central Europe 3 cr.

Physical, biological and human geography of Germany, Austria, Switzerland, Hungary, Czechoslovakia and adjacent areas.

Prerequisite: 43-337 *Geography of Europe* or consent of instructor.

43-348 Geography of Western Europe 3 cr.

Regional study of the British Isles and their dependencies, France and the Benelux countries.

Prerequisite: 43-337 *Geography of Europe* or consent of instructor.

43-351 Statistics for Geographers and Earth Scientists 3 cr.

Introduction of the application of statistical principles and techniques to the geographical studies, as well as to the problems in other earth sciences.

Prerequisite: Nine credits in geography or geology.

43-352 Independent Study in Geography 3 cr.

Special work in regional or topical geography of the student's choice, subject to approval of the instructor.

Prerequisite: Consent of instructor.

43-353 Independent Study in Geography 2 cr.

Special work in regional or topical geography of the student's choice, subject to approval of the instructor.

Prerequisite: Consent of instructor.

43-354 Independent Study in Geography 1 cr.

Special work in regional or topical geography of the student's choice, subject to approval of the instructor.

Prerequisite: Consent of instructor.

43-355 Urban Transportation 3 cr.

Development of railroad, waterway, highway, airline and rapid transportation system for intra-city and extra-city services and their problems.

Prerequisite: 43-312 *Economic Geography* or consent of instructor.

43-356 Field Methods in Geography 4 cr.

Preparation of maps of physical and human geography; writing of a regional geography report; introduction to mapping methods; mathematical geography rudiments; course taught off campus during a major field trip either in the United States or abroad; students should not plan to take another course simultaneously; summer session only.

Prerequisite: 43-311 *World Regional Geography* and a regional geography course dealing with the area studied or consent of instructor.

43-361 City and Regional Planning 3 cr.

Geographic aspects of planning the city as a whole, its various components and external relationships in terms of both areas and functions; field work.

Prerequisite: 43-317 *Urban Geography* or consent of instructor.

43-362 Geography of Population 3 cr.

Growth and distribution of population; elements of population change such as birth, death and migration; problems of both short and long term, as well as of both local and global nature.

Prerequisite: 43-312 *Economic Geography* or 43-313 *Cultural Geography* or consent of instructor.

43-371 Geomorphology 3 cr.

World landforms, their origins and relationships to diastrophism, volcanism, weathering and erosion.

Prerequisite: 43-271 *Physical Geography*.

43-372 Physiography of the Americas 3 cr.

Evolution, utilization, and classification of landforms in the physiographic provinces of North and South America.

Prerequisite: 43-271 *Physical Geography* or 43-311 *World Regional Geography*.

43-373 Biological Geography 3 cr.

Geographical distribution of living organisms and the principles underlying this distribution; three hour lecture period; lecture only.

Prerequisite: Six hours of general biology.

43-374 Cartography 3 cr.

Instruction and practice in the fundamentals of map interpretation, projection, and construction; lectures and laboratory exercises.

Prerequisite: Nine credits in geography.

43-375 Workshop in Geography 6 cr.

A general workshop designed primarily for advanced students and teachers of geography. Emphasis is placed on the study of contemporary trends in the field and/or the intensive study of particular topical or regional aspect of geography. Practical local and/or state-wide field work, field trips, seminar papers and lectures will be included.

Prerequisite: Consent of Department.

43-401 Seminar in Cultural Geography 3 cr.

Detailed analysis of selected theories and methodologies of cultural geography and the current trends within the discipline; students to prepare a seminar paper that incorporates the concepts of a specific approach applied to a local phenomenon.

Prerequisite: Graduate standing, and 43-313 *Cultural Geography* or consent of instructor.

43-402 Seminar in Political Geography 3 cr.

Intensive study of the major approaches in political geography, accomplished in part by the preparation and presentation of a seminar paper incorporating a significant portion of

pertinent political geographic theory.

Prerequisite: Graduate standing and 43-314 Political Geography.

43-411 Scope and Philosophy of Geography 3 cr.

Historical development of geography as a science; its contents, subdivisions and methods of study.

Prerequisite: Graduate standing and nine credits in geography.

43-421 Climatology 4 cr.

Climatic controls and elements, climatic regions and their characteristics and relations to soil vegetation and cultural development.

Prerequisite: Graduate standing, and 43-272 Fundamentals of Meteorology and Climatology or consent of instructor.

43-422 Paleogeography 3 cr.

Reconstruction of past environments from geomorphic, hydrographic and climatic viewpoints; their influence upon contemporary natural environments.

Prerequisite: Graduate standing, and 43-271 Physical Geography or 51-214 Earth Science II or 53-211 Physical Geology or consent of instructor.

43-431 Thesis Seminar—Geography 6 cr.

Guidance of students conducting research and writing a thesis to fulfill requirements for the Master of Arts degree in the Teaching of Geography.

Prerequisite: Acceptance to Master's degree candidacy in Geography.

43-435 Geography of China 3 cr.

Detailed geographic study of China, including Formosa.

Prerequisite: Graduate standing, and 43-344 Geography of China, Japan and India or consent of instructor.

43-441 Mathematical Geography 3 cr.

Methods of triangulation; mathematical basis for projections and map making; gravity; isostasy.

Prerequisite: Graduate standing, and 43-271 Physical Geography or 43-371 Geomorphology or 43-374 Cartography.

43-442 Geographic Problems in Quantitative Measurements 3 cr.

Recent developments of statistical applications in physical and cultural geography; reliability of quantitative formulas and studies; geometrics; statistical project required as part of the course.

Prerequisite: Graduate standing, introductory course in statistics, and high school mathematics.

43-471 Seminar in Urban Geography 3 cr.

Intensive discussion, study and research on the most essential topics in urban geography, such as central place theory, urban renewal programs, population and economic development; field work.

Prerequisite: Graduate standing, and 43-317 Urban Geography or consent of instructor.

44-301 The Jacksonian Era—1824 to 1840 3 cr.

Various political, economic, social and intellectual developments involved in the rise of Jacksonian Democracy; the growth of democracy at the state and national levels; the new conception of the presidency; nationalism and sectionalism; economic growth; national expansion; political and social theories of the Jacksonian period.

Prerequisite: 44-213 Main Currents in American History and 44-214 United States History 1607-1865.

44-302 History of Afro-Americans, 1501 to 1877 3 cr.

An upper level course dealing with the history of Negro Americans, from the African background through the end of Reconstruction. Emphasis is on the experiences and accomplishments of Negroes themselves.

Prerequisite: 44-213 Main Currents in American History; (44-214 U.S. History, 1607-1865 and 44-328 History of Africa, are strongly recommended).

44-303 History of Negro Americans, 1877 to the Present 3 cr.

An upper level course dealing with the history of Negro Americans from the end of Reconstruction to the present. Emphasis is on the experiences and accomplishments of Negroes themselves, and especially on the development of various approaches and proposed solutions to the problems and dilemmas of a multi-racial society.

Prerequisite: 44-213 Main Currents in American History; (44-328 History of Africa, strongly recommended).

44-304 The Early National Period, 1789-1824 3 cr.

A study of the formative years of the American Republic from the promulgation of the Constitution in 1789 to the end of the so-called "era of good feeling" in 1824.

Prerequisite: 44-214 United States History, 1607-1865 or equivalent or consent of instructor.

44-311 Ancient Greece from 3000 B.C. to 146 B.C. 3 cr.

Greek civilization beginning with the Minoan and Mycenaean cultures up to the Roman conquest, emphasizing the basic themes of its political, social, economic, and intellectual life during the Dark Age, Archaic, Classical and Hellenistic periods.

Prerequisite: 44-111 Western Civilization 3000 B.C. to 1700 A.D.

44-312 American Revolution—1763 to 1789 3 cr.

Intensive study of the events leading to American Independence; social and political changes accompanying independence; America under the articles of Confederation; the writing and adoption of the Constitution.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present and 44-213 Main Currents in American History.

44-313 Medieval Europe 3 cr.

An upper level course focusing on the major themes of the Middle Ages in Europe with emphasis on Western Europe.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present and 44-212 Western Civilization 1700 A.D. to Present.

44-314 History of Modern France: 1789-1870 3 cr.

Intellectual and social background of the revolution in the middle and late eighteenth century; the revolutionary decade in France and its effect on Europe, 1789-1870; Napoleon and the internationalization revolutionary reforms, 1800-1815.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present or 44-212 Western Civilization 1700 A.D. to Present.

44-316 Constitutional History of the United States 3 cr.

An upper level course involving the study of the historical background of the United States Constitution; the basics of law necessary to understanding a judicial process; tracing of themes of constitutional law of development.

Prerequisite: 44-213 Main Currents in American History, and one year of college level American history recommended.

44-317 History of the Second World War 3 cr.

Intensive study of the Second World War in its global aspects and implication, to include post-war developments and the cold war.

Prerequisite: 44-213 Main Currents in American History, and one year of college level American history recommended.

44-319 Civil War and Reconstruction—1861 to 1877 3 cr.

Military, political, constitutional, social and economic developments during the Civil War; presidential and congressional reconstruction; radical reconstruction in the southern states; the weakening and abandonment of reconstruction.

Prerequisite: 44-213 Main Currents in American History and 44-214 United States History—1607-1865; (44-332 The Coming of the Civil War, strongly recommended).

44-321 Nineteenth Century Europe 3 cr.

Emphasis on those massive events and changes that affected large regions of Europe; the great movements of Nationalism, Romanticism, Liberalism, Imperialism and the Industrial Revolution.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

44-322 Europe in the Twentieth Century 3 cr.

Political, social and economic devel-

opment of Europe in this century.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present or consent of instructor.

44-323 France since 1815 3 cr.

A survey of the major political, social, and economic forces that helped shape France since 1815; the place of France in the European Community; French foreign policy in the post-WWII period.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

44-325 The World in the Twentieth Century 3 cr.

World developments, including the causes and consequences of the two world wars, their impact on the non-European world, the rise of World Communism, the breakup of the colonial empires, etc.

Prerequisite: One year of college history.

44-326 History of the Far East 3 cr.

Broad survey of the history of the Asians from early times to around the beginning of the twentieth century; stress on the traditional religious philosophies, cultures and ways of life of the Asians; special emphasis on the peoples of India, Pakistan, China, Japan; special emphasis on selected areas of Southeast Asia.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

44-328 History of Africa 3 cr.

Historical survey from early times to the present, emphasizing the area south of the Sahara.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

44-331 The Ancient Mediterranean World—Prehistory to 476 A.D. 3 cr.

An upper level course focusing on the development of civilization in Ancient Egypt, Mesopotamia, Persia, Classical and Hellenistic Greece, the Roman Republic and the Roman Empire.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present, or 44-111 Western Civilization 3000 B.C. to 1700 A.D. and 44-212 Western Civilization 1700 A.D. to Present.

44-332 The Coming of the Civil War 3 cr.

Intensive study of the various political, social and economic factors that led to the breakdown of constitutional government and the beginning of the Civil War.

Prerequisite: 44-213 Main Currents in American History; (and 44-214 United States History—1607-1865, strongly recommended).

44-333 United States History—1900 to 1933 3 cr.

In-depth view of political, social, economic and intellectual development in the United States between the Pro-

gressive Movement and the New Deal, with particular emphasis on American involvement in World War I.

Prerequisite: One year of United States history at the college level.

**44-334 United States History—
1933 to Present 3 cr.**

In-depth treatment of domestic American history and foreign policy between the New Deal and the present, with particular emphasis on the role of this country as a world power.

Prerequisite: One year of United States history at the college level.

**44-335 Historical Archaeology of
Ancient Greece 3 cr.**

The archaeological documentation of the history of ancient Greece from the Bronze age through the Early Hellenistic period. Extensive use will be made of color slides of major sites, their architecture, sculpture and monuments.

**44-336 Independent Study in
History 3 cr.**

Intensive study in selected subjects and periods of history.

Prerequisite: Consent of instructor.

**44-337 Independent Study in
History 2 cr.**

Intensive study in selected subjects and periods of history.

Prerequisite: Consent of instructor.

**44-338 Independent Study in
History 1 cr.**

Intensive study in selected subjects and periods of history.

Prerequisite: Consent of instructor.

**44-339 Senior Historiography
Seminar 3 cr.**

An experience in historical research and exposure of the student to some major theories of history.

Prerequisite: For students who have senior status as undergraduate history majors and who have completed the required history courses.

**44-341 Intellectual History
of the United States—
1607 to 1865 3 cr.**

Designed to introduce the student to the major ideological systems in the colonial and national periods; political and religious philosophy treated, as well as key individual thinkers.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present and 44-213 Main Currents in American History.

**44-342 Intellectual History
of the United States—
1865 to Present 3 cr.**

An upper level course covering the modern period in intellectual history; social Darwinism, pragmatism, and liberalism are three of the intellectual systems studied; approach similar to

that for 44-341 Intellectual History of the United States—1607 to 1865, but courses are independent and need not be taken in sequence.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present and 44-213 Main Currents in American History.

**44-343 Colonial History
of the United States—
1607 to 1775 3 cr.**

The nature of colonial government, town life, literature, as well as a comparison of the development of major colonies; key personalities of the period, such as Benjamin Franklin, Cotton Mather, Jonathan Edwards and Thomas Jefferson studied in detail; designed for American History majors who have background in the field.

Prerequisite: 44-213 Main Currents in American History.

**44-344 The History of the South—
1877 to Present 3 cr.**

Intensive study of the politics of the South after Reconstruction; the emergence of the industrial South; the Negro's place in this new situation, as well as the rise of segregation at the turn of the century; particular attention to the problem of the Negro and the value system of the South in light of present civil rights considerations; how the South has accommodated itself to twentieth century living.

Prerequisite: 44-213 Main Currents in American History.

**44-345 Historical Perspectives on
American Society and
Culture—1815 to 1960 3 cr.**

Changing American cultural patterns and social structure under the impact of changing technology; concepts and data from anthropology and sociology used within a historical setting.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present and 44-213 Main Currents in American History.

**44-346 History of England
to 1688 3 cr.**

Survey of English history to the revolution of 1688; emphasis on significant themes, such as the evolution of monarchy and parliament, medieval society, the Elizabethan world, and constitutional crisis in Stuart England.

**44-347 History of Britain from
1688 to the Present 3 cr.**

Tracing of the political, economic and cultural forces that shaped Great Britain from the late seventeenth century to the present; the transition to an industrial society, from an aristocratic to a democratic society, Georgian and Victorian culture, contemporary Britain.

**44-348 From Empire
to Commonwealth 3 cr.**

Overseas expansion of Britain from the seventeenth to the twentieth century; political and economic trends affecting the empire, imperialism, the end of empire, and the nature of the present Commonwealth; readings and term paper.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present or consent of instructor.

44-349 Tudor England 3 cr.

Major political, social, intellectual and economic trends in sixteenth century England.

Prerequisite: Consent of instructor.

**44-351 History of Ancient
Palestine 3 cr.**

Survey of the History of Palestine from the age of the Patriarchs to the exile in 539 B.C., with special attention given to the political, social and religious institutions that characterize Palestine in the biblical period.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present or 44-331 Ancient Mediterranean World Prehistory to 476 A.D. or consent of instructor.

**44-352 Latin American History
to 1825 3 cr.**

Early Indian civilizations; age of discovery and conquest; socio-economic, cultural and governmental institutions in colonial life; revolutions and wars of independence.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

**44-353 Latin American History
Since 1825 3 cr.**

Cultural and institutional developments in Latin America since independence.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

**44-354 Central America and
the Caribbean 3 cr.**

History of Central America and of the major islands of the Caribbean, emphasizing the period since independence and relations with the United States.

Prerequisite: Upper undergraduate standing and one general course in Latin American History.

44-355 History of Mexico 3 cr.

Early Indian civilization; colonial and national periods with emphasis on race relations, the class structure, the church, latifundia, intellectual life, the revolution, and the impact of industrialization in the twentieth century.

Prerequisite: Upper undergraduate standing and one general course in Latin American History.

44-356 Stuart England 3 cr.

Major political, social, intellectual and

economic trends in England from 1600 to 1715.

Prerequisite: Consent of instructor.

**44-357 The History of Prussia—
Germany, 1640-1918 3 cr.**

The study of the evolution of Prussia in the 17th and 18th centuries with emphasis upon her role in the political and social institutions of Germany. The successes and failures of Bismarckian and Wilhelmian Germany stress the impact of Prussia-Germany on Europe and the world through 1918.

Prerequisite: 44-211 Currents in Western Civilization, 1700—Present or equivalent or consent of instructor.

**44-358 Russian History from the
Varangians to 1855 3 cr.**

The Russian people, state, and culture from their origins to the death of Nicholas I.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

**44-359 Russian and Soviet History,
1855 to the Present 3 cr.**

The political, diplomatic, intellectual and social development of the peoples of the Russian Empire and the Soviet Union from the accession of Alexander II to the present.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

**44-361 Intellectual History of
Europe—1500 to 1789 3 cr.**

Intellectual "progress" from the late Renaissance to the French Revolution; emphasis on the scientific developments, the intellectual impact on Europe of the overseas discoveries, philosophy, religion, literature and art; relationship between changing ideas and philosophies and political developments brought out whenever possible.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present.

**44-362 Intellectual History of
Europe—1789 to
Present 3 cr.**

Impact of the French Revolution and the intellectual developments from that time to the present; sections on science, philosophy, literature and art; the interrelationship between intellectual and political developments.

Prerequisite: 44-211 Currents in Western Civilization: 1700 to the Present or consent of instructor.

**44-363 History of Chinese and
Japanese Thought 3 cr.**

Survey of the content and evolution of such ideologies as Confucianism, Taoism, Legalism, Buddhism, Shinto, Democracy, Socialism, and Communism in China and Japan; stress on the relationship of these ideologies to the

traditional and modern life of the people.

Prerequisite: 44-211 *Currents in Western Civilization: 1700 to the Present.*

44-364 Asia in the Twentieth Century 3 cr.

The period from approximately the beginning of the twentieth century to the present; description and analysis of the political, economic and social forces that are compelling the Asians to uproot, review and change conceptions and practices deeply rooted in the past; special emphasis on the countries of India, Pakistan, China, Japan and selected areas of Southeast Asia.

Prerequisite: 44-326 *History of the Far East or consent of instructor.*

44-365 The Renaissance 3 cr.

Intellectual, cultural, political, social and economic developments in Italy and the rest of Europe, 1300-1600.

Prerequisite: 44-111 *Western Civilization 3000 B.C. to 1700 A.D.*

44-366 The Age of The Reformation 3 cr.

The religious crisis within Roman Catholicism and the genesis and growth of the Protestant movement.

Prerequisite: 44-111 *Western Civilization 3000 B.C. to 1700 A.D.*

44-367 The Constitutional History of England 3 cr.

A study of the constitutional development of England from the Anglo-Saxons to the present day.

44-368 The Hapsburg Monarchy, 1618-1918 3 cr.

A political, diplomatic, economic and social history of the lands and peoples under Hapsburg rule from the Thirty Years War until the dissolution of the Hapsburg monarchy.

Prerequisite: 44-211 *Currents in Western Civilization: 1700 to the Present.*

44-369 Twentieth Century Germany 3 cr.

The study of the problems faced by 20th century Germany, including the demise of the Weimar Republic and the political and social origins of the Nazi Movement, followed by a survey of post-war Germany.

Prerequisite: 44-211 *Currents in Western Civilization: 1700 to the Present or equivalent or consent of instructor.*

44-371 History of Science 3 cr.

Development of scientific method and natural sciences from ancient civilization to the present.

Prerequisite: Eight credits in physical science and eight in biological science.

44-372 Italy since the Napoleonic Era 3 cr.

Survey of the evolution of modern Italy

since its encounter with national self-consciousness in the Napoleonic era. Treats Italian economic, political, intellectual, and diplomatic history within the European community of nations: from the Risorgimento movement, through the weak beginnings of the Italian state, through the Fascist experience, and to the contemporary democratic flowering.

Prerequisite: 44-211 *Currents in Western Civilization: 1700 to the Present.*

44-373 The Emergence of Industrial and Urban America, 1877-1901 3 cr.

This course is a study of the formative years of modern America from the conclusion of reconstruction following the Civil War to the advent of the Theodore Roosevelt administration and national progressivism. Emphasis is placed on those ideas, institutions and factors which help explain the growth of present Urban America with its great economic and industrial strength and its imperial expansionist tendency.

Prerequisite: 44-213 *Main Currents in American History or equivalent or consent of instructor.*

44-374 Ancient Mesopotamian Civilization—4000 B.C. to 539 B.C. 3 cr.

The various peoples of Mesopotamia, their dominant characteristics and attitudes as expressed through their political, social and religious institutions.

Prerequisite: 44-111 *Western Civilization, 3000 B.C. to 1700 A.D.*

44-375 Ancient Egyptian Civilization—3500 B.C. to 332 B.C. 3 cr.

Survey of the history of Egypt, emphasizing the political, social and religious institutions that reflect its distinctive style and outlook.

Prerequisite: 44-111 *Western Civilization, 3000 B.C. to 1700 A.D.*

44-376 Diplomatic History of Europe, 1815-1890 3 cr.

This course is a study of the history of European diplomacy from the end of the Napoleonic wars to the fall of Bismarck. It stresses the relationship of the political, economic, and social history of the European Great Powers and the history of their international relations.

Prerequisite: 44-211 *Currents in Western Civilization: 1700 to the Present.*

44-377 Diplomatic History of Europe, 1890 to the Present 3 cr.

This course is a study of the history of European diplomacy from the fall of Bismarck to the present. It stresses the relationship of the political, economic, and social history of the Great Powers and the history of their international relations.

Prerequisite: 44-211 *Currents in Western Civilization: 1700 to the Present.*

44-378 Senior Seminar in American Reform Movements 3 cr.

This course is designed to give the undergraduate history major an opportunity to read and evaluate the historical literature on one important theme in American History: American reform movements. Abolitionists, feminists, labor reformers, populists, progressives and New Dealers will be among the major reform groups discussed.

Prerequisite: Senior status as undergraduate History major.

44-381 United States Foreign Relations—1775 to 1898 3 cr.

Development of American foreign policy, diplomacy and other relationships with the rest of the world from the American Revolution through the Spanish-American War.

Prerequisite: 44-213 *Main Currents in American History* and 44-214 *United States History 1607 to 1865.*

44-382 United States Foreign Relations—1898 to 1945 3 cr.

The United States as a world power; consequences of the Spanish-American War; new relationships with Latin America, Asia and Europe; the United States and World War I; the United States and the Long Armistice; American involvement in World War II.

Prerequisite: 44-213 *Main Currents in American History* and 44-214 *United States History 1607 to 1865; (44-381 United States Foreign Relations—1775 to 1898 recommended).*

44-383 The Woman in American History 3 cr.

A survey, from colonial times to the present, of the role of the woman in America, women reform movements such as the suffragettes and the feminists, and the influence of women in America.

Prerequisite: 44-213 *Main Currents in American History.*

44-384 Pro-Seminar in Modern European History 3 cr.

Intensive reading and discussion course open to a limited number of students. Under the direction of the professor, students will be asked to prepare themselves for weekly discussions on a particular aspect of modern European history.

Prerequisite: 44-211 *Currents in Western Civilization: 1700 to the Present.*

44-421 Seminar in the History of the Civil War and Reconstruction 3 cr.

Directed studies in the history of the era of the Civil War and Reconstruction, including the antebellum period; each student to write a seminar paper that will be revised and developed in the light of criticism by other members of the seminar.

Prerequisite: Graduate standing and consent of instructor.

44-424 Seminar in Twentieth Century European History 3 cr.

Seminar on selected problems in twentieth century Europe; students to present papers on particular topics for discussion and analysis.

Prerequisite: Graduate standing, 44-322 *Europe in the Twentieth Century* and consent of instructor.

44-431—Thesis Seminar—History 6 cr.

Guidance of students conducting research and writing a thesis to fulfill requirements for the Master of Arts Degree in History.

Prerequisite: Acceptance to Master's degree candidacy in History.

44-451 Historiography and Historical Method 3 cr.

Required of all students working in the graduate program in history; an attempt to give the student historical understanding, philosophies of history and methods of historical research.

Prerequisite: Graduate standing.

44-452 Seminar in the Historical Writings of the Ancient Near East and Greece 3 cr.

The preparation of research papers dealing with the literary and historical documents of the Egyptians, Mesopotamians, Hittites and Greeks; discussion on the different views and assumptions about history that underlie these writings.

Prerequisite: Graduate standing and 44-331 *The Ancient Mediterranean World—Prehistory to 476 A.D.* and 44-311 *Ancient Greece from 3000 B.C. to 146 B.C.* or 44-374 *Ancient Mesopotamian Civilization—4000 B.C. to 539 B.C.* or 44-375 *Ancient Egyptian Civilization—3500 B.C. to 332 B.C.* or consent of instructor.

44-453 Seminar in 19th Century European History 3 cr.

Directed research seminar for graduates interested in the major problems in 19th century European history.

Prerequisite: Graduate standing and consent of instructor.

44-454 Seminar in History of the South, 1877 to the Present 3 cr.

An in-depth research experience in the area of the Modern South; the political, social, economic or intellectual aspects of the region's history will be appropriate to research analysis.

Prerequisite: Graduate standing, and a course in *History of the South* or consent of instructor.

44-455 Proseminar in American Foreign Policy 3 cr.

A systematic and in-depth study, analysis and criticism of the principal monographs dealing with the making of American Foreign Policy since 1895.

Prerequisite: Graduate standing, and a course in *American Diplomatic History* or consent of instructor.

44-471 Seminar in Latin American History 3 cr.

Problems and crucial issues of colonial, nineteenth century and contem-

porary Latin America; students will prepare a seminar paper that will be revised and developed in the course of discussion and readings.

Prerequisite: Graduate standing and consent of instructor.

44-472 Seminar in Modern British History 3 cr.

Directed studies in modern British history, primarily in the nineteenth and twentieth centuries; students will prepare a seminar paper that will be revised and developed in the course of discussion and readings.

Prerequisite: Graduate standing, one course in British history and consent of instructor.

44-473 Seminar in United States History in the Twentieth Century 3 cr.

In-depth study in seminar fashion of problems in the history of the United States during this century; students will prepare a seminar paper that will be revised and developed in the course of discussion and readings.

Prerequisite: Graduate standing and consent of instructor.

44-474 Seminar in United States Intellectual History 3 cr.

Study of selected topics; goals are orientations to the major writings in the field and research experience.

Prerequisite: Graduate standing, 44-341 Intellectual History of the United States—1607 to 1865, and 44-342 Intellectual History of the United States—1865 to Present.

44-475 Seminar in Modern Chinese and Japanese History 3 cr.

Directed studies; student to prepare a seminar paper that will be discussed, questioned and developed further during the seminar.

Prerequisite: Graduate standing and one course in Asian studies.

44-476 Seminar in American Foreign Policy 3 cr.

The preparations of original research papers dealing with the making of American Foreign Policy since 1895; a systematic and in-depth study, analysis and criticism of these papers by selected students.

Prerequisite: Graduate standing and 44-382 United States Foreign Relations—1898 to 1945 or equivalent or consent of instructor.

44-477 Seminar in American Colonial History 3 cr.

The reading of primary and selected secondary works and the preparation and class evaluation of original research papers dealing with some aspect of American Colonial History.

Prerequisite: Graduate standing, and 44-343 Colonial History of the United States—1607 to 1775 or consent of instructor.

45-301 Legislative Process 3 cr.

Introduction to the legislative process; problems of representation, organization of the legislature, participation in the legislative process, the legislature in action, and proposals for improved

organization; emphasis on legislatures at the national level.

Prerequisite: Three credits in Political Science or consent of instructor.

45-302 United States Foreign Policy Since World War II 3 cr.

Description and analysis of the important changes in traditional American foreign policy that have occurred since World War II; the international responsibilities that America must bear as a modern world power and the political, economic and social factors that are conditioning and limiting American foreign policy today.

Prerequisite: Three credits in American History or American Government.

45-303 Public Opinion and Propaganda 3 cr.

Examination and analysis of public opinion as related to the political behavior of leaders and followers. Emphasis on voting behavior, opinion surveys, techniques of opinion manipulation for political purposes and the role of opinion in policy-making.

Prerequisite: Three credits in Political Science or consent of instructor.

45-304 Constitutional Law: The Supreme Court's Role in American Government 3 cr.

Judicial review and the vote of the Supreme Court on Constitutional development will be traced focusing on federalism, separation of powers, the commerce clause, the contract clause, national taxing. The historical and political context and constitutional law doctrines of crucial Supreme Court cases will be examined. Particular emphasis will be given to the rule of the court in expanding the powers of National government. The changing role of the Supreme Court will be studied particularly in terms of the reapportionment cases.

Prerequisite: Three credits in American Government or American History.

45-305 Constitutional Law: Civil Liberties 3 cr.

The role of the Supreme Court and its impact on the Constitutional development of the Due Process Clause. Equal Protection of Laws Clause, civil liberties and the First Amendment Freedoms will be traced. Particular emphasis will be placed on the assessment of the role of the Supreme Court vis a vis the states and the national government in protecting and restricting civil liberties.

Prerequisite: Three credits in American Government or American History.

45-306 Contemporary Political Philosophy 3 cr.

Contemporary problems of political philosophy will be examined through

selected writings of 20th century political philosophers. Particular focus will be placed on an examination of the nature of power, the breakdown of authority, political obligation, technology versus human values, revolution, the use and meaning of violence, and the concept of the public interest.

Prerequisite: Three credits in Political Science.

45-307 The Government and Politics of Metropolitan Areas 3 cr.

An examination of the multiplicity and diversity of governments in metropolitan areas; the styles, structures and processes of governments in suburbia; the role and functioning of special districts; the problem of fragmentation and proposed solutions; fiscal and taxing structures; examination and analysis of selected areawide functions; emerging trends in metropolitan government and the prospects for change.

45-311 Policy Making in American National Government 3 cr.

Case study and systematic analysis of legislative, executive, administrative and judicial policy making processes at the national governmental level.

Prerequisite: Three credits in American Government or consent of instructor.

45-312 Modern European Governments 3 cr.

Analytical and comparative study of the politics and government of the major European nations.

Prerequisite: Three credits in Political Science or consent of instructor.

45-313 Contemporary International Relations 3 cr.

Basic principles and problems; emphasis on the contemporary problems and issues of international political life.

Prerequisite: Three credits in Political Science or consent of instructor.

45-315 Political Parties and Pressure Groups 3 cr.

Examination of the role of parties and political interest groups in the political system, with emphasis on description and analysis of parties and groups in American politics; discussion of parties and interest groups as agents of political representation and social change.

Prerequisite: Three credits in Political Science or consent of instructor.

45-316 War and Peace 3 cr.

War as a social institution; causes of war and conditions of peace; proposals and prospects for a peaceful world order.

45-317 Independent Study in Political Science 3 cr.

Intensive investigation into special topics.

Prerequisite: Consent of instructor.

45-318 Municipal Government 3 cr.

An introduction to Urban Government; powers of municipal corporations; taxation and budgeting; local law administration; partisan and non-partisan form of government, representative structure and elections; institutionalized forms of urban leadership and control.

Prerequisite: Three credits in Political Science or consent of instructor.

45-319 International Law and Organization 3 cr.

International law of war and peace; organization and activities of world and regional organizations.

Prerequisite: 45-313 Contemporary International Relations or consent of instructor.

45-321 Political Theory 3 cr.

Analysis and evaluation of the history, development, decline and resurgence of political theory; study of democratic theory and competing ideologies; relationship of theory and research.

Prerequisite: Three credits in Political Science or consent of instructor.

45-322 Politics and Government of South America 3 cr.

Examination of the various political systems currently existing on the continent of South America with comparisons of conditions and institutions of the various countries.

Prerequisite: Three credits in Political Science or consent of instructor.

45-323 Government in New Nations 3 cr.

Comparative analysis of political systems in the developing nations; attention centered on nations of Southeast Asia, Africa and Latin America.

Prerequisite: Three credits in Political Science or consent of instructor.

45-324 Communist China: Politics and Government 3 cr.

The structure and activities of the Chinese Communist Party and State. Communist outlook, ideologies and significant internal and foreign problems will also be examined and analyzed.

Prerequisite: Three credits in Asian Government or History or consent of instructor.

45-327 Independent Study in Political Science 2 cr.

Intensive investigation into special topics.

Prerequisite: Consent of instructor.

45-328 Seminar in Domestic Politics and Government 3 cr.

Advanced discussion course requiring the writing and presentation of research papers.

Prerequisite: Six credits in American Government or consent of instructor.

45-329 Seminar in Comparative Politics 3 cr.

Advanced discussion course requiring the writing and presentation of research papers.

Prerequisite: Six credits in American Government or consent of instructor.

45-331 Seminar in International Relations 3 cr.

Advanced discussion course requiring the writing and presentation of research papers.

Prerequisite: Six credits in International Relations or consent of instructor.

45-332 Public Administration 3 cr.

Theory and practice of public administration in various political systems; basic administrative law; decision making in public administration; administrative control; the civil service at various levels; manifestations of maladministration; lectures and actual case work in public administration.

Prerequisite: Three credits in Political Science or consent of instructor.

45-333 State Government and Politics 3 cr.

Examination of political institutions at the state level: governor, legislature, judiciary, constitution, parties, and administration. Analysis of state politics within and outside the institutional framework. Discussion of major problems and functions of state governments today. Emphasis on Illinois governments and politics.

Prerequisite: Three credits in Political Science or consent of instructor.

45-334 Urban Politics 3 cr.

Examination of major problems of urban areas and the methods of dealing with them. Analysis of political forces which can be mobilized to solve conflicts and problems or which may impede such solutions. Types of governments and politics and their ability to meet the demands and solve the problems of urban areas. Discussion of community power and control, citizen participation and decentralization of governmental services.

Prerequisite: Three credits in Political Science or consent of instructor.

45-335 Political Theory I: Man and the State 3 cr.

Greek, Roman, early Christian political thought will provide the material for an examination of the relationship of man and the state. Analysis of the benefits derived from membership in a political community and its incumbent obligations on the citizen, the concept of the just state, the state as the instrument for the moral perfection of the individual, the concept of nation building. These concepts will be examined through a selection from the works of

Plato, Aristotle, Cicero, St. Augustine and St. Thomas Aquinas.

Prerequisite: Three credits in Political Science.

45-336 Political Theory II: Man and Society 3 cr.

The tensions between the individual and the state will be analyzed. Focus will be particularly given to the concepts of society, natural rights, political obligation, consent, the role of law, social contract and revolution. These concepts will be examined through a selection from the works of Machiavelli, Hobbes, Locke, Rousseau, Burke, Mill, Marx and others.

Prerequisite: Three credits in Political Science.

45-337 Independent Study in Political Science 1 cr.

Intensive investigation into special topics.

Prerequisite: Consent of instructor.

45-338 Politics of Sub-Sahara Africa 3 cr.

An examination and comparison of the politics of selected African states with particular focus on the colonial heritage, the role of the ideology, political parties, government structure, education, the role of the military, problems of tribal integration, and the problem of modernization.

Prerequisite: Three credits in Political Science.

45-339 Political Theory III: Contemporary Political Analysis 3 cr.

Contemporary political analysis will be assessed focusing on several of the following topics: the behaviorist school, decision making, mathematical approaches to politics, structural-functional analysis, system theory, game theory, communications theory, political development theory, interest group theory, and democratic theory.

Prerequisite: Three credits in Political Science.

45-341 Governments in Asia 3 cr.

Comparison of selected governments in Asia; a variety of governments compared in order to give a broad and realistic view of the political systems now current in Asia; the political systems of Communist China, Japan, India, Pakistan and several Southeast Asian countries.

Prerequisite: Three credits in Political Science or consent of instructor.

45-342 International Relations in Asia 3 cr.

Analysis and description of the basis of the foreign policies of various Asian nations; attention given to the relations among the Asian nations as well as their relations with other areas of the world.

Prerequisite: Three credits in Political Science or consent of instructor.

45-343 Seminar on Asian Politics 3 cr.

Attention to be focused on a contemporary crisis and, in some instances an impending crisis in the area; problem under discussion to be dissected and investigated in depth; relationship between the current crisis and past and future crises to be discussed.

Prerequisite: Six credits in Asian Politics and/or Asian History or consent of instructor.

45-344 Politics of the Middle East 3 cr.

Introduction to the politics of the Middle East (Southwest Asia), relating the physical environment, economic conditions and the historical heritage to the political structure presently existing in the region; analysis of the region in its world context.

Prerequisite: Three credits in Political Science or consent of instructor.

45-345 Politics of Southeast Asia 3 cr.

Formulation and implementation of domestic politics of the countries of Southeast Asia; repercussions of these politics; the salutary or detrimental effects of national politics upon the ubiquitous minority groups of these countries; internal disorders resulting from domestic and international politics; the feasibility of regional co-operation among these countries; political factors for or against economic development of the region as a whole.

Prerequisite: Three credits in Political Science or consent of instructor.

45-346 Political Doctrines of Asia 3 cr.

Survey of the origins of indigenous political doctrines of Asian countries; outside influences in the forms of colonialism, capitalism, socialism and communism; some of the syntheses of these contrasting political doctrines; the impact of all these political doctrines upon the thinking of the ruling elite and the lives of the people.

Prerequisite: Three credits in Political Science or consent of instructor.

45-347 Seminar in Asian Studies 3 cr.

The seminar will stress the relationship between the various disciplines in Asian Studies. Each seminar must present a paper on a significant Asian topic. The student is required to stress the interdisciplinary approach in his preparation of the research report.

Prerequisite: Six credits in Asian Politics and/or Asian History or consent of instructor.

45-348 Government and Politics of South Asia 3 cr.

A lecture course covering political development of India, Pakistan, the Himalayan States and Ceylon. This will include analysis of the constitution,

governmental structure and political process of these countries. Current domestic and foreign policies will also be discussed.

Prerequisite: Three credits in Political Science or consent of instructor.

45-349 Cities and the Federal System 3 cr.

A systematic study of the role and functions of the national and state governments in urban areas; an examination of the pattern and effectiveness of representation of urban areas and interests at higher levels of government; the making and execution of urban policy at the national and state level with special attention given to intergovernmental fiscal relations and programs designed to meet specialized and currently critical urban problems.

Prerequisite: Three credits in Political Science.

45-351 The Soviet Union: Government and Politics 3 cr.

The structure and operation of the Soviet Communist Party and State. Local politics, economic activity, communications system and foreign relations will be examined and analyzed.

Prerequisite: Three credits in Political Science or consent of instructor.

45-352 African Political Thought 3 cr.

African political thought will be examined through selected writings of crucial African leaders and writers which deal with political development in the new States of Africa. Particular focus will be placed on the problems of African identity (African values versus westernization), African Socialism, Pan-Americanism, and the one party State.

Prerequisite: Three credits in Political Science or consent of instructor.

45-353 Practical Politics 3 cr.

An examination of contemporary politics with emphasis on the role of politicians and the realities of political life.

45-354 Political Modernization in Africa 3 cr.

An examination of the concepts and processes involved in political modernization in Africa; particular attention will be given to traditional societies and the process of transformation; modernization and social integration; modernization and political institutions (one party states, the role of the army); ideologies and patterns of modernization.

Prerequisite: Six credits in Political Science or three credits in African Politics or consent of instructor.

45-356 South Asia in International Politics 3 cr.

Analysis of South Asia as a "neutral bloc," emphasizing the United States,

the Soviet Union and Communist China's relation with it. Inter-State conflict and cooperation in South Asia, including relation with other countries. These issues and their evolution are examined in terms of political events, developments in weaponry, communication, alliances, international relations and organization, and strategic and ideological thought among the governments involved.

Prerequisite: Three credits in Asian Studies or consent of instructor.

45-401 Seminar in American Policy-Making Process 3 cr.

Analysis of legislative, executive, administrative and judicial policy-making process at the national governmental level; emphasis on current research, case studies in policy making, and presentation of seminar papers.

Prerequisite: Graduate standing and consent of instructor.

45-402 Seminar in Political Behavior 3 cr.

Sociological and psychological perspectives in political science; how political attitudes and preferences are formed; comparative political cultures; social and psychological determinants of political participation and political decision-making; American voting behavior; discussion of current research in these areas; writing and presentation of seminar papers.

Prerequisite: Graduate standing and consent of instructor.

45-403 Seminar in Contemporary Political Problems of East Asia 3 cr.

Analysis of the major problems of East Asia, Japan, Korea and China; emphasis placed on such topics as nationalism, westernization, and the intrusion of communism in the area; discussion and presentation of seminar papers.

Prerequisite: Graduate standing and three courses in Asian politics and history and consent of instructor.

45-404 Revolutionary Movements in Asia 3 cr.

The problems of political movements, particularly revolutionary movements, in Asia; the recruitment and employment of adherents of the movements; the use of underground armies; and the application of terrorist tactics to obtain optimum results of the movements; approach to be a combination of the historical and the operations research points of view.

Prerequisite: Graduate standing and three courses in Asian Politics and/or History.

45-405 Seminars in Urban Politics 3 cr.

Analysis of the politics of metropolitan areas, with emphasis on the mobilization of resources for urban problem-solving, and the political forces that impede the solution of such problems; the writing and presentation of re-

search papers on urban politics in the Chicago metropolitan area.

Prerequisite: Graduate standing and six credits in Political Science.

45-406 Seminar in International Relations 3 cr.

An analysis of the major problems in international relations, with emphasis on the causes of international conflict, diplomacy among nations, and conflict resolution; presentation and discussion of seminar papers.

Prerequisite: Graduate standing and six credits in Political Science.

45-407 Political Integration in Western Europe 3 cr.

Focus on post World War II political integration in Europe; examination of various European international and supranational organizations, with emphasis on the dynamics of political integration in the European Common Market.

Prerequisite: Graduate standing and six credits in Political Science.

45-408 Seminar in Problems of Nation Building 3 cr.

A seminar dealing with attempts on the part of the underdeveloped world to create nation-state out of diversity of races, cultures, languages and values; nature of indigenous political culture; resistance of this political culture to alien political culture brought in to facilitate the process of nation building; and conflict between the two political cultures to be examined in depth.

Prerequisite: Graduate standing and six credits in Political Science.

45-409 State Parties and Politics 3 cr.

Focus on the role of local and state party organizations in American state and national politics; politics of the urban machine, the organization of state party systems, and the role of the state party in Presidential politics.

Prerequisite: Graduate standing and six credits in Political Science.

45-411 Seminar in South Asian Politics 3 cr.

South Asian politics to be examined and appraised; review of recent approaches to the study of this field; students to be exposed to a substantial portion of South Asian politics literature and they will also be required to participate in the discussion and to prepare and present both oral and written reports.

Prerequisite: Graduate standing, and 45-348 Government and Politics of South Asia and consent of instructor.

45-412 Seminar in the Behavioral Aspects of International Relations 3 cr.

Research, seminar papers, and discussion of the socio-psychological approaches to the study of international relations; topics to be covered include nationalism in international conflict

resolution, decision-making in international relations, national and international image formation, and the socio-psychological determinants of foreign policies.

Prerequisite: Graduate standing and 45-313 Contemporary International Relations, or equivalent, and consent of instructor.

45-413 Contemporary Politics of Himalayan Kingdoms 3 cr.

A general survey of the political, economic, social, cultural, religious and educational institutions in Nepal, Bhutan and Sikkim. Among the topics to be discussed are: the origins, consolidation and expansion of autocratic rule in the area; their cultural, social, religious and political systems; their relations with China, Tibet and British India; the special role of the Rana family of Nepal in the region for over a century; and a detailed analysis of the present political systems in the Himalayan Kingdoms.

Prerequisite: Graduate standing, and three credits in Asian Studies or consent of instructor.

45-414 Colonial Government and Administration in South Asia 3 cr.

An advance analysis that seeks to explain the rise of the British colonial political system; the sources and nature of colonial power; the effects of colonial rule on the economic, social, cultural, educational, religious and political system of the South Asian countries.

Prerequisite: Graduate standing, and three credits in Asian Studies or consent of instructor.

45-431 Thesis Seminar—Political Science 6 cr.

Guidance of students conducting research and writing a thesis to fulfill the requirements for the Master of Arts degree in Political Science.

Prerequisite: Acceptance to Master's degree candidacy in Political Science.

46-301 Elements of Economics 3 cr.

The course compresses the substance of Principles of Economics I and II into one term and covers basic economic concepts, national income, employment and growth, markets, the price system and allocation of resources, current economic problems and the U.S. economy in the world context. (May serve as prerequisite to advanced courses for students not concentrating in economics).

Prerequisite: For upperclassmen and graduate students with no prior credit for Principles of Economics.

46-302 Economic Development 3 cr.

Theoretical analysis of factors underlying economic development with reference to newly developing nations. Consideration of policy issues underlying attempts to accelerate economic growth.

Prerequisite: One course in Economics or consent of instructor.

46-303 Economic Theory: National Income 3 cr.

This course will deal with macroeconomic concepts; determination of income, employment, price levels, effects of fiscal, monetary and other policies.

Prerequisite: 46-215 Principles of Economics I and 46-216 Principles of Economics II; or 46-301 Elements of Economics.

46-304 Economic Theory: The Price System 3 cr.

A systematic study of the role of the price system in organizing economic activity and an evaluation of its effectiveness; price determination and resource allocation under competition, monopoly, oligopoly, and monopolistic competition; theories of demand, cost, partial and general equilibrium.

Prerequisite: 46-215 Principles of Economics I and 46-216 Principles of Economics II; or 46-301 Elements of Economics.

46-305 Economic Statistics 3 cr.

An introduction to the principle methods of statistical analysis as applied to economic problems.

Prerequisite: 46-215 Principles of Economics I and 46-216 Principles of Economics II; or 46-301 Elements of Economics or consent of instructor.

46-306 Labor Economics 3 cr.

Theoretical and current public policy issues relating to wage determination, labor markets, the labor force and its employment and unemployment, hours, conditions, business cycles and social security.

Prerequisite: One course in Economics or consent of instructor.

46-307 Money and Banking 3 cr.

The nature and functions of money and the role of the monetary sector in the determination of income and employment. Attention is given to the institutional framework, money markets, commercial banking, deposit expansion, the federal reserve system and instruments of monetary policy.

Prerequisite: One course in Economics or consent of instructor.

46-308 Comparative Economic Systems 3 cr.

Analysis of the structure, institutions, operation, performance and growth of alternative economic systems with emphasis on the U.S., U.S.S.R. and other economies including selected underdeveloped economies.

Prerequisite: One course in Economics or consent of instructor.

46-309 Public Finance 3 cr.

To investigate the economics of governmental activities. The economic effects of each of the types of public revenues and expenditures will be considered. In addition, the workings of fiscal policy and the effects of the

public debt will be discussed. The course will emphasize, but not be restricted to American fiscal institutions and policies.

Prerequisite: 46-215 *Principles of Economics I* and 46-216 *Principles of Economics II*; or 46-301 *Elements of Economics* or consent of instructor.

46-313 Economic History of Europe 3 cr.

Development of the modern economic system and institutions of Europe from their late Medieval and Renaissance beginnings; the revival of trade, the growth of towns, the Commercial Revolution, the development of new systems of economic thought to support capitalism, the Industrial Revolution, the rise of new economic forms such as socialism, modified capitalism, and "mixed" economies in the twentieth century.

Prerequisite: One course in *European History* or one course in *Economics*.

46-314 The Development of Economic Thought 3 cr.

Survey of the major streams of economic thought from 1776 to the present.

Prerequisite: 46-212 *Contemporary Economic Society* or consent of instructor.

46-315 American Capitalism 3 cr.

Contemporary controversial interpretations of American capitalism; course to center around the idea that the system is described in obsolete terms such as private property, competition, free enterprise; critical examination of recent reformulations of the capitalist system.

Prerequisite: 46-212 *Contemporary Economic Society* or consent of instructor.

46-316 Independent Study in Economics 3 cr.

Intensive study of special topics of economics; staff guidance.

Prerequisite: Consent of instructor.

46-317 Investment 3 cr.

Analysis and evaluation of investment policies and media: stocks, bonds, mutual funds, commodities. The role of the stock market in the economy. Alternative strategies for personal investing.

Prerequisite: Junior level or consent of instructor. (An introductory course in *Economics* recommended).

46-321 The Indian Experiment in Economic Development 3 cr.

Problem of economic underdevelopment in India using an interdisciplinary focus; the causes of underdevelopment as well as the policies designed to overcome such underdevelopment, discussed in terms of the total cultural complex of a society.

46-322 International Economics 3 cr.

A general course introducing the fundamentals of international trade theory; theoretical, institutional and historical aspects of international economic relations are considered, including foreign exchange and balance of payment problems, tariff, quotas, and U.S. commercial policies.

Prerequisite: 46-215 *Principles of Economics I* and 46-216 *Principles of Economics II*; or 46-301 *Elements of Economics* or consent of instructor.

46-323 Economic Development of East Asia 3 cr.

Analysis of factors underlying economic development of nations in East Asia with a focus on Communist China and Japan but including some consideration of other areas such as Korea, Taiwan, the Philippines and selected Southwest Asian nations.

Prerequisite: 46-215 *Principles of Economics I* and 46-216 *Principles of Economics II*; or 46-301 *Elements of Economics* or consent of instructor.

46-324 Modern Economic Development in the Middle East 3 cr.

A survey of the economic conditions and development of the Middle Eastern countries. Emphasis is placed on the development programs of Iran, Turkey, Israel, and Egypt, as well as on the role of oil in the development of the area.

Prerequisite: One course in *Economics*.

46-331 American Economic History 3 cr.

Survey of American economic history from the colonial period to the present; controversial issues and interpretations in American history.

Prerequisite: One course in *American History* or one course in *Economics*.

46-332 Government and Business 3 cr.

The course attempts to provide an understanding of why government plays a larger role in economic life today; to provide a description of contemporary government participation in the economy; and to suggest possible future directions of government's role in the economy.

46-401 Seminar in Contemporary Political and Economic Problems of the Middle East 3 cr.

Analysis of the major political and economic problems of the area; emphasis on such topics as nationalism, westernization, pan-Islamism, population explosion, need for capital formation, manpower and natural resource development and industrialization; presentation and discussion of seminar papers.

Prerequisite: Graduate standing and consent of instructor.

47-301 Socialization Processes 3 cr.

Examination of socialization processes, considering various theories from a symbolic-interactionist perspective, in which the individual is studied as a participant in groups; consideration given to cross-cultural approaches to socialization studies.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-302 Contemporary Social Issues 3 cr.

Analysis and interpretation of major contemporary social issues, such as war and peace, poverty, racism, deviant behavior; critical evaluation of present and suggested program to meet these problems.

Prerequisite: 47-113 *Comparative World Cultures II* and 47-316 *Urban Ecology* or consent of instructor.

47-303 Small Group Interaction 3 cr.

Analysis of social interaction in small groups; techniques of small group analysis, such as sociometry and role-playing and various forms of feedback and self-study, to be used in the group.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-304 Community Organization 3 cr.

The community viewed as a social system of human relationships; tensions in intergroup networks analyzed; programs of planned community change and citizen participation critically evaluated; field studies.

Prerequisite: 47-113 *Comparative World Cultures II* and 47-316 *Urban Ecology* or consent of instructor.

47-305 Revolution and Conflict 3 cr.

An analysis of major theories and studies of revolutions in developing nations and industrial societies. Presents the Theoretical and Methodological approach of the radical Sociologists.

Prerequisite: 47-202 *Introductory Sociology* or consent of instructor.

47-316 Urban Ecology 3 cr.

Urban characteristics, emphasizing the Chicago metropolitan area; analysis of geographical, ecological and sociological processes that effect pattern of city structure and function; consideration of current urban issues, such as housing, civil rights and anti-poverty programs; field work.

Prerequisite: 47-113 *Comparative World Cultures II*.

47-317 Police and Community Relations 3 cr.

Study of the basis and nature of prevalent police approaches to low income and ethnic minority communities and of the nature and basis of

attitudes and behavior from the community towards the police.

Prerequisite: 47-202 *Introductory Sociology* or 47-316 *Urban Ecology* or consent of instructor.

47-318 Human Ecology 3 cr.

Principles and processes significant among the relationships existing between human communities and their environments.

47-321 Criminology 3 cr.

The purpose of this course is to critically examine the major sociological theories pertaining to causation of crime. Emphasis will be placed on analyzing the ideological basis of these theories, and viewing criminology from the point of view of power and class relations.

Prerequisite: 47-202 *Introductory Sociology* or consent of instructor. Not open to students who have taken 47-349 *Criminology and Penology*.

47-322 Social Change 3 cr.

Introductory course that provides an interdisciplinary and cross-cultural view of selected political, economic and social processes and problems associated with social change in contemporary society; emphasis upon the institutional contexts of recent social change.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-323 Penology 3 cr.

This course will critically examine Penal Institutions in the United States. Emphasis will evaluate the severity of American sentencing and treatment practices. Special attention is given to the role of the Police and the Juvenile Court. The Prison Community is analyzed, and a stress is placed upon Treatment and Prevention.

Prerequisite: 47-202 *Introductory Sociology* or consent of instructor.

47-324 Political Sociology 3 cr.

Interrelationships of social structure, population characteristics and political behavior; the role of interest groups in national, state and local political processes; contemporary social trends and their implications for political behavior.

Prerequisite: 47-113 *Comparative World Cultures II* and 45-211 *Comparative Political Systems*.

47-326 Sociology of Knowledge 3 cr.

Emphases and orientations of systems of knowledge in relation to societal organization; the intellectual elites and their role in society.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-331 The College Community 3 cr.

Examination of the college as a unique subcommunity in American urban cul-

ture, including historical and contemporary comparisons of outstanding experimental colleges; study of alternative patterns for campus organization, including a required two or three-day field trip to another college.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-332 Education as a Social Institution 3 cr.

Education as a cultural universal; the mutual influences of social institutions and education; factors involved in socialization of student personality.

Prerequisite: 47-113 *Comparative World Cultures II*.

47-333 Work and Society 3 cr.

Relations of work patterns to total societies; interaction and relationships within the work situation; the tensions and conflicts of the occupational and professional roles; socialization into occupational and professional roles.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-334 Collective Behavior 3 cr.

Behavior in relatively unstructured situations; the analysis of behavior in crowds, mobs and disaster situations; the study of social movements, cults, fads, etc.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-335 Sociological Theory 3 cr.

History of social thought; the various interpretations of societal patterns; the theoretical orientations of the fathers of sociology; the logic of theory construction and its relations to methods of studying societies.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-336 Development and the Management of Change 3 cr.

Technological, historical, economic, political, demographic, cultural and social-organizational aspects of development planning and administration, with particular reference to programs of managed change in underdeveloped areas; models of development theory and review of selected literature; area emphasis varies.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-337 Methods of Sociological Inquiry 3 cr.

Research design, construction of questionnaires and schedules, interviewing techniques, statistical interpretation and computer processing of data; study of the relation of research method to theoretical orientation; students to participate in original research on either individual or group basis.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-338 Sociology and Social Policy 3 cr.

Past, present and prospective uses of social research in local, national and international programs; new developments in sociological research, such as the use of social indicators to develop agenda for political action, and the policy implications; case studies of the relationships of sociology and social policy, involving both domestic and foreign-area research.

Prerequisite: 47-113 *Comparative World Cultures II* or consent of instructor.

47-339 Individuals, Group and Society 3 cr.

A study of the individual and group relationship in society in terms of the various types of social collectives: primary and secondary groups, crowds and publics, collective behavior and social movements. An emphasis is placed on the symbolic nature of social interaction.

Prerequisite: 47-202 *Introductory Sociology*.

47-341 Independent Study in Sociology 3 cr.

Research study in an area of special interest to the student, involving research methodology and field studies.

47-342 Introduction to Social Welfare 3 cr.

Examination of the social welfare profession, functioning within a framework of social institutions, social organizations, social policies, and social standards which give identity and form to professional social work services.

47-343 Marriage and the Family 3 cr.

Study of marriage and the family as social institutions; cross-cultural perspective; change in functions of these institutions with technological change; marital disorganization; marriage prediction studies.

47-344 Sociology of Religion 3 cr.

The study of the social aspects of religious beliefs, practices and participation. The Church as a social institution and its relationship to social class, social control. Religion as a form of expressive behavior. The function of religion for the individual and for different social groups.

Prerequisite: 47-202 *Introductory Sociology*.

47-345 Social Movements 3 cr.

The nature of social movements; the generation, maintenance, and decline of commitment to social movements. An analysis of the relationship of social movements to social change.

Prerequisite: 47-202 *Introductory Sociology*.

47-346 Social Stratification 3 cr.

Consideration of the role of social

differentiation and stratification in the formation and maintenance of social organization: an examination of the nature and consequences of various stratification systems.

Prerequisite: 47-202 *Introductory Sociology*.

47-347 Sociology of Communications 3 cr.

The study of communication between individuals, between groups and the characteristic patterns of communication in societies. The nature of rumor, conversation and the popular arts with reference to mass media. The functions and effects of mass media and the social context in which they function.

Prerequisite: 47-202 *Introductory Sociology*.

47-348 Applied Sociology 3 cr.

A survey of the uses of sociological research in business, government and educational institutions. Research studies of governmental and military organizations, medical and psychiatric institutions, schools and corporate structures are analyzed. Community development and market advertising research procedures are considered.

Prerequisite: 47-337 *Methods of Sociological Inquiry*.

47-349 Criminology and Penology 3 cr.

Study of the nature of crime, methods of dealing with adult offenders, and an examination of the present and proposed programs for the treatment of the criminal and the prevention of crime.

Prerequisite: 47-202 *Introductory Sociology*.

47-351 Senior Seminar in Sociology 3 cr.

Discussion, critical review and integration of the student's work with current research.

Prerequisite: Senior standing in Sociology.

47-352 Sociology of Complex Organizations 3 cr.

The study of complex social organizations in industrial societies. An emphasis is placed upon metropolitan social systems and their interrelationships. An analysis of the internal subsystems and the management of stress.

Prerequisite: 47-202 *Introductory Sociology*.

47-353 Race and Ethnic Relations 3 cr.

A cross-cultural study of the patterns of interaction between racial and ethnic groups; analysis of the sources of prejudice and discrimination; examination of the relationship between race and ethnic relations and patterns of stratification.

Prerequisite: 47-202 *Introductory Sociology*.

47-354 Industrial Sociology 3 cr.

A study of the relationship between

different levels of industrial organizations and at different levels of the same organization. A review of studies of management and unions, and the cooperation and conflict between them.

Prerequisite: 47-202 *Introductory Sociology*.

47-355 Advanced Sociological Theory 3 cr.

An analysis and evaluation of the major theories in sociology that are significant today. Among the theories that will be considered are functionalism, game theory, exchange theory, modern symbolic interactionism and "the new sociology." The student would benefit from prior enrollment in 47-335.

Prerequisite: 47-202 *Introductory Sociology* or consent of instructor.

47-356 Advanced Field Methods in Sociology 3 cr.

A presentation of the various Sociological Methods used in Field Studies. An emphasis is placed upon participant-observation, the Life History, The Case Method, and Focused Interviews. Students will acquire familiarity with various techniques through supervised field research. Prior completion of a course in statistics will be of advantage to the student.

Prerequisite: 47-337 *Methods of Sociological Inquiry* or consent of instructor.

47-373 Community Field Studies I 3 cr.

Chicago metropolitan field investigations of community conditions, local institutions and action programs; field investigations may be broad — action programs for housing integration — or specific, such as intensive study of a particular school-community; findings viewed in the perspective of national and local community action programs.

Prerequisite: 47-304 *Community Organization* and 47-316 *Urban Ecology* or consent of instructor.

47-374 Community Field Studies II 3 cr.

In-depth field investigations utilizing participant-observer techniques in community agencies.

Prerequisite: 47-373 *Community Field Studies I* or consent of instructor.

51-315 Fundamentals of Radioactivity 4 cr.

Properties of radioactive nuclei, nature of radioactivity, nuclear structure; nuclear reactions and interactions of radiation with matter; includes measurement of radioactivity, production of high energy charged particles and brief treatment of nuclear reactors.

Prerequisite: 54-353 *Physical Chemistry II*.

51-341 Fortran and Numerical Analysis for Scientists 3 cr.

Introduction to the use of computers in solving scientific problems; Fortran

programming fully described and applied to several common types of problems.

Prerequisite: 22-215 Calculus and Analytic Geometry II.

51-414 Seminars in Research 5 cr.
Guidance of students conducting research and writing a thesis to fulfill requirements for the Master of Arts degree in the Teaching of Science.

Prerequisite: Acceptance to Master's degree candidacy in science with thesis option.

53-302 Earth Science Materials 3 cr.
A study of the philosophy, goals, and approaches of the Earth Science Curriculum Project, and its relationship to other science curriculum movements.

Prerequisite: Junior standing, open for graduate students.

53-303 Earth Science for Secondary School Teachers I 3 cr.

Introduction to the basic concepts of Earth Science as it relates to retraining of Earth Science teachers. Open only to participants in an in-service institute. Discussion of Earth materials, physical processes of surface and near surface environments.

53-304 Earth Science for Secondary School Teachers II 3 cr.

Introduction to basic concepts of Oceanography and Meteorology. Open only to participants in an in-service institute. Discussion of basic elements of climate and weather forecasting. Meteorological instruments. Introduction to basic concepts in Oceanography.

53-311 Mineralogy 3 cr.

Composition, structure, occurrence and uses of common rock forming and ore minerals; physical and chemical properties used in their identification; lecture and laboratory.

Prerequisite: 54-211 General Chemistry I, and 51-121 Earth Science I plus 51-122 Earth Science Laboratory or 53-211 Physical Geology.

53-312 Structural Geology 3 cr.

Description and classification of geologic structures—folds, faults, joints, plutons, etc.; principles of rock deformation; interpretation of geologic maps; tectonic and geotectonic theories; lecture and laboratory.

Prerequisite: 51-121 Earth Science I and 51-122 Earth Science Laboratory, or 53-211 Physical Geology.

53-314 Paleontology 3 cr.

Principles, study of invertebrate phyla—morphology, taxonomy, ecology; applications to correlation and dating, paleoclimatology; lecture 2 hrs., lab 3 hrs.

Prerequisite: 51-214 Earth Science II or 53-212 Historical Geology, and 58-211 Animal Kingdom.

53-315 Glacial and Quaternary Geology 3 cr.

Glacial and related features and chronology with particular emphasis on the Great Lakes and contiguous territory.

Prerequisite: 51-121 Earth Science I or 53-211 Physical Geology.

53-316 Stratigraphy 3 cr.

Principles of stratigraphy including classification of rock units, methods of correlation, general relationship of diastrophism to the depositional sedimentary patterns. A systematic study of the more important stratified rocks of North America.

Prerequisite: 51-121 Earth Science I; 51-214 Earth Science II; or 53-211 Physical Geology and 53-212 Historical Geology, or consent of instructor.

53-317 Principles of Sedimentation 3 cr.

The processes governing the formation, transportation, deposition of sediments and the alterations that transform them into sedimentary rocks. The practicable application of these techniques are developed in laboratory.

Prerequisite: 51-121 Earth Science I or 53-211 Physical Geology.

53-318 World Regional Geology 3 cr.

Introduction to the comparative structure, stratigraphy and geologic evolution of the continents, with emphasis on North America; lecture only.

Prerequisite: 51-214 Earth Science II, or 53-212 Historical Geology.

53-319 Petrology 3 cr.

Petrography and petrogenesis of the most common rocks; lecture and laboratory.

Prerequisite: 53-311 Mineralogy.

53-321 Oceanography 3 cr.

Geology, biology, physics, and chemistry of the oceans and ocean basins; lecture only.

53-322 Economic Geology 3 cr.

Geologic occurrence and origin of mineral deposits and fuels; geological, geochemical and geophysical exploration and prospecting methods; economic and political implications in local, national and international policy; lecture 2 hrs., lab 2 hrs.

Prerequisite: 51-121 Earth Science I plus 51-122 Earth Science Laboratory, or 53-211 Physical Geology; also 53-311 Mineralogy.

53-323 Field Geology 3 cr.

Introduction to field methods including page and compass and plane table mapping. Preparation of geologic maps and reports from field data. Field trips to selected localities in Illinois, Michigan and Wisconsin.

Prerequisite: 51-121 Earth Science I or 53-211 Physical Geology; (53-312 Structural Geology highly desirable).

53-324 History of the Geological Sciences 1 cr.

Growth of key concepts in geology and related sciences and the men who were responsible for them; lecture only.

Prerequisite: Consent of instructor.

53-325 Seminars in Earth Science 1 cr.

Selected topics of current research interest.

Prerequisite: Advanced standing in earth science and consent of instructor.

53-326 Independent Study in Earth Science 3 cr.

Research in the geological sciences, oceanography, meteorology or astronomy.

Prerequisite: Consent of instructor.

53-327 Geology of the National Parks 3 cr.

A study of the geological processes governing and controlling the scenic wonders of our continent, with particular reference to lands encompassed by the National Park System.

Prerequisite: 51-121 Earth Science I or consent of instructor.

53-328 Marine Geology 3 cr.

Structure and geomorphology of the ocean basins and their margins, marine geological processes, sedimentation, and stratigraphy.

Prerequisite: 51-121 Earth Science I or 53-211 Physical Geology.

53-329 Soil Science 3 cr.

The physical and chemical factors in soil formation. Composition of soil materials. Relation of soils to parent material. Soil classifications. Soil as a resource.

Prerequisite: 51-121 Earth Science I, 53-211 Physical Geology or consent of instructor.

53-371 Geomorphology 3 cr.

World landforms, their origins and relationships to diastrophism, volcanism, weathering and erosion; lecture only.

Prerequisite: 51-121 Earth Science I plus 51-122 Earth Science Laboratory, or 53-211 Physical Geology or 43-271 Physical Geography.

53-401 Petroleum Geology 3 cr.

Origin and geologic occurrence of petroleum, geographic distribution of petroleum provinces; current concepts, recent developments, the future; global economic and sociologic impact of the industry; laboratory application of subsurface techniques that includes examination of drill cuttings, regional subsurface mapping, and mapping a currently producing field.

Prerequisite: Graduate standing and 53-312 Structural Geology, 53-316 Stratigraphy, 53-317 Principles of Sedimentation and 53-322 Economic Geology.

53-402 Current Problems in Earth Science 3 cr.

A study of the current problems together with recent research in the Earth Sciences; classroom discussions, including self-directed investigations into these areas by individual students.

Prerequisite: Graduate standing.

53-403 Earth Science III for Secondary School Teachers 3 cr.

Introduction to the basic concepts of Earth Science with emphasis on earth's environment in space; discussion of current problems in Earth Science as they relate to man's environment; discussion of unsolved problems in Earth Science.

Prerequisite: Graduate standing.

53-404 Workshop in Earth Science Materials 3 cr.

A study of the philosophy, goals, and approaches of the Earth Science Curriculum Project, and its relationship to other science curriculum projects; students to perform ESCP investigations so as to gain some understanding of the inquiry approach to teaching; two hours lecture, two hours laboratory.

Prerequisite: Graduate standing.

53-407 Hydrogeology 3 cr.

The occurrence, movement, storage, and distribution of ground water, problems pertaining to water quality, sea water intrusion, water pollution and recharge of aquifers.

Prerequisite: Graduate standing, six credits in Earth Science or consent of instructor.

54-305 Independent Study in Chemistry 3 cr.

An introduction to original chemical research under the supervision of a qualified instructor. Provides an opportunity for student and professor to combine talents and interests in creative chemical research.

Prerequisite: Consent of instructor and junior standing.

54-316 Inorganic Chemistry 2 cr.

Structural concepts of inorganic chemistry; mechanism of inorganic reactions; trends within the periodic table; types of bonding; lecture only.

Prerequisite: 54-232 Organic Chemistry II.

54-324 Instrumental Analysis 3 cr.

Chemical and instrumental methods of analysis and their applications to the quantitative study of chemical reactions; lecture and laboratory.

Prerequisite: 54-213 Chemical Analysis and 54-232 Organic Chemistry II.

54-326 Chemical Literature 2 cr.

An introduction to library research in Chemistry. Preparation of a review paper in some current field of Chemistry making use of chemical journals.

Prerequisite: 54-351 Physical Chemistry I and 54-231 Organic Chemistry I.

54-327 History of Physical Science 2 cr.

Introduction to the history of physical science with emphasis on the philosophical and experimental foundations of modern concepts of physics and chemistry; lecture only.

Prerequisite: 54-212 General Chemistry II and 59-202 College Physics II.

54-332 Identification of Organic Compounds 4 cr.

Chemical, physical and spectroscopic methods and their use in the separation, purification and identification of organic compounds; lecture and laboratory.

Prerequisite: 54-232 Organic Chemistry II, 54-351 Physical Chemistry I.

54-334 Advanced Organic Chemistry 4 cr.

A more advanced treatment of organic reactions with emphasis on reactive mechanism and factors — such as resonance, inductive effect and steric hindrance — that affect the rate of organic reactions; some modern synthetic methods discussed; lecture only.

Prerequisite: 54-232 Organic Chemistry II, 54-351 Physical Chemistry I, and 54-352 Physical Chemistry Laboratory.

54-346 Radiochemistry 4 cr.

Continuation of selected topics dealing with radioactivity; to include dating techniques using radioactive nuclides, radiochemistry applications, solar energy, star genesis, high energy particle generators, etc., lecture and laboratory.

Prerequisite: 54-351 Physical Chemistry I plus 54-352 Physical Chemistry Laboratory, or a course in fundamentals of radioactivity.

54-351 Physical Chemistry I 3 cr.

Thorough study and mathematical treatment of the laws governing chemical and physical changes; introduction to the careful measurement of some physical values; lecture only.

Prerequisite: 54-232 Organic Chemistry II, 54-213 Chemical Analysis, 22-113 Calculus and Analytic Geometry I.

54-352 Physical Chemistry Laboratory 2 cr.

Laboratory experience illustrating concepts of physical chemistry; laboratory only.

Prerequisite: 54-351 Physical Chemistry I; (54-353 Physical Chemistry II may be taken concurrently).

54-353 Physical Chemistry II 3 cr.

An extension of the work of 54-351 Physical Chemistry I, including the study of more complex phenomena such as electrochemistry, homogeneous and heterogeneous equilibria, and applications of the first and second laws of thermodynamics; lecture only.

Prerequisite: 54-351 Physical Chemistry I.

54-401 Carbohydrates 3 cr.

Structure, stereo chemistry, and reactions of the monosaccharides, disaccharides, oligosaccharides and polysaccharides.

Prerequisite: Graduate standing, 54-232 Organic Chemistry II, and 54-353 Physical Chemistry II.

54-402 Organometallic Chemistry 3 cr.

The metal-carbon bond; organometallic synthesis, structure, and reaction mechanisms; thermodynamics; main group metal-carbon compounds; transition metal-carbon compounds; special topics, Grignard structure and mechanism, ferrocenes, carboranes, carbonyl complexes, aromatic heterocycles, inorganic multiple bonding.

Prerequisite: Graduate standing, 54-232 Organic Chemistry II, 54-316 Inorganic Chemistry, and 54-351 Physical Chemistry I.

54-403 Physical Methods in Organic Chemistry 3 cr.

The various physical techniques of interest to the organic chemist, including U.V., I.R., Raman, N.M.R., E.S.R., mass spectroscopy, diffraction, molecular weight determination, dipole moment, etc., discussed through the theoretical and the empirical approach.

Prerequisite: Graduate standing, 54-232 Organic Chemistry II, and 54-353 Physical Chemistry II.

54-404 Chemical Thermodynamics 3 cr.

The principles of thermodynamics and their application to chemical problems; particular emphasis on partial molal quantities, the chemical potential, and the thermodynamics of chemical equilibrium.

Prerequisite: Graduate standing, 54-232 Organic Chemistry II, 54-351 Physical Chemistry I, 54-353 Physical Chemistry II.

54-405 The Chemical Bond 3 cr.

Application of quantum mechanics to chemistry; molecular orbital theory; experimental and theoretical determination of bond parameters, e.g. bond strengths, bond lengths, bond orders, bond angles.

Prerequisite: Graduate standing, 54-232 Organic Chemistry II, and 54-352 Physical Chemistry Laboratory.

54-406 Coordination Chemistry 3 cr.

Scope of transition metal coordination complexes, coordination number and structure, ligand types, isomerization, complex stability, bonding, mechanisms, magnetic moments.

Prerequisite: Graduate standing, 54-232 Organic Chemistry II, 54-316 Inorganic Chemistry, and 54-351 Physical Chemistry I.

56-301 Seminars in Biological Science 1 cr.

Selected problems; aspects of modern research.

Prerequisite: Advanced standing in biology, and consent of instructor.

56-302 Seminar I in Biology for Undergraduates 1 cr.

Library research of selected topics in Biology including the delivery of a presentation and the leading of a discussion period thereafter. The general topic will change every trimester and will be selected by the professor in charge.

Prerequisite: Junior or Senior Standing in Biology with at least 18 credit hours in Biology.

56-311 Genetics 3 cr.

Introduction to the traditional Mendelian concepts, and to contemporary concepts of heredity and their cytological mechanisms; lecture and laboratory.

Prerequisite: Six credits in general biology.

56-312 Evolution 3 cr.

A reading lecture-discussion course on the facts, theories and principles of organic evolution; lecture only.

Prerequisite: Six credits in general biology.

56-314 Cellular Physiology 3 cr.

Energy metabolism and biosynthesis; factors influencing and determining relative rates of their component metabolic reactions; lecture and laboratory.

Prerequisite: 56-101 Biology of Cells or 56-316 Biochemistry, and six credits in physical science.

56-315 Biophysics 3 cr.

Utilization of physical principles as unifying concepts in the understanding of biological phenomena at the molecular, cellular and organismic levels; lecture and laboratory.

Prerequisite: Six credits in physics or chemistry, and six credits in general biology.

56-316 Biochemistry 3 cr.

Chemistry and metabolism of carbohydrates, proteins, nucleic acids, lipids, vitamins and minerals associated with animal and plant life; lecture and laboratory.

Prerequisite: 56-101 Biology of Cells and general chemistry, or one year of general chemistry.

56-317 Ecology 3 cr.

Basic principles applicable to interrelationships between living things and their environment, their exemplification by observation in the field; the current danger of disturbing balances in nature and by environment contamination; lecture and field work.

Prerequisite: Six credits in general biology.

56-318 General Microbiology 3 cr.

Micro-organisms, including bacteria, molds, yeasts, actinomycetes, viruses, rickettsias and protozoa; their cultivation and laboratory study; methods of control; their importance in soils, industry, disposal of sewage and spoilage of foods; production of disease

and immunity; lecture and laboratory.

Prerequisite: Six credits in general biology.

56-319 Radiation Biology 4 cr.

Somatic and genetic effects of ionizing radiation; use of isotopes as tracers in experiments involving metabolic activities; lecture and laboratory.

Prerequisite: 54-211 General Chemistry I and 59-201 College Physics I with 59-202 College Physics II (or 51-105 The Physical World and 51-107 Chemical Concepts, plus 51-106 The Physical World: Laboratory and 56-108 Chemical Concepts: Laboratory) and nine credit hours in Biology including 56-318 General Microbiology or 57-315 Plant Physiology or 58-312 Animal Physiology.

56-321 Cytology and Cyto genetics 3 cr.

A survey of cell structure and function with particular emphasis on the role of the nucleus. Topics include cell ultrastructure, chromosome structure, an analysis of cell division, effects of irradiation and chemicals on cells, and the evolution of the karyotype; lecture and laboratory.

Prerequisite: Six credits in general biology; (56-311 Genetics recommended).

56-322 Pathogenic Microbiology 3 cr.

Pathogens of man, other animals and plants — including bacteria, actinomycetes, rickettsias, viruses, yeasts, molds and protozoa—will be studied; sources, modes and factors of infection, immunity, and hypersensitivity will be considered, also the clinical and pathological features, laboratory diagnosis, treatment and control of major human infectious diseases; lecture and laboratory.

Prerequisite: Six credit hours in general biology and 56-318 General Microbiology.

56-351 Physical Methods in Biology 3 cr.

Principles and practice of physical instrumentation and techniques in the manipulation of biological materials, extraction of biological data and regulation of physical variables; spectrophotometry, chromatography and electrophoresis, radioactivity detection and techniques, and cell and tissue fractionation methods; lecture and laboratory.

Prerequisite: Six credits in biology including 56-101 Biology of Cells, one year of chemistry and one year of physics.

56-371 History of Science 3 cr.

Development of scientific method and natural sciences from ancient civilization to the present; lecture only.

Prerequisite: Six credits in physical science and six in biological science.

56-373 Biological Geography 3 cr.

Geographical distribution of living organisms and the principles underlying this distribution; lecture only.

Prerequisite: Six credits in general biology.

56-401 Analysis of Development 3 cr.

Analysis of mechanisms underlying developmental processes in the embryo and adult organisms as they are presently understood, with special emphasis on the role of the genes in development; lecture only.

Prerequisite: Graduate standing and six credits in general biology and embryology or developmental anatomy.

56-402 Biochemical Genetics 3 cr.
Gene concept and mechanism of gene action: DNA and genetic coding, code translation, replication, chemical aspects of mutation, gene-protein and gene-enzyme relationships, intracellular integration of gene action; lecture and laboratory.

Prerequisite: Graduate standing, 56-311 Genetics and 56-316 Biochemistry.

56-403 Seminars in Biology 3 cr.
Presentation by students of selected topics of current biological interest; area of discussion to vary each trimester; two hours per week; course may be repeated up to a maximum of 3 credits by departmental permission.

Prerequisite: Graduate standing and departmental permission.

56-404 Advanced Cell Physiology 3 cr.

Topics of timely interest in Cell Physiology; goals of research and recent contributions to the understanding of the molecular organization of the cell; the regulation of cellular activity in terms of molecular action and interaction; one hour lecture and two three-hour laboratory sessions.

Prerequisite: Graduate standing, 56-314 Cellular Physiology, 54-231 Organic Chemistry I, 56-351 Physical Methods in Biology and 56-316 Biochemistry.

56-405 Electron Microscopy 3 cr.
Theoretical principles and operational procedures of electron microscopy, interpretation of electron micrographs, and correlation of cell ultrastructure and function; lecture and laboratory.

Prerequisite: Graduate standing, 56-321 Cytology and Cytogenetics, acceptance to candidacy in the M.S. or M.A.T. Biology program, and written consent of the department.

56-406 Physical Biochemistry 3 cr.
A study of the physical and chemical phenomena associated with the metabolism and isolation of important biological compounds; mechanisms involved in the passage of metabolites across biological membranes; the release of energy in enzymatic systems; equilibria of important biochemical constituents in uni- and multi-celled organisms; the isolation and purification of biologically active compounds; lecture only.

Prerequisite: Graduate standing, and 56-316 Biochemistry; Physics recommended.

57-311 General Mycology 3 cr.
Fungi, yeasts, molds; their cultivation and laboratory study; methods of con-

trol; their importance in soils, industry, spoilage of foods and diseases of animals and plants; lecture and laboratory.

Prerequisite: Six credits in general biology.

57-312 Economic Botany 3 cr.

Plants of particular economic significance to man as sources of food, fibers, flavoring agents, drugs, industrial chemicals; horticultural plants; the role of economic plants in past and modern society; lecture only.

Prerequisite: Six credits in general biology.

57-313 Plant Anatomy 3 cr.

The cellular, organismic and gross structures of the vascular plants; their inter-relationships with development and function in time and environment; lecture and laboratory.

Prerequisite: Six credits in general biology.

57-314 Systematic Botany 3 cr.

Phylogenetic interpretation derived from plant diversity; the importance of the patterns of contemporary plants from the standpoint of evolution; taxonomic study with the aid of manuals or local vascular plants; lecture and laboratory.

Prerequisite: Six credits in general biology.

57-315 Plant Physiology 3 cr.

Physio-chemical basis of plant life, emphasizing life processes of major significance to the seed plants; lecture and laboratory.

Prerequisite: Six credits in physical science and six in general biology.

57-317 Plant Morphogenesis 3 cr.

Factors determining rate, sequence and type of biological pattern and structure development as exemplified in plants; lecture and laboratory.

Prerequisite: 57-313 Plant Anatomy or 57-315 Plant Physiology or 57-318 General Plant Morphology.

57-318 General Plant Morphology 3 cr.

Principles of plant morphology as illustrated by life histories of representative forms of the major plant groups; lecture and laboratory.

Prerequisite: Six credits in general biology.

57-321 Plant Ecology 3 cr.

Ecological principles illustrated by environmental and successional relationships in selected plant communities of the Chicago area; lecture and field work.

Prerequisite: Six credits in general biology.

57-402 Non-Vascular Plants 3 cr.
Morphology, phylogeny, development and selected aspects of the physiology of slime molds, true fungi, algae, mosses, and liver-worts; lecture and laboratory.

Prerequisite: Graduate standing and 57-318 General Plant Morphology.

57-403 Vascular Plants 3 cr.
Origins of vascular plants as indicated by fossil records; their contemporary life forms and ecological position; structures of economic importance; lecture and laboratory.

Prerequisite: Graduate standing and 57-318 General Plant Morphology.

57-404 The Water Relations of Plants 3 cr.

The effects of water on the growth, development, reproduction and survival of plants; three hours lecture.

Prerequisite: Graduate standing and 57-315 Plant Physiology.

57-405 Plant Biochemistry 3 cr.

The metabolic pathways of particular importance to plants, such as photosynthesis, the dissemination of starch, nitrogen fixation, and the formation of certain secondary products to be emphasized; metabolic pathways common to plants, as well as to other groups of organisms, to be considered; phytohormonal control to be examined; three hours lecture.

Prerequisite: Graduate standing and 56-316 Biochemistry.

57-406 Algal Research Methods 3 cr.

Procedures for the discovery, isolation, identification, cultivation, growth measurement, and harvesting of algal species (including mutant forms); techniques of cell disruption and separation of cell components; methods for the study of proteins, enzymes, and pigments; lecture and laboratory.

Prerequisite: Graduate standing and 57-315 Plant Physiology; recommended but not required, 56-316 Biochemistry or 56-351 Physical Methods in Biology or 57-405 Plant Biochemistry.

58-311 General Embryology 3 cr.

Development of animals, both vertebrate and invertebrate, from the egg to the adult stage; lecture and laboratory.

Prerequisite: Six credits in general biology.

58-312 Animal Physiology 3 cr.

Functions and inter-relationships of organ systems; lecture and laboratory.

Prerequisite: Six credits in general biology.

58-313 Entomology 3 cr.

Insects; their identification, classification, habits and ecological relationships, with special emphasis on those common to the Chicago area; lecture, laboratory and field work.

Prerequisite: Six credits in general biology.

58-314 Ornithology 3 cr.

Birds, their identification, classification, habits, ecological relationships and conservation, with special emphasis on those indigenous to the Chicago area; lecture, laboratory and field work.

Prerequisite: Six credits in general biology.

58-315 Invertebrate Zoology 3 cr.
Taxonomy and comparative morphology of the major phyla of invertebrates; life histories of representative forms; lecture and laboratory.

Prerequisite: Six credits in general biology.

58-316 Animal Behavior 3 cr.

Comparative ethology in the animal kingdom and its adaptive significance based upon the evolution of form and function of the nervous system, sense organs and effector organs; topics include instinct, learning, intelligence, social organization, and their physiological integrating mechanisms; lecture only.

Prerequisite: Six credits in general biology.

58-317 Animal Parasitology 3 cr.

The taxonomy, anatomy, physiology, and significance of the parasitic animals will be studied. Host-parasite interactions, distribution of parasites throughout the world, examination of their life cycles, and prophylaxis and therapy of parasitic infections are to be covered in conjunction with the above study.

Prerequisite: 56-101 Biology of Cells and 56-102 Biology of Organisms or six credits in general biology.

58-318 Comparative Animal Histology 3 cr.

The microscopic comparative anatomy (histology) of adult invertebrate and vertebrate animal cells, tissues, and organs. 2 hours of lecture and 3 hours of laboratory per week.

Prerequisite: Six credit hours of general biology, including 56-102 Biology of Organisms and 58-211 Animal Kingdom or its equivalent.

58-319 Protozoology 3 cr.

Protozoology: a general treatment of the group covering microscopic anatomy and ultrastructure, natural history, morphogenesis, as well as their genetics and physiology; lecture and laboratory.

Prerequisite: One year of general biology.

58-323 Developmental Anatomy 4 cr.

Phylogenetic study of the embryology and adult anatomy of the vertebrates; course combines the traditionally separate courses, comparative vertebrate anatomy and embryology; lecture and laboratory.

Prerequisite: Six credits in general biology, including 56-102 Biology of Organisms.

58-333 Endocrinology 3 cr.

Certain glandular and neurosecretions, the hormones and their function in maintaining homeostasis in the vertebrates; current research on hormone action; minor reference to invertebrate hormones; lecture and laboratory.

Prerequisite: 56-101 Biology of Cells and 56-102 Biology of Organisms, or consent of instructor; (also a course in physiology or biochemistry recommended).

58-401 Vertebrate Osteology 3 cr.
The development, microscopic anatomy, macroscopic anatomy and biomechanics of the vertebrate skeleton in phylogeny and ontogeny; three hours of lecture per week, no laboratory but three field trips (minimum) to Field Museum to be arranged.

Prerequisite: Graduate standing, one year of general biology, and 58-213 Mammalian Anatomy or 58-323 Developmental Anatomy.

58-402 Comparative Animal Physiology 3 cr.
The physiological and biochemical evolution of animals; emphasis on the range and variety of physiological mechanisms and processes involved in adaptations to special habits and habitats.

Prerequisite: Graduate standing, 58-312 Animal Physiology, and 58-211 Animal Kingdom or equivalent.

59-311 Mechanics I 3 cr.
Statics of point particles and rigid bodies, kinematics and dynamics of point particles, (including damped and forced harmonic oscillators) work and energy, linear and angular momentum, conservation laws, dynamics of two dimensional rigid bodies, introduction to special relativity.

Prerequisite: 22-215 Calculus and Analytic Geometry II and 59-202 College Physics II.

59-312 Mechanics II 3 cr.
Moving coordinate systems and inertial forces, dynamics of a system of particles, dynamics of a rigid body, central forces-orbits, Lagrangian mechanics, introduction to Hamilton-Jacobi theory.

Prerequisite: 59-311 Mechanics I or consent of instructor.

59-321 Electricity and Magnetism I 3 cr.
Coulomb's law, electric fields and electrostatic potential, Gauss's law, Poisson's equation, capacitance, dielectric media, current density, simple circuits, magnetic fields, Lorentz force, magnetic media, induction, Ampere's laws, inductance, Maxwell's equations.

Prerequisite: 59-202 College Physics II and 22-215 Calculus and Analytic Geometry II.

59-323 Electricity and Magnetism II 3 cr.
Maxwell's equations, Vector potential, propagation of electromagnetic waves, wave guides, generation of electromagnetic waves, special relativity and the Lorentz transformation, four-vector formalism of electromagnetism.

Prerequisite: 59-321 Electricity and Magnetism I.

59-324 Quantum Mechanics I 3 cr.
An introduction to the Physical and Mathematical Foundations of Quantum Mechanics. Review of the Experimental Basis and of the Semi-Classical Formulation of Quantum Mechanics.

Amplitudes, Wave Packets, and the application of the Schrodinger equation to bound systems. The Heisenberg formulation of Quantum Mechanics: Commutation rules, observables, Perturbation theory. Applications to Atomic and Molecular Physics.

Prerequisite: Three 300-level Physics courses and a course in Ordinary Differential Equations.

59-326 X-Ray Theory and Techniques 3 cr.
Designed to study the history of X-rays, production, absorption, scattering, intensity and spectra.

Prerequisite: 59-202 College Physics II and 59-204 Introductory Experimental Physics II.

59-331 Optics 3 cr.
Geometric optics, velocity of light, lenses, photometry, diffraction, resolving power, polarized light, photons, Planck radiation law, spectrum, X-rays.

Prerequisite: 59-202 College Physics II and 59-204 Introductory Experimental Physics II.

59-333 Vibration and Sound 3 cr.
Linear restoring forces, simple harmonic motion, vibration of string, standing waves, vibration of membrane, forced vibrations, damping, resonance, velocity of sound, propagation of sound.

Prerequisite: 59-201 College Physics I and 59-203 Introductory Experimental Physics I.

59-335 Thermodynamics and Kinetic Theory 3 cr.
Systems, temperature, ideal gas laws, work, first law, second law, Carnot cycle, entropy, kinetic hypothesis, pressure, Maxwell distribution.

Prerequisite: 59-201 College Physics I and 59-203 Introductory Experimental Physics I.

59-336 Modern Physics 3 cr.
Special relativity and Lorentz Invariance. Review of the experimental evidence for the wave properties of particles and the particle properties of light, atomic spectra and electron spin, elementary wave mechanics, the properties of many electron atoms and the Periodic Table, the structure of molecules and solids, electrons in metals and in semiconductors, nuclear structure, spectra and reactions, the properties of elementary particles and their conservation laws.

Prerequisite: Three 300-level Physics courses.

59-337 Modern Physics Lab 1 cr.
A series of individual experiments chosen according to each student's needs and interests in the fields of optics, electronics, atomic physics, nuclear physics, and solid state physics.

Prerequisite: To be taken with 59-336 Modern Physics.

59-338 Introductory Mathematical Physics 3 cr.
Vector and tensor analysis, matrices

and matrix algebra, ordinary differential equations with constant coefficients, fourier series, introduction to complex variables.

Prerequisite: 59-202 College Physics II and 22-215 Calculus and Analytic Geometry II.

59-339 Intermediate Physics Lab 2 cr.

A series of experiments in the fields of optics, electronics and atomics, solid-state and nuclear physics. The experiments will be chosen according to the individual student's needs and interests.

Prerequisite: Junior standing.

59-343 Nuclear Physics 3 cr.
Structure and properties of nuclear forces, Alpha, Beta, and Gamma radiation, nuclear reactions, scattering, neutron physics, accelerators and detectors, high energy physics.

Prerequisite: 22-215 Calculus and Analytic Geometry II and 59-336 Modern Physics and 59-337 Modern Physics Lab.

59-344 Introduction to Solid State Physics 3 cr.

Crystal structure, crystal forces, the free electron model, the energy band model of conductors, semiconductors and insulators, magnetism, optical properties of solids.

Prerequisite: 59-336 Modern Physics.

59-391 Astronomy 3 cr.
The planets including Earth, sun, moon, energy of stars, spectra, evolution of stars, certain special types of stars, Milky Way, and galactic systems.

59-393 Electronics 3 cr.
L, R and C as impedances, frequency response, networks, transients, amplifiers, oscillators, vacuum tubes, transistors.

Prerequisite: 59-202 College Physics II and 59-204 Introductory Experimental Physics II.

59-401 Advanced Experimental Physics 3 cr.
Series of individual experiments or one long-term project (depending upon student's needs and interests) in the fields of Atomic, Nuclear, Solid State of Particle Physics. Six hours of laboratory work per week.

Prerequisite: Graduate standing and consent of instructor.

59-402 Atomic Physics 3 cr.
One electron atoms, Bohr atom, Schrodinger's equation, sketch of Relativistic Theory, Zeeman and Stark effects, the theory of radiation, central field approximations, current applications.

Prerequisite: Graduate standing, and 59-324 Quantum Mechanics I.

59-403 Solid State Physics 3 cr.
Crystal structure, crystal bonding,

thermal properties of solids, dielectric properties, free electrons model of metals, band theory of solids, magnetism, current applications.

Prerequisite: Graduate standing, and 59-324 Quantum Mechanics I.

59-404 Advanced Electronics for Scientists 3 cr.

Description of and operating techniques for electronic implementation used in measurement and analysis of scientific data; feedback control (servo) systems; operational amplifiers, analog computation, digital circuits and systems (logic circuits, counters, timers, pulse analyzers).

Prerequisite: Graduate standing, and 59-393 Electronics or consent of instructor.

59-405 Elementary Particles 3 cr.
Theoretical and experimental advances in elementary particle physics since the prediction and discovery of the pi meson; emphasis on the symmetries of strong and weak interactions.

Prerequisite: Graduate standing, and 59-324 Quantum Mechanics I.

59-406 Statistical Mechanics 3 cr.
Transport theory, kinetic theory of gases, ensembles, Fermi-Dirac statistics, Bose-Einstein statistics; applications to superfluids, electron gases in metals and semi-conductors, and ferromagnetism included.

Prerequisite: Graduate standing, 59-312 Mechanics II, 59-335 Thermodynamics and Kinetic Theory, and 59-336 Modern Physics.

59-407 Relativity and Gravitation 3 cr.

Review of the historical development of special relativity, relativistic kinematics and dynamics; Tensor calculus in Euclidian and Riemannian geometry; the general theory of relativity and the weakfield approximations; experimental verifications; Red shift, precession of the perihelion of Mercury; introduction to cosmology.

Prerequisite: Graduate standing, 59-311 Mechanics I, 59-312 Mechanics II, 59-321 Electricity and Magnetism I, and 59-323 Electricity and Magnetism II.

61-322 Independent Study in Education 3 cr.

Individual investigation into a topic of the student's choice; staff guidance.

Prerequisite: Consent of instructor.

62-312 Seminar in Current Educational Literature 3 cr.

Critical analysis of current educational and interdisciplinary literature; aiming to develop an appreciation and understanding of the literature with contemporary references.

62-313 Problems, Issues, and Practices in Education 3 cr.

Designed to acquaint the student with the problems and issues relevant to the major activities of the classroom teacher; problems to be studied may

be selected from the following: curriculum, programmed learning, educational television, special education.

62-321 Group Dynamics 3 cr.

Scientific and social engineering aspects of group dynamics; qualities of good group leadership and group techniques.

Prerequisite: Pre-service training required or consent of instructor.

62-371 Education as a Social Institution 3 cr.

Education as a cultural universal; the mutual influence of social institutions and education; factors involved in socialization of student personality.

62-411 Comparative Education 3 cr.

Comparison of the similarities and differences in current educational trends and policies in selected foreign countries; factors that influence the development of education throughout the world; attention given to the reforms that have been brought about by the democratization of the educational process.

Prerequisite: Graduate standing.

62-412 Selected Concepts in the Philosophy of Education 3 cr.

Analysis of such concepts as democracy and authoritarianism, self and society, scientific and unscientific freedom and control, rationality and emotion, ends and means, the nature of man, the meaning of citizenship, morality, national aims, recreation and work; application of these concepts to the process of teaching.

Prerequisite: Graduate standing, 62-213 Philosophy of Education.

62-413 Teacher Interpersonal and Intergroup Relations 3 cr.

Designed to help the experienced classroom teacher more effectively contribute to the conservation of human resources through means afforded by an examination of the related literature; the discussion of, and participation in, activities designed to relate knowledge in the field to both experienced and anticipated classroom situations; the development of skills and techniques appropriate to strengthening the teaching-learning process within the total school community.

Prerequisite: Graduate standing.

62-421 Administration and Organization of Public Education 3 cr.

Introduction to the study of educational administration with emphasis upon the nature of the administrative process and administrative theory; an overview of the structure and operation of public education at the local, state and federal levels.

Prerequisite: Graduate standing.

62-422 Administration and Supervision of the Elementary School 3 cr.

An examination of the elementary school with emphasis upon the role of the principal and his relationship with personnel; administrative behavior analyzed in terms of tasks and processes that aid in improving educational programs; students to have an opportunity to solve problems with simulated material.

Prerequisite: Graduate standing, 62-421 Administration and Organization of Public Education.

62-423 Administration and Supervision of the Secondary School 3 cr.

An examination of the secondary school as an administrative unit with emphasis upon the roles of the principal, professional staff, and central administration; the nature of supervision and the leadership function and evaluative process; research conclusions on supervision and their practical applicability to the secondary school.

Prerequisite: Graduate standing, 62-421 Administration and Organization of Public Education.

62-428 Seminar in Educational Administration 3 cr.

An in-depth analysis of selected topics and problems in educational administration; administrative behavior, administrative theory, contributions of behavioral sciences to administration, etc., and their implications for practicing administrators in education.

Prerequisite: Graduate standing, and 62-422 Administration and Supervision of the Elementary School or 62-423 Administration and Supervision of the Secondary School.

63-325 Student Teaching and Seminar—Grades KG-3 6 cr.

Combined elementary school field work with college-based critiques, this course is designed to induct students gradually into the many activities and responsibilities of the elementary classroom teacher. Guidance and supervision under a college supervisor with weekly seminar.

Prerequisite: Completion of required professional education courses and approval of Director of Student Teaching.

64-301 Curriculum of the Elementary School 3 cr.

Interpreting and improving the elementary curriculum, specific relationships between the nature of the learner and the learning processes.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors or 36-212 Child Psychology for KGP Majors, and 62-215 Philosophical and Historical Foundations of Public Education.

64-302 Methods of Teaching Language Arts—Elementary School 2 cr.

Materials and techniques for the teaching of writing, speaking and lis-

tening; the function of language in the life of the child; the relationship of language to other areas of learning. This course is a prerequisite for 65-306 Methods of Teaching Reading—Elementary School.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education and 64-301 Curriculum of the Elementary School.

64-303 Methods of Teaching Mathematics—Elementary School 2 cr.

Development of meanings that lead children to effective communication with number concepts and to clearer quantitative thinking; methods and techniques of teaching number systems.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education and 64-301 Curriculum of the Elementary School.

64-304 Methods of Teaching Social Studies—Elementary School 2 cr.

Guiding students toward a concept of "man on the land"; discussion of the nature of each of the social studies areas most commonly taught in the elementary school, together with demonstrations and suggestions for teaching so that the social studies may contribute to a wholesome pattern of education; attention given to the need for developing critical thinking and to the exploration of problems associated with the methods of research.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education and 64-301 Curriculum of the Elementary School.

64-305 Methods of Teaching Science—Elementary School 2 cr.

Development of scientific thinking; understanding basic scientific thinking; understanding basic scientific principles; teaching materials, laboratory equipment, and other multisensory aids for science education.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education and 64-301 Curriculum of the Elementary School.

64-306 Methods of Teaching Reading—Elementary School 2 cr.

Information concerning the various methods for teaching reading, acquaintance with recent research and controversial issues; opportunities to do limited practice teaching lessons.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education and 64-301 Curriculum of the Elementary School.

64-314 Teaching the Gifted Child 2 cr.

Characterizations of qualifications for instructing the gifted (superior and talented) pupils: current research, means of identifying gifted students, program organization, motivation, observation of programs and organization, struc-

tures (school and community) and evaluation.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors or 36-212 Child Psychology, and 62-215 Philosophical Historical Foundations of Public Education, and 64-301 Curriculum of the Elementary School.

64-315 Teaching in the Inner-City School 2 cr.

Educational problems inherent in the inner-city milieu; exploration of developmental learning concerns as applicable to various ethnic groups; study of socio-economic conditions as relating to educational achievements.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors or 36-212 Child Psychology, and 62-215 Philosophical Historical Foundations of Public Education.

64-316 Teaching the Slow-Learning Child 2 cr.

Characteristics of the slow-learning child, with special emphasis on the areas of physiological and mental development and concomitant dysfunctions of the sensory modalities: visual, auditory, tactile, kinesthetic, motor and perceptual; current research and therapy; program organization; diagnosis and evaluation; observation in schools.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors or 36-212 Child Psychology, and 62-215 Philosophical Historical Foundations of Public Education.

64-317 Micro-Teaching in a Major Methods Area—Elementary School 2 cr.

Limited directed observations in a typical public elementary school; student to teach a small group of elementary children for a brief time; gradual increase in the number of students taught and the length of the lesson, culminating in the experience of preparing and teaching thirty to forty minutes per day for an entire class. The teaching and reteaching sessions are video taped for critique purposes.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors or 36-212 Child Psychology, 62-215 Philosophical Historical Foundations of Public Education, and 64-301 Curriculum of the Elementary School; to be taken concurrently with Methods of Teaching (64-302, 64-303, 64-304, 64-305 or 64-306) in major area.

64-319 Classroom Organization Discipline 3 cr.

Designed for the beginning teacher; exploration of the various methods by which the classroom may be organized and brought to a level of discipline necessary for effective teaching; examination of such topics as the unit, teacher-pupil rapport, class discussion, lesson planning, importance of motivation, and techniques of discipline.

Prerequisite: Consent of instructor.

64-325 Student Teaching and Seminar — Grades 3-8 6 cr.

Combined elementary school field work with college-based critiques, this course is designed to induct students gradually into the many activities and responsibilities of the elementary classroom teacher. Guidance and supervision under a college supervisor with weekly seminar.

Prerequisite: Completion of required professional education courses and approval of Director of Student Teaching.

64-414 Principles of Curriculum Development 3 cr.

Fundamental criteria for curriculum planning and the principal types of curriculum patterns as they apply to various subject-matter disciplines; emphasis focused on the student's subject area of specialization and its applicability to the improvement of the curriculum in the classroom and in the school; study of selection and organization of learning experiences, as well as objectives and evaluation.

Prerequisite: Acceptance for Master's degree candidacy.

64-418 Classroom Problems in the Teaching-Learning Process 2 cr.

The contributions of learning psychologists that are applicable to the teaching-learning process; areas explored include implications of learning in curriculum design, in instructional methods, in educational decisions, and in the use of learning resources; relevant for the classroom teacher who attempts to utilize learning concepts in the classroom and in research.

Prerequisite: Graduate standing.

65-301 Curriculum of the Secondary School 3 cr.

Modern secondary school curriculum; various types of curriculum organization; basic philosophical, psychological and sociological considerations underlying modern curriculum development; research basis for current curriculum trends.

Prerequisite: 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors or 36-212 Child Psychology, and 62-215 Philosophical and Historical Foundations of Public Education.

65-331 Methods of Teaching on the Secondary Level 2 cr.

Selection, organization and use of materials and methods that are common to all subject areas in the secondary school. Discussion of the unit, the lesson plan, discipline, the class discussion, and other elements of methodology necessary for effective teaching.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education and 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors.

65-421 Research in Classroom Teaching of Language Arts 3 cr.

Designed to acquaint the student with research in contemporary trends in teaching the language arts, including reading; critical appraisal and discussion of classical and current studies in language arts will provide specific suggestions useful in classroom practice; an overview of the entire area, as well as opportunity for individual study in-depth of a specific area related to the student's need and interest; in-service teachers may become involved in action research.

Prerequisite: Acceptance for Master's degree candidacy in literature, linguistics or language arts.

65-422 Research in Classroom Teaching of Social Studies 3 cr.

Designed to acquaint the student with the general principles, patterns, and problems of research in the teaching of the social studies; study of some specific findings in the field of social studies research.

Prerequisite: Acceptance for Master's degree candidacy in social studies.

65-423 Research in Classroom Teaching of Mathematics 3 cr.

Designed to acquaint the student with the general principles of research in the teaching of mathematics, analytical examination of the various research studies with special emphasis on the new mathematics.

Prerequisite: Acceptance for Master's degree candidacy in mathematics.

65-424 Research in Classroom Teaching of Science 3 cr.

Designed to acquaint the student with research studies in the teaching of science; special emphasis placed on the new programs that have been developed.

Prerequisite: Acceptance for Master's degree candidacy in science.

66-312 Education in a Large Urban Area 3 cr.

Specific problems in studying and working with children of varying socioeconomic cultures and groups — non-English speaking, transients, residents of public housing, etc.; required directed observation in classroom situations throughout the city; problems in the re-education of teachers; the role of the school as a community school.

Prerequisite: Permission of Department Chairman for undergraduate students.

66-313 Principles and Techniques of Guidance 3 cr.

Definition, education, and the social scene in which guidance operates; features of guidance services, emphasizing group and individual counseling techniques and services.

66-321 Diagnosis and Treatment of Reading Difficulties 3 cr.

Survey of standard diagnostic procedures; identification of slow readers through diagnosis, group and individual testing, and information techniques; procedures and techniques for correcting reading problems in elementary and secondary schools.

Prerequisite: 64-306 Methods of Teaching Reading—Elementary School or consent of instructor.

66-411 Testing and Evaluation 2 cr.

Principles of test construction, simple statistics, and examination of commonly used standardized tests and other evaluative procedures; student to become acquainted through extensive readings with the recognized authorities in the field.

Prerequisite: Graduate standing and a valid teaching certificate.

66-412 Laboratory in Testing and Evaluation 1 cr.

An opportunity to practice the techniques presented in 66-411 Testing and Evaluation.

Prerequisite: Graduate standing, 66-411 Testing and Evaluation to be taken previously or concurrently.

66-413 Group Work in the Educational Setting 3 cr.

Psychological aspects of groups and leadership are introduced; group discussion, group guidance, and group counseling purposes, procedures, roles, and methods to be examined; group participants to interact in role playing and group communication.

Prerequisite: Admission to Master's degree candidacy in guidance and counseling, or graduate standing plus consent of instructor; and 66-313 Principles and Techniques of Guidance and 36-437 Theories and Principles of Counseling.

66-451 Practicum I in Guidance and Counseling 3 cr.

Supervised experience in counseling with elementary school pupils in the elementary school setting; seminar discussions an integral part.

Prerequisite: Acceptance to Master's degree candidacy in guidance and counseling, completion of required courses, and approval of department chairman.

66-452 Practicum II in Principles and Practices of Counseling 3 cr.

Intensive and extensive supervised experiences in elementary school counseling; opportunity to work directly with children having learning problems, students expected to demonstrate mastery of the techniques of a guidance counselor; seminar discussions.

Prerequisite: Acceptance to Master's degree candidacy in guidance and counseling, 66-451 Practicum I in Guidance and Counseling (may be concurrent), and approval of department chairman.

66-453 Practicum I in Guidance and Counseling—Secondary Level 3 cr.

Supervised experience in group activities with secondary school students; group dynamics emphasized, as well as individual counseling; seminar discussion an integral part of course.

Prerequisite: Acceptance to Master's degree candidacy in guidance and counseling, completion of required courses and approval of department chairman.

66-454 Practicum II in Guidance and Counseling—Secondary Level 3 cr.

Intensive and extensive supervised experiences in group work, as well as with individuals; opportunities to work directly with students in developmental guidance; student expected to demonstrate mastery of the techniques of a guidance counselor, seminars, discussions.

Prerequisite: Acceptance to Master's degree candidacy in guidance and counseling, 66-453 Practicum I in Guidance and Counseling—Secondary Level (may be concurrent), and approval of department chairman.

66-455 Classroom Applications of Learning Principles 3 cr.

Theoretical approaches and research findings applicable to the teaching operations and learning processes of children; rote learning, cognitive learning, transfer of training, and effects of practice to be among the topics explored.

Prerequisite: Graduate standing.

66-456 Community Resources and the Schools 3 cr.

Educational, personal, family, social, and vocational services available for elementary school children.

Prerequisite: Admission to Master's degree program in guidance and counseling and 66-313 Principles and Techniques of Guidance, or consent of program advisor.

66-457 Information and Resources for Secondary School Guidance 3 cr.

Exploration of the informational aspects of secondary school guidance; investigation of resources for guidance.

Prerequisite: Admission to the Master's degree program in guidance and counseling at the secondary level and 66-313 Principles and Techniques of Guidance, or consent of program advisor.

66-458 The School Guidance Program 3 cr.

Comprehensive overview of the organization, administration and supervision of guidance in the elementary and secondary school.

Prerequisite: Admission to Master's degree program in guidance and counseling and 66-313 Principles and Techniques of Guidance, or consent of program advisor.

66-459 The School Guidance Workshop 3 cr.

Comprehensive overview of the organization, administration and supervision

of guidance in the elementary and secondary school.

Prerequisite: Graduate standing.

68-301 Developmental Reading in the Secondary School 3 cr.

Theory, methodology, and problems involved in the teaching of reading in the secondary schools; emphasis on the contributions of specific methods in dealing with individual differences.

Prerequisite: 14-102 Literature and Writing II or equivalent.

68-302 Measurement and Evaluation of Reading 3 cr.

Designed to acquaint the student with standardized and informal tools and procedures for reading measurement and evaluation. Techniques of test construction, obtaining norms, and interpreting results are treated in some detail. Emphasis is laid on appraising the reader's capacity, competence, needs, and interests; evaluating reading programs and materials; evaluating effectiveness of teaching reading; and improving classroom techniques of evaluation.

Prerequisite: 68-301 Developmental Reading in the Secondary School or 63-213 Language Arts in the Primary Grades or 64-306 Methods of Teaching Reading—Elementary School.

68-401 Developmental Reading Theory 3 cr.

Theory and methodology of the developmental process; nature and purposes of reading; problems involved in reading various types of material; the contribution of specific methods; techniques of evaluation.

Prerequisite: Graduate standing.

68-402 Specialized Problems in Reading Instruction 3 cr.

Selected topics in methods and materials relating to reading; instructional problems arising in the reading sources and resources; types of programs; trends in reading instruction; utilization of research.

Prerequisite: 14-433 Developmental Reading Theory.

68-403 Curriculum and Supervision in Reading 3 cr.

Principles and procedures in developing a sound school curriculum in reading; the functions and responsibilities of reading consultants, coordinators, and supervisors; reading equipment and material; in-service reading programs; overall evaluative reading programs.

Prerequisite: Graduate standing, 68-401 Developmental Reading Theory, and 68-301 Developmental Reading Theory in the Secondary School or 64-306 Methods of Teaching Reading—Elementary School.

69-331 Functions of the School Library 3 cr.

The school library, its origins, devel-

opment, and administration, as seen in the context of the history of libraries in general.

69-332 Technical Processes in School Libraries 3 cr.

Principles and objectives of organizing library materials; classifications and cataloging procedures, with emphasis on the school library.

69-333 Library Materials for Language and Creative Arts 3 cr.

Critical examination and evaluation of basic reference tools; encyclopedias, bibliographies, dictionaries, directories, and other print and non-print materials.

69-334 Library Materials for Social Sciences and Natural Science 3 cr.

Critical examination and evaluation of basic reference tools; encyclopedias, bibliographies, dictionaries, directories, and other print and non-print materials.

69-335 Reading Guidance in the Elementary School 3 cr.

Evaluation and use of library materials and techniques for the guiding of reading in kindergarten through grade eight.

69-351 Selection, Utilization, and Evaluation of Instructional Materials 3 cr.

Application of learning theory and curriculum principles to the selection, utilization, and evaluation of projected and non-projected instructional materials; laboratory experience in the use of projection and audio equipment.

Prerequisite: Junior or Senior standing or consent of instructor.

69-352 Design and Production of Instructional Materials 3 cr.

Lecture and laboratory experience involving the design and production of materials for general instructional purposes. Attention will be given to the production of materials for specific media, (i.e., Television).

Prerequisite: Junior or Senior standing or consent of instructor.

69-353 Administration and Instructional Media Programs 3 cr.

Applies the principals of management to instructional media programs including the administration of integrated print and non-print materials.

Prerequisite: One course in Library Science and one course in Media Education.

69-401 The Theory of Programmed Instruction 3 cr.

Investigation of the Skinner and Crowder techniques of programmed instruc-

tion; a study of the history of teaching machines and techniques of devising a program of instruction in the various subject-matter disciplines.

Prerequisite: Graduate standing.

69-402 Television and Related Instructional Media 3 cr.

Intensive treatment of the most effective methods of utilizing television as an instructional medium. The course is designed to help teachers prepare lessons for actual closed circuit presentation and to familiarize them with a television lesson format. Students will work with professional television equipment as well as with instructional devices related to teaching such as projectors, bulletin boards, transparencies, and many other visual aids. All TV presentations will be videotaped. Laboratory fee \$2.

Prerequisite: Admission to a Master's degree program and in-service teacher, or consent of instructor.

69-403 Television in Today's World 3 cr.

Designed to help in-service teachers utilize effectively the medium of television (educational and commercial) to enrich their classroom teaching experiences; opportunity to hear eminent people from the commercial and educational television studios of Chicago, as well as specialists from the Chicago Board of Education, discuss television broadcasting as a vehicle for enriching the school curriculum; excerpts from local and national programs and documentaries shown during class sessions followed by discussions and suggestions for implementing them into lesson plans.

Prerequisite: Graduate standing and in-service teacher.

69-404 Administration of Instructional Media Programs 3 cr.

Applies the principles of management to instructional media programs including the administration of integrated print and non-print materials.

Prerequisite: Graduate standing, one course in Library Science, and one course in Media Education.

72-301 Methods of Teaching Mathematics in the Secondary School 3 cr.

Problem-solving in algebra and geometry; study of recursion problem and mathematical induction; discovery methods in mathematics; techniques of solving word problems.

Prerequisite: 65-331 Methods of Teaching on the Secondary Level and Junior standing.

72-302 Contemporary Art Education in the Secondary School 3 cr.

Designed to develop inquiry and understanding of many problems of communicating or teaching art in the secondary school.

Prerequisite: 18 credits in art.

73-301 Methods and Techniques of Teaching Music in the Secondary Schools 3 cr.

Methods and materials utilized in teaching and organizing music classes and performing groups in the secondary schools; major emphasis upon general music classes, music rehearsal and performance problems in vocal and instrumental music.

Prerequisite: Consent of advisor.

73-302 Methods of Teaching Geography in the Secondary School 3 cr.

A study of the materials and techniques utilized in the teaching of geography on the secondary level. Areas of concentration include an examination of the various forms of subject organization and the place of geography in the secondary curriculum, an introduction to the literature of methodology, a study of current trends, and the findings of research.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, 65-331 Methods of Teaching on Secondary Level, Senior standing, and department approval.

74-301 Methods of Teaching History in the Secondary School 3 cr.

The nature of history and allied disciplines; demonstration of specific organizational patterns and teaching methods in each of these areas; the importance of teaching for critical thinking; trends in the teaching of history.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, and 65-331 Methods of Teaching on the Secondary Level.

74-321 Linguistic Approaches to English Teaching 3 cr.

Designed to introduce the student to theoretical material in applied linguistics and to give practice in designing, presenting and evaluating specific classroom procedures in the linguistically oriented teaching of language, literature, and composition.

Prerequisite: 28-211 Introduction to Phonology or 28-213 American English: Advanced Structure.

74-372 Teaching English in the Secondary School 3 cr.

Introduction to the methods, techniques and materials for teaching literature in the secondary schools; emphasis on the critical techniques of analyzing and evaluating literature.

Prerequisite: 65-331 Methods of Teaching on the Secondary Level and 12 credit hours in English or Linguistics.

75-301 Teaching Modern Foreign Languages in the Secondary School 3 cr.

Theory, practice and study of methods

and techniques of teaching modern foreign languages at the secondary level. Study of the types of audio-lingual and visual procedures that can be used effectively and principles that should guide their selection and use.

Prerequisite: Completion of 27 credit hours beyond the Basic Program in major field and consent of instructor.

75-302 Methods of Teaching Secondary General Social Studies 3 cr.

Discussion and demonstration of organizational patterns and teaching methods in anthropology, economics, political science, and sociology. An examination of the place of these disciplines in the secondary curriculum, an introduction to the literature of methodology, a study of current trends, and the findings of research.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, 65-331 Methods of Teaching on the Secondary Level, and Senior standing.

75-314 Materials and Methods for Teaching High School Science 4 cr.

Interpretation of the content and structure of those areas of natural sciences generally included in secondary school curricula; recent developments in curriculum organization and teaching materials; methods of teaching in the classroom and laboratory, including team teaching, programmed instruction and other individualized guided study programs.

Prerequisite: One term of chemistry, one of physics, and one of biology, and 65-331 Methods of Teaching on the Secondary Level.

75-398 Speech Activities in the Secondary School 3 cr.

Principles and practice in the teaching of speech to adolescents; activities, contests, festivals; present trends in the teaching of speech and an evaluation of current teaching materials.

Prerequisite: In-service teacher or 9 credit hours in speech.

77-301 Secondary Student Teaching and Seminar in Art 6 cr.

Initiation in general secondary school procedures by means of observation and participation. Teaching two classes five half-days; continuous supervision of one or more cooperating teachers from the secondary art staff; additional supervision by a College art supervisor who will also conduct the associated seminar.

Prerequisite: Approval of art department and completion of education courses, including 72-302 Contemporary Art Education in the Secondary Schools and 65-331 Methods of Teaching on the Secondary Level.

77-301 Secondary Student Teaching and Seminar in Biology 6 cr.

Participation in directing learning experience in secondary biology at several levels under the supervision of one or more regularly assigned secondary teachers; observation of experienced teachers; familiarization with the daily program of the secondary school; weekly seminar and critique.

Prerequisite: Senior standing; approval of department; 75-314 Materials and Methods for Teaching High School Science and 65-331 Methods of Teaching on the Secondary Level.

77-301 Secondary Student Teaching and Seminar in Chemistry 6 cr.

Participation in directing learning experiences in secondary chemistry at several levels under the supervision of one or more regularly assigned secondary teachers; observation of experienced teachers; familiarization with the daily program of the secondary school; weekly seminar and critique.

Prerequisite: Senior standing; approval of department; 75-314 Materials and Methods for Teaching High School Science and 65-331 Methods of Teaching on the Secondary Level.

77-301 Secondary Student Teaching and Seminar in Earth Science 6 cr.

Participation in directing learning experience in secondary Earth Science at several levels under the supervision of one or more regularly assigned secondary teachers; observation of experienced teachers; familiarization with the daily program of the secondary school; weekly seminar and critique.

Prerequisite: Senior standing, 75-314 Materials and Methods for Teaching High School Science and 65-331 Methods of Teaching on the Secondary Level.

77-301 Secondary Student Teaching and Seminar in English 6 cr.

Participation in directing learning experiences in secondary English at several levels under the supervision of one or more regularly assigned secondary teachers; observation of experienced teachers; familiarization with the daily program of the secondary school; weekly seminar and critique.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, 65-331 Methods of Teaching on the Secondary Level, 74-372 Teaching English in the Secondary School, and at least 24 hours of English.

77-301 Secondary Student Teaching and Seminar in Foreign Language 6 cr.

Practical experience in student teaching in specially assigned high schools to promote skills and techniques in the teaching of foreign languages;

weekly seminar and discussion of particular pedagogical problems.

Prerequisite: Approval of department and/or second level proficiency test required; 65-331 Methods of Teaching on the Secondary Level and 75-301 Teaching Modern Foreign Languages in the Secondary School.

77-301 Secondary Student Teaching and Seminar in General Social Studies 6 cr.

Introduction to the daily activities which comprise a secondary school curriculum. Practical experience in student teaching in one or more of the following academic disciplines: anthropology, economics, political science and sociology. Additional supervision by a college supervisor who also conducts a weekly seminar associated with the student teaching program.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, 65-331 Methods of Teaching on the Secondary Level, 75-302 Methods of Teaching Secondary General Social Studies, Senior standing, and approval of the Department of Secondary Education.

77-301 Secondary Student Teaching and Seminar in Geography 6 cr.

Practical experience in student teaching in geography at several levels within the secondary school. The student will be supervised by one or more regularly assigned secondary teachers and by a college supervisor who will also conduct the weekly seminar associated with the student teaching program. In addition, the student will be introduced to the daily program of the secondary school.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, 65-331 Methods of Teaching on the Secondary Level, 73-302 Methods of Teaching Geography in the Secondary School, Senior standing, and department approval.

77-301 Secondary Student Teaching and Seminar in History 6 cr.

Familiarization with the daily program of the secondary school and practical experiences in student teaching in secondary history at several levels under the supervision of one or more regularly assigned secondary teachers; additional supervision by a college supervisor who will also conduct the weekly seminar associated with the student teaching program.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, 65-331 Methods of Teaching on the Secondary Level, 74-301 Methods of Teaching History in the Secondary School, Senior standing, and approval of department.

77-301 Secondary Student Teaching and Seminar in Mathematics 6 cr.

Familiarization with the daily program of the secondary school and practical experience in student teaching in secondary mathematics at several levels under the supervision of one or more regularly assigned secondary teachers; additional supervision by a college supervisor who will also conduct the weekly seminar associated with the student teaching program.

Prerequisite: 62-215 Philosophical and Historical Foundations of Public Education, 62-201 Educational Psychology or 36-213 Educational Psychology for Psychology Majors, 65-331 Methods of Teaching on the Secondary Level, 72-301 Methods of Teaching Mathematics in the Secondary School, Senior standing and approval of department.

77-301 Secondary Student Teaching and Seminar in Music 6 cr.

Practical application of teaching music in the public schools at the secondary level. A student is expected to spend at least five one-half days per week in the classroom either as orientation or as the classroom teacher, under the close supervision of a cooperating teacher working in cooperation with a college supervisor. This experience will be as broad as is practicable but will center on the student's main interest level. Frequent conferences and a weekly seminar will supplement the program.

Prerequisite: Advanced Junior standing or preferably Senior standing, completion of required education courses, 73-301 Methods and Techniques of Teaching Music in the Secondary Schools, and approval of department.

77-301 Secondary Student Teaching and Seminar in Physical Education 6 cr.

Participation in directing learning experiences in secondary Physical Education at several levels under the supervision of one or more regularly assigned secondary teachers; observation of experienced teachers; familiarization with the daily program of the secondary school; weekly seminar and critique.

Prerequisite: Approval of department chairman, Senior standing, 65-331 Methods of Teaching on the Secondary Level and 83-344 Foundations of Physical Education for Secondary Schools.

77-301 Secondary Student Teaching and Seminar in Physics 6 cr.

Participation in directing learning experiences in secondary Physics at several levels under the supervision of one or more regularly assigned secondary teachers; observation of experienced teachers; familiarization with the daily program of the secondary school; weekly seminar and critique.

Prerequisites: Senior standing, approval of department, satisfactory completion of 75-314 Materials and Methods for Teaching High

77-301 Secondary Student Teaching and Seminar in Speech 6 cr.

Initiation of the student teacher in general secondary school procedures via observation and participation in a recognized secondary school program. Supervision of teaching will be handled by one or more regularly assigned cooperating teachers and a member of the speech staff who will serve as College supervisor; frequent conferences and a weekly seminar will supplement the program.

Prerequisite: Senior standing, completion of all methods courses, including 75-398 Speech Activities in the Secondary School, and approval of advisor.

82-301 Health Education in the Elementary School 2 cr.

Preparation for teachers of health education in the elementary grades. Emphasis on curriculum, methods, organization, and presentation of materials.

82-302 Methods and Materials for Sex Education—K-6 3 cr.

Preparation for teachers of sex education in grades K through 6. Emphasis on selection and presentation of materials and audio-visual aids in the classroom.

Prerequisite: Undergraduates: 82-216 Health, First Aid and Safety Education or 82-204 Health, First Aid and Safety Education or 82-301 Health Education in the Elementary School; others: Bachelor's Degree or consent of instructor.

82-303 Methods and Materials for Sex Education—Grades 7-12 3 cr.

Preparation for teachers of sex education in grades 7 through 12. Emphasis on selection and presentation of materials and audio-visual aids in the classroom.

Prerequisite: Undergraduates: 82-216 Health, First Aid and Safety Education or 82-301 Health Education in the Elementary School; others: Bachelor's Degree or consent of instructor.

82-305 Health Education in the Secondary School 2 cr.

Subject matter selection and organization for teaching purposes; development of laboratory methods of presentation, educational principles guiding health instruction; development of health habits and attitudes in children; health examinations; cooperation with outside agencies.

82-306 Seminar in Trends and Issues in Sex Education 3 cr.

A critical analysis of current trends and basic issues of sex education with emphasis on selected independent study.

Prerequisite: Undergraduates: 82-302 Methods

and Materials for Sex Education—Grades K-6 or 82-303 Methods and Materials for Sex Education—Grades 7-12; others: Bachelor's Degree or Consent of instructor.

83-301 Projects in Physical Education 2 cr.

Organization and administration of special physical education projects; athletics days, tournaments, fun-nites, parent nights, patrol organization and duties, supervisory duties and responsibilities.

83-341 Foundations of Physical Education for Elementary Schools 3 cr.

Participation in warm-up and day's-order activities, low-organized and lead-up games, tactics. Teaching methods and materials; purchase and care of equipment; safety measures; progressions and skill practice. Program planning in physical education for elementary schools.

83-344 Foundations of Physical Education for Secondary Schools 3 cr.

Basic principles of physical health through participatory activities with special emphasis upon theory, methodology, and materials; participation in warm-up and day's-order activities, low-organized and lead-up games, tactics; purchase and care of equipment; safety measures, progressions, and skill practice; program planning in physical education for secondary schools.

83-381 Water Safety Instructor 2 cr.

Work leading to certification by the American Red Cross as a Water Safety Instructor; review of life saving, swimming strokes, diving and stunts; emphasis on student teaching.

84-301 Physical Education Seminar 2 cr.

Discussion of student teachers' problems; conferences and counseling with department staff members; physical education lesson planning and discussion; positive disciplinary control; taken with student teaching.

84-302 Kinesiology 3 cr.

Thorough study of the origin, insertion and the function of muscles; types of faulty body mechanics; activities that prevent, counteract or alleviate these conditions; correct sitting and standing positions; posture testing.

84-303 Adapter and Corrective Physical Education 3 cr.

The atypical program for the atypical student; history and purpose of program; setting-up programs with assistance from doctors and physicians; field trips to special schools.

84-306 Independent Study in Physical Education 3 cr.

Special project of the student's choosing relating to some facet of physical education; students who are having difficulty with a particular phase of physical education may be put on special work with an instructor and/or a laboratory assistant for intensified training; paper required on subject of study.

Prerequisite: Approval of Department Chairman.

84-307 Organization of Elementary School Physical Education Classes 3 cr.

Various methods and techniques for the efficient use of gymnasium space for the safety and physical education of students; emphasis on class control methods, safety measures, roll-taking, use of equipment, storage and repair of equipment, and shower room control; students to participate in various events and set up programs for elementary school children.

84-311 Coaching and Team Management—High School 3 cr.

Administration, theory and practical study relating to the area of coaching and management of high school teams in most athletic areas; scouting and planning special emphasis given to methodology by means of student requirement to help set up a complete program for various athletic teams.

84-321 Intramurals—High School 3 cr.

Administration, theory, practice, aims, objectives and methods of intramural programs; students to participate in setting-up and conducting all events that lend themselves to competition.

84-341 Organization of High School Classes 3 cr.

Organizational techniques for the efficient use of physical education facilities with special emphasis upon management and methodology in instruction; attention is given to class control methods; safety; use storage, and repair of equipment; student participation in various events throughout course.

84-351 Organization of Dance Classes—High School 3 cr.

Administration, theory, practical application of the many dance programs in the high schools; students to learn all kinds of dances and to complete a regular dance course program for high school girls; methods and materials to be discussed and evaluated; students to organize dance programs for class, with critiques to follow.

85-301 General Safety and Traffic Education 3 cr.

This course is organized to assist the teacher, the safety coordinator, and the school administrator in planning and conducting a program which will provide a safe environment for students and employees as well. In addition to the study of several areas of school safety and liability, teachers are afforded one semester hour of field experience in the use of simulation equipment as it relates to traffic education.

85-302 Basic Driver Education 3 cr.

Introduction to the highway transportation system is presented reviewing the rationale of the objectives, subject matter, and learning activities. Wherever possible, objectives are treated in behavioral terms in order to achieve changes in behavior. Teachers are provided with one semester hour of dual-control automobile field experience which deals with judgments and decisions on traffic situations at hand.

85-304 Advanced Traffic Safety Education 3 cr.

A study of management practices as they relate to programs, teachers, and students in the state driver education program. The thrust of this course deals with organization, supervision, and administration of driver education. Practices in planning programs, facilities, and equipment are reviewed with emphasis on state legislative and educational requirements. Included also is one semester hour of field experience on methods and techniques of off-street or range multiple-car programs.

86-301 Computer Concepts for Teachers 3 cr.

This course will introduce the student to electro-mechanical and electronic data processing concepts. The Fortran programming language will be used to solve problems on a digital computer.

Prerequisite: 3 years of high school mathematics or 22-401 College Algebra.

86-303 Basic Concepts in Computer-Assisted Instruction 3 cr.

This course will introduce the student to the concepts of Computer-Assisted Instruction and the programs and equipment used. Representative topics include Tutorial, Drill and Practice, Simulation and Game programs in operation. The fundamentals of the management of a computerized learning center will be studied.

Prerequisite: 86-301 Computer Concepts for Teachers or equivalent experience, and consent of instructor.

86-311 Electronic Computer Programming 3 cr.

This course will approach computer programming from a fundamental point of view and present machine language, symbolic language, and a report generating language. The student will have access to a computer for program testing.

Prerequisite: 86-201 Computer Utilization in Class and Research Work or 86-301 Computer Concepts for Teachers or equivalent experience.

86-313 Quantitative Methods and Computer Use 3 cr.

Mathematical and statistical techniques in current natural, physical, and social science research with particular emphasis on the employment of the computer and the development of research designs.

Prerequisite: 22-104 College Algebra or 22-275 Statistics or consent of instructor.

86-315 Fundamentals of Programming Logic 3 cr.

An introduction to algorithmic approach to problem solving in various computer areas. Problem analysis, and the development of practical algorithms is stressed. Techniques in application of the iterative process and numerical methods are studied. Methods for organizing and managing files, the systems aspect of file organization, information retrieval, indexing, classification, and search strategies are introduced.

Prerequisite: 86-201 Computer Utilization in Class and Research Work or 86-301 Computer Concepts for Teachers or equivalent experience.

86-321 Fortran Programming I 3 cr.

An in-depth study of the Fortran programming language with emphasis on mathematics, science, and statistics applications. The student will study methods of problem solving and will prepare Fortran solutions for testing on the computer.

Prerequisite: 86-201 Computer Utilization in Class and Research Work or 86-301 Computer Concepts for Teachers or equivalent experience.

86-325 Fundamentals of Teaching Computer Studies 3 cr.

The course investigates various teaching methods, with discussion of materials, equipment, and techniques of implementation currently used in the classroom. A comparative study of the common computer languages with an introduction to time sharing computer systems is made and particular problems of such systems are analyzed. The course is designed primarily for secondary school teachers but is of benefit to the college teacher.

Prerequisite: 86-301 Computer Concepts for Teachers and 86-321 Fortran Programming I or equivalent experience.

86-331 COBOL Programming I 3 cr.

An in-depth study of the COBOL programming language with emphasis on business applications. The student will study methods of problem solving and will prepare COBOL solutions for testing on the computer.

Prerequisite: 86-201 Computer Utilization in Class and Research Work or 86-301 Computer Concepts for Teachers or equivalent experience.

91-312 History and Cultures of Afro-Americans 3 cr.

Study of African derivation and the culture of American slavery; urban and rural existence; development of the emergent Afro-American middle-class.

91-313 The Idioms of Afro-American Communities 3 cr.

The oral communication characteristics and language patterns peculiar to Afro-Americans in urban ghettos.

91-314 History and Cultures of Southern White Migrants 3 cr.

History of the Southern White Migrants treated in conjunction with an examination of the cultural patterns of the people; major emphasis on the family, religion, education and economic status, and their respective roles in the transition from a rural to an urban way of life.

91-315 History and Cultures of Americans of Spanish Descent: Mexican, Puerto Rican, and Cuban 3 cr.

Cultures of the Puerto Rican, Mexican, and Cuban studied against their historical backgrounds; special attention given to an understanding of the individual's problems in transition from peasant to urban societies.

91-316 History and Cultures of American Indians 3 cr.

Treatment of the general history and distribution by cultural areas of the North American Indian; description and analysis of representative Indian values undertaken in order to understand the problems in the process of change from tribal to non-tribal systems.

91-324 Problems in Testing Inner-City Children 3 cr.

Special problems in administering, interpreting and constructing tests for inner-city children.

91-326 Language Behavior in Inner-City Communities 3 cr.

Review of the literature and research on language problems of the disadvantaged; methods and programs for speech, reading and listening improvement; utilization of such learning aids

as the Echorder, Phonic Mirror, and the Bell and Howell Language Master.

91-331 Literature of Minorities 3 cr.

Approach to the study of minority cultures through literature written by and about those minorities; study of literary works concerned with Negroes; Southern Mountain Whites, American Indians, Cubans, Puerto Ricans, and Mexicans; insights into the cultural attributes of these groups through the reading of novels, plays, biographies, essays, poems and short stories.

91-341 Culture of Poverty 3 cr.

Intensive comparative analysis of the way of life of America's urban poor and their relationship to the larger society.

91-348 Intergroup Dynamics 3 cr.

Study of how to help pupils and parents of different races interact harmoniously; practice in directing activities that will enhance intercultural relationships through such techniques as role playing, panel discussions and public speaking.

Prerequisite: 36-201 Introductory Psychology.

91-352 Research Methods in Inner-City Studies 3 cr.

Research design and analysis of data; methods for collecting and interpreting data, observation, formulation of hypotheses, techniques of interviewing, questionnaire construction and writing of reports; primary objective of course is training students to read research studies with understanding and to apply the findings to classroom instruction.

91-353 Research Writing 3 cr.

Advanced instruction in writing reports, proposals, papers, and theses. Consideration of form and style. Methods of writing critiques of research studies.

Prerequisite: 91-352 Research Methods in Inner City Studies.

91-354 Methods of Teaching in the Inner City 3 cr.

Curriculum development and adjustment to meet needs of inner-city pupils; new approaches to teaching the "hard to reach" pupil; students to develop units in their own major teaching areas, utilizing new materials and techniques.

91-411 Graduate Study in Disadvantage 3 cr.

Introduction to graduate study in the problems of disadvantaged cultures: Negroes, American Indians, Southern Mountain Whites, Cubans, Mexicans, and Puerto Ricans; course required in graduate degree program and should be taken early.

Prerequisite: Graduate standing.

91-412 Pathology in the Afro-American Ghetto 3 cr.

Problems of emotional and physical health; delinquency, drug addiction, crime.

Prerequisite: Graduate standing and consent of instructor.

91-421 Seminar in Disadvantage—the Negro 3 cr.

Primarily reading and research in specialized areas; study of the Negro self-image, the effects of caste life on mental health, the ethos of the ghetto, and the school in the ghetto community; students to do research and present papers on special problem areas and their relationship to school and community.

Prerequisite: Graduate standing and 91-411 Graduate Study in Disadvantage.

91-422 Seminar in Disadvantage—The Southern Mountain White 3 cr.

The problems of Southern Mountain newcomers, analysis of urban adjustment problems undertaken against the determinants imposed by urban environments; students to do research and present papers on special problem areas and their relationship to school and community.

Prerequisite: Graduate standing and 91-411 Graduate Study in Disadvantage.

91-423 Seminar in Disadvantage—the Spanish-Speaking 3 cr.

Description and analysis of the world views of Spanish-speaking peoples undertaken in order to understand and help to solve the problems they encounter in adjusting to an urban environment; adjustment problems of Cubans, Mexicans, and Puerto Ricans; students to do research and present papers on special problem areas and their relationship to school and community.

Prerequisite: Graduate standing and 91-411 Graduate Study in Disadvantage.

91-431 Seminar in Inner City School Problems 3 cr.

Problems of curriculum, counseling, instruction, facilities, school attendance, the gang, etc.; students to do research and present papers on special problem areas and their relationship to school and community.

Prerequisite: Graduate standing and 91-411 Graduate Study in Disadvantage.

91-451 Research and Thesis 3 cr.

Supervision and advisement in evolving thesis problems and in writing the thesis.

Prerequisite: Acceptance to Master's degree candidacy in Inner City Studies.

91-452 Field Internship 3 cr.

An opportunity to work with disadvantaged children in varied social agencies that serve these youngsters

in their communities; the student to function as participant-observer by assuming an active work role in the various programs offered by the agencies, thereby allowing close, intimate contact with the children and their parents; agency staff supervision, as well as regular attendance at staff conferences, to enable the student to gain working insight and understanding of the philosophy of the agency program; to be taken concurrently with 91-453 Seminar in Field Internship.

Prerequisite: Graduate standing.

91-453 Seminar in Field Internship 3 cr.

A companion course to Field Internship; formulation of operational principles of understanding and working through various problems that arise in the student's interaction with disadvantaged youngsters in the field; clarification of the student's attitudes and feelings as determinants in the relationships and learning processes; to be taken concurrently with 91-452 Field Internship.

Prerequisite: Graduate standing.

95-307 Field Study: Study of Methods in Anthropological Field Work 5 cr.

95-308 Field Study: Culture of Blue Collar Working Class I 5 cr.

95-309 Principles and Methods of Community Organizing I 5 cr.

95-311 Principles and Methods of Community Organizing II 5 cr.

Prerequisite: 95-309 Principles and Methods of Community Organizing I.

95-312 Field Study—Community History: The Austin Community 5 cr.

95-313 Field Study—Black and White Relationships in a Changing Community 5 cr.

95-314 Field Study: Individual Evaluation 5 cr.

95-320 Man the Innovator 3 cr.

A planning course to be undertaken by the student(s) in consultation with the appropriate faculty advisor during a trimester prior to the fuller Experimental College undertaking.

95-326 Man and the Natural Order I 3 cr.

Experimental and/or experiential work of an interdisciplinary nature in the physical and natural sciences.

95-327 Man and the Natural Order II 3 cr.

See course description of 95-326.

95-328 Man and the Natural Order III 3 cr.

See course description of 95-326.

95-329 Man and the Natural Order IV 3 cr.

See course description of 95-326.

95-330 Man and the Natural Order V 3 cr.

See course description of 95-326.

95-331 Man and the Social Order I 3 cr.

Experimental and/or experiential work of an interdisciplinary nature in the social and behavioral sciences.

95-332 Man and the Social Order II 3 cr.

See course description of 95-331.

95-333 Man and the Social Order III 3 cr.

See course description of 95-331.

95-334 Man and the Social Order IV 3 cr.

See course description of 95-331.

95-335 Man and the Social Order V 3 cr.

See course description of 95-331.

95-336 Man and Civilization I 3 cr.

Experimental and/or experiential work of an interdisciplinary nature in the humanities and creative arts.

95-337 Man and Civilization II 3 cr.

See course description of 95-336.

95-338 Man and Civilization III 3 cr.

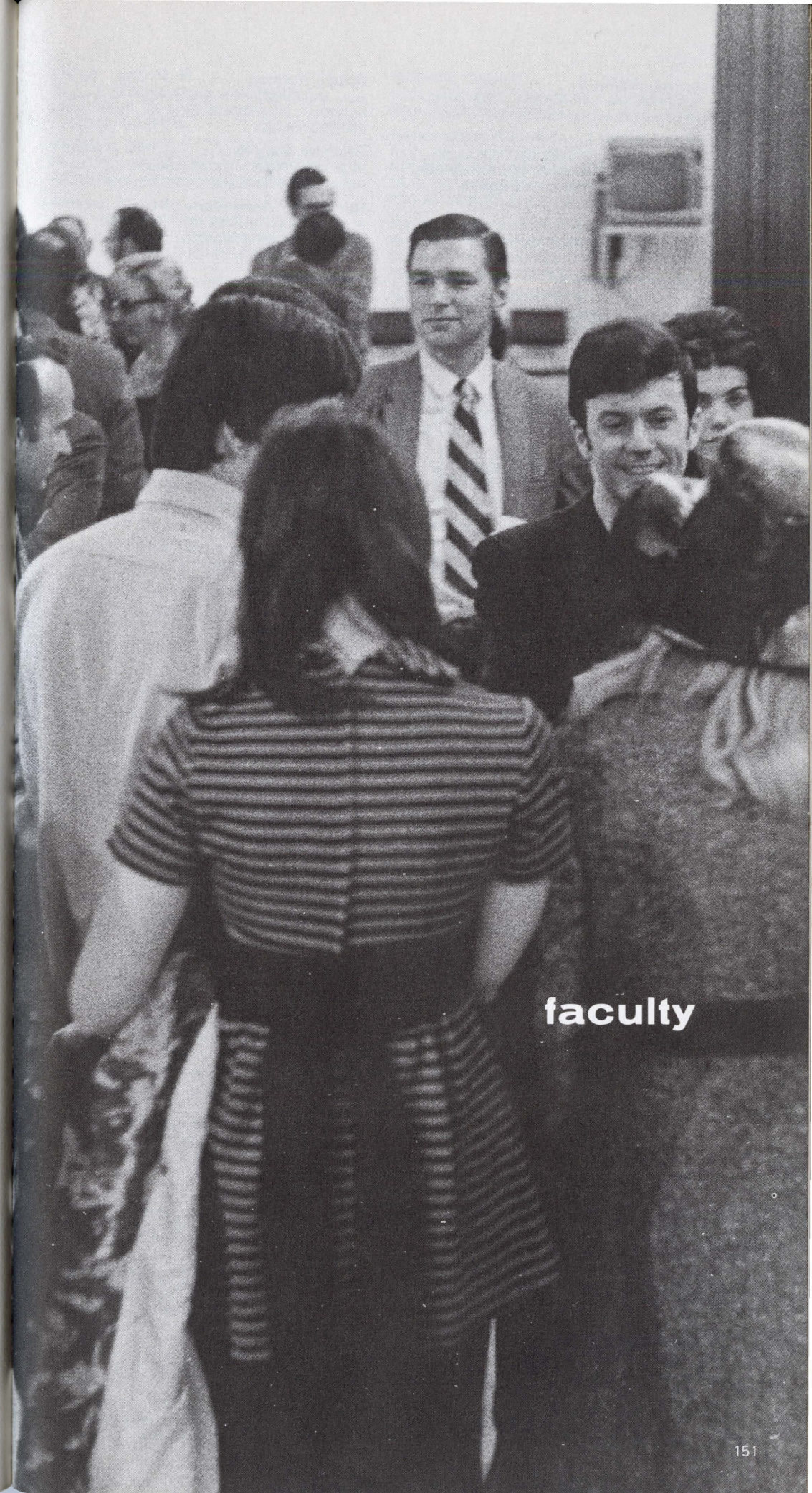
See course description of 95-336.

95-339 Man and Civilization IV 3 cr.

See course description of 95-336.

95-340 Man and Civilization V 3 cr.

See course description of 95-336.



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calendar for 1971-72

Fall Trimester, 1971

September 6 — Monday

Labor Day Holiday

SEPTEMBER 7 — Tuesday

Fall Trimester Begins, Registration

SEPTEMBER 9 — Thursday

Classes begin

NOVEMBER 25 — Thursday

NOVEMBER 26 — Friday

Thanksgiving Holiday

NOVEMBER 27 — Saturday

DECEMBER 22 — Wednesday

Fall Trimester Commencement

DECEMBER 23 — Thursday

Fall Trimester ends

DECEMBER 24 — Friday to

JANUARY 2 — Sunday (inclusive)

Christmas Recess

Winter Trimester, 1972

JANUARY 3 — Monday

Winter Trimester begins,
Registration

JANUARY 5 — Wednesday

Classes begin

APRIL 19 — Wednesday

Winter Trimester Commencement

APRIL 21 — Friday

Winter Trimester ends

APRIL 22 — Saturday to

APRIL 30 — Sunday (inclusive)

Spring Recess

Spring Trimester, 1972

MAY 1 — Monday

Spring Trimester and first 8-week
term begins. Registration

MAY 3 — Wednesday

Extended-day classes in the first
8-week term begins

MAY 4 — Thursday

Day classes in the first 8-week term
begin

MAY 29 — Monday

Memorial Day Holiday

JUNE 23 — Friday

First 8-week term ends

June 26 — Monday

Registration for classes in the
second 8-week term

JUNE 27 — Tuesday

Classes in the second 8-week term
begin

JULY 4 — Tuesday

Independence Day Holiday

AUGUST 16 — Wednesday

Spring Trimester Commencement

AUGUST 18 — Friday

Spring Trimester and second
8-week term end

1971

SEPTEMBER						
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NOVEMBER						
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DECEMBER						
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1972

JANUARY						
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AUGUST						
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22	23	24	25	26	27	28
29	30	31				

graduate college deadlines

*For further information
apply to the Graduate Office*

Oct. 8, 1971, Friday

Final day for filing preliminary application for April graduation.

Prerequisite: Admission to degree candidacy.

Final day for filing final application* for December graduation. (Applications accepted from September 1.)

Prerequisite: Approval of preliminary application.

Nov. 5, 1971, Friday

Final day for completion of all work (courses, oral and/or written examinations, acceptance of thesis in final form or of special papers) and payment of thesis fee for December graduation.

Feb. 4, 1972, Friday

Final day for filing preliminary application for August graduation.

Prerequisite: Admission to degree candidacy.

Final day for filing final application* for April graduation. (Applications accepted from January 3.)

Prerequisite: Approval of preliminary application.

March 3, 1972, Friday

Final day for completion of all work (courses, oral and/or written examinations, acceptance of thesis in final form or of special papers) and payment of thesis fee for April graduation.

June 2, 1972, Friday

Final day for filing preliminary application for December graduation.

Prerequisite: Admission to degree candidacy.

Final day for filing final application* for August graduation. (Applications accepted from May 1.)

Prerequisite: Approval of preliminary application.

July 7, 1972, Friday

Final day for completion of all work (courses, oral and/or written examinations, acceptance of thesis in final form or of special papers) and payment of thesis fee for August graduation.

*PLEASE DO NOT SUBMIT THE FINAL APPLICATION FOR GRADUATION BEFORE THE BEGINNING OF THE TRIMESTER IN WHICH YOU EXPECT TO GRADUATE. THE \$15.50 NON-REFUNDABLE, NON-TRANSFERABLE GRADUATION FEE MUST BE SUBMITTED WITH THE FINAL APPLICATION. APPLICATIONS SUBMITTED BEFORE THE ACCEPTANCE DATE AND/OR THOSE NOT ACCOMPANIED BY THE FEE WILL BE RETURNED.

