

CATALOG

**Northern Illinois
State Teachers College**

**Graduate
School**

**DeKalb
1951-1952**

STATE OF ILLINOIS
ADLAI E. STEVENSON, Governor

CATALOG

OF THE

GRADUATE SCHOOL

OF

**NORTHERN ILLINOIS
STATE TEACHERS COLLEGE**



DeKalb, Illinois
1951-1952

(Printed by Authority of the State of Illinois)



(26811)

STATE OF ILLINOIS
ADLAI E. STEVENSON, Governor

DEPARTMENT OF REGISTRATION AND
EDUCATION

THE TEACHERS COLLEGE BOARD

Ex Officio Members

NOBLE J. PUFFER
Director of Registration and Education (Springfield)
Chairman

VERNON L. NICKELL
Superintendent of Public Instruction (Springfield)
Secretary

Appointed Members

1945-1951
MR. LEWIS M. WALKER.....Gilman

1947-1953
DR. PRESTON BRADLEYChicago
MR. RUSSELL L. GUIN.....Danville

1949-1953
MR. WILLIAM W. WIRTZ.....DeKalb

1949-1955
MR. JOSEPH F. BOHRER.....Bloomington
DR. WILLIAM C. REAVIS.....Chicago
MR. LESTER O. SCHRIVER.....Peoria

1951-1957
MR. JACK AUSTIN.....Charleston

MR. CHARLES G. LANPHIER, Co-ordinator.....Springfield

GRADUATE SCHOOL CALENDAR 1951-1952

SUMMER SESSION, 1951

Monday, June 11.....Registration 8:00 A.M.
Tuesday, June 12.....Class work begins 8:00 A.M.
Wednesday, July 4.....Holiday
Friday, August 3.....Summer Session closes at end of school day

AUTUMN QUARTER, 1951

Saturday, September 15.....Registration 8:00 A.M.
Monday, September 17.....Class work begins 8:00 A.M.
Friday and Saturday, October 19-20.....Homecoming
Friday, October 26.....Meeting of Rock River Division, I.E.A.
Wednesday, November 21.....Thanksgiving recess begins 12:00 noon
Monday, November 26.....Class work resumes 8:00 A.M.
Monday, December 3, through Friday, December 7.....Registration for
Winter Quarter
Tuesday, Wednesday, Thursday, December 4, 5, 6.....Examinations
Friday, December 7.....Quarter closes at end of school day

WINTER QUARTER, 1951-1952

Monday, December 10.....Last day of registration for Winter Quarter
Monday, December 10.....Class work begins 8:00 A.M.
Friday, December 21.....Christmas recess begins 12:00 noon
Monday, January 7.....Class work resumes 8:00 A.M.
Friday, February 22.....Holiday
Monday, March 10, through Friday, March 14.....Registration for
Spring Quarter
Tuesday, Wednesday, Thursday, March 11, 12, 13.....Examinations
Friday, March 14.....Quarter closes at end of school day

SPRING QUARTER, 1952

Monday, March 17.....Last day of registration for Spring Quarter
Monday, March 17.....Class work begins 8:00 A.M.
Friday, March 21.....Last day for filing application for admission
to candidacy for June degree candidates
Friday, March 21.....Last day for filing application to take final
examinations for June degree candidates
Wednesday, April 9.....Easter recess begins at end of school day
Tuesday, April 15.....Class work resumes 8:00 A.M.
Saturday, May 24.....Last day of final examinations for
June degree candidates
Friday, May 30.....Holiday
Sunday, June 1.....Commencement 5:00 P.M.
Monday, Tuesday, Wednesday, June 2, 3, 4.....Examinations
Thursday, June 5.....Quarter closes at end of school day



THE SCIENCE BUILDING



ADMINISTRATIVE OFFICERS

Left to right: Leslie A. Holmes, President of the College; Romeo M. Zulauf, Dean of the Faculty; J. R. Hains, Director of the Graduate School.

ADMINISTRATION

Leslie A. Holmes, Ph.D.	President of the College
Romeo M. Zulauf, A.M.	Dean of the Faculty
J. R. Hains, Ph.D.	Director of the Graduate School
Edith Leifheit, B.E.	Registrar
Mary Lou Humphrey	Secretary to the Director of the Graduate School

ADMINISTRATIVE COUNCIL

Leslie A. Holmes, Ph.D.	President of the College Chairman of the Administrative Council
Romeo M. Zulauf, A.M.	Dean of the Faculty Vice-Chairman of the Administrative Council
Alma Anderson, A.M.	Associate Professor of Fine Arts Head of the Department of Fine Arts Elected from the Faculty
J. R. Hains, Ph.D.	Professor of English Director of the Graduate School Elected from the Humanities Division
Ernest E. Hanson, A.M.	Dean of Men Appointed by the President
Eugene W. Hellmich, Ph.D.	Professor of Mathematics Elected from the Arts and Sciences Division
Esther Williams, Ed.D.	Professor of Education Elected from the Education Division
Margaret Wood, Ph.D.	Associate Professor of Speech Appointed by the President

GRADUATE COUNCIL

Leslie A. Holmes, Ph.D.	President of the College
Romeo M. Zulauf, A.M.	Dean of the Faculty
J. R. Hains, Ph.D.	Director of the Graduate School Chairman of the Graduate Council
Donald W. Berger, Ed.D.	Department of Education
J. Hal Connor, A.M.	Department of English
Earl W. Hayter, Ph.D.	Department of Social Sciences
Eugene W. Hellmich, Ph.D.	Department of Mathematics
W. V. O'Connell, Ed.D.	Department of Speech
Frederick W. Rolf, Ph.D.	Department of Physical Sciences
George L. Terwilliger, Ed.D.	Department of Biological Sciences

Departmental representatives are elected by their departments.

GRADUATE FACULTY

Leslie A. Holmes, Ph.D.....President
Romeo M. Zulauf, A.M.....Dean of Faculty and
Director of Summer Session
J. R. Hains, Ph.D.....Professor of English and
Director of Graduate School
Harold E. Aikins, Ph.D.....Associate Professor of Social Sciences
S. Orville Baker, Ph.D.....Associate Professor of English
Donald W. Berger, Ed.D.....Professor of Education
Robert A. Bullington, Ph.D.....Associate Professor of Biological Sciences
Loren T. Caldwell, S.M.....Associate Professor of Physical Sciences
George Clark, Ph.D.....Assistant Professor of English
Joseph Clettenberg, Ph.D.....Director of Extension
J. Hal Connor, A.M.....Professor and Head of Department of English
Paul Crawford, Ph.D.....Professor of Speech
Irene Feltman, M.A.....Assistant Professor of Education
Harvey Feyerherm, Ph.D.Assistant Professor of Biological Sciences
O. J. Gabel, Ph.D.....Professor of Education
Howard W. Gould, Ph.D.....Professor and Head of
Department of Physical Sciences
Eugene Grant, D.Ed.....Assistant Professor of Education
Clarence Ethel Hardgrove, Ph.D.....Associate Professor of Mathematics
M. C. Hayes, Ph.D.....Associate Professor of Education
Earl W. Hayter, Ph.D.....Professor of Social Sciences
Eugene W. Hellmich, Ph.D.....Professor of Mathematics
Charles E. Howell, Ph.D.....Professor of Social Sciences
Max S. Huebner, Ph.D.....Director of Student Teaching
Hugh Jameson, Ph.D.....Professor and Head of
Department of Social Sciences
Frederick Kent, LL.D.....Assistant Professor of Social Sciences
Wendell A. Lindbeck, Ph.D.....Associate Professor of Physical Sciences
John W. Lloyd, Ed.D.....Professor of Social Sciences
Lewis McFarland, Ph.D.....Associate Professor of Speech
James J. Martin, Ph.D.....Assistant Professor of Social Sciences
Helen R. Messenger, Ph.D.....Professor of Education
Wallace B. Miner, A.M.....Associate Professor of Physical Sciences
C. E. Montgomery, Ph.D.....Professor and Head of
Department of Biological Sciences
W. V. O'Connell, Ed.D.....Professor and Head of Department of Speech

KARL, L. ADAMS HALL,



WALK BETWEEN BUILDINGS



ADMINISTRATION BUILDING



THE GRADUATE SCHOOL

Facilities for graduate study are being offered to students of Northern Illinois State Teachers College for the first time in 1951. In January of this year the Teachers College Board of the State of Illinois authorized the organization of the Graduate School and placed in its control, subject to approval by the Board, matters concerning advanced study leading to the degree of Master of Science in Education. Acting under this authorization, the school is presenting its first offerings in the summer session of 1951 and planning to present offerings in accordance with demand every quarter thereafter.

Seven departments have prepared programs of study for properly qualified members of the Graduate School: *Biological Sciences, Education, English, Mathematics, Physical Sciences, Social Sciences,* and *Speech*. Each of these departments offers a full major; the Department of Education offers four distinct sequences; and groups of departments are collaborating to offer majors in related areas. Within the fields covered by these seven departments, therefore, wide variety in programs is a distinctive feature of the offerings.

This variety is deliberate. It is intended to meet the needs of public school teachers, supervisors, and administrators. The Faculty of the Graduate School conceives the purpose of the entire program to be the provision of better education for the personnel of our public schools than can be provided in four years of study. The faculty is concerned, therefore, with presenting a program which recognizes the particular needs of each individual student. Assuming that no two students have the same background, the same abilities, or the same aspirations, the faculty proposes to make it possible for individual students to follow programs which will make them more effective in the public schools.

Admission Requirements

A candidate for admission to the Graduate School must (1) hold a baccalaureate degree from an approved institution or (2) be in the last quarter of work leading to that degree from Northern Illinois State Teachers College.

All entering students must have a physical examination to be given by the family physician and reported on a health chart furnished by the College. A smallpox vaccination at the time of examination is required unless a certificate of successful vaccination during the last three years can be furnished. The report of physical examination should be returned to the Student Health Service at least one week preceding the beginning of the quarter in which the student plans to enroll.

Areas of Specialization

The student may select a major field of study from any of the participating departments named above; or in some cases he may select an inter-departmental or "area" major. Such combined majors are at present being planned in English-Speech, English-Social Sciences-Speech, and Mathematics-Sciences. For course numbers, titles, and descriptions see pages 27 ff.

Application for Admission

Students who wish to register for graduate study should write to the Director of the Graduate School, requesting a copy of the form "Application for Admission to the Graduate School." This form should be completed and returned to the Director as early in advance of registration as possible, preferably a week or more in advance.

In the case of a student who holds the baccalaureate degree from another institution, arrangements should be made for the forwarding of a transcript of record from that institution.

Registration

Graduate students are expected to register during the regular registration period at the beginning of each quarter (see calendar). Those who register after the specified dates are required to pay a "late registration fee" of \$3.00.

Arrangements for registration and for assignments to advisory committees should be made through the Office of the Director of the Graduate School.

The only courses carrying graduate credit are those numbered 400-499 and 500-599.

Expenses

The average total expense for room, board, books, and supplies is estimated at approximately \$650 to \$750 for the academic year.

The fees for graduate students are the same as for undergraduates:

Incidental and activities fees per quarter	\$30.00
Additional fee for non-residents of Illinois per quarter	30.00
Summer session incidental and activities fees	16.50*
Graduation fee (payable at beginning of quarter during which student expects to receive the degree)	10.00
Additional transcript of record after first copy	1.00
*After the Summer Session of 1951, these fees will be increased to \$20.00.	

Transcripts are not issued to persons who are under financial obligation to the College or to the College Loan Fund.

Fees are due at the time of registration. No refunds on fees are granted after ten calendar days following the beginning of the quarter.

Changes in class programs will be permitted only with the approval of the student's advisory committee, and a charge of \$1.00 will be made for each program change after the third day of the quarter.

Students registering for a laboratory course in chemistry are required to purchase a \$5.00 "breakage coupon" at the Business Office. Refunds will be made on unused portions of the coupon.

The incidental and activities fees cover the following services and privileges: registration, library, health service, gymnasium; admission to athletic events, concerts, dramatic productions, lectures, and speech events; subscriptions to the weekly college paper and the college annual.

Veterans' Benefits

Veterans' benefits are available to graduate students under Public Law 346. After admission to the Graduate School, a veteran who has entitlement under the law should apply to a regional office of the Veterans Administration for a supplementary letter of eligibility. In order to continue under P. L. 346, a veteran must be in training on or before July 25, 1951, and remain in continuous training. However, regularly employed teachers will be permitted to maintain continuous training by attendance at successive summer sessions. Benefits under this program include tuition, fees, books, and subsistence.

Veterans' benefits are available under the Illinois State Scholarship Law for those veterans who do not claim benefits under P. L. 346. After admission to the Graduate School, a veteran must present proof of his honorable discharge and legal residence in the state. This benefit covers only college fees up to the total of \$80.00 per year.

The Coordinator of Veterans Affairs will assist veterans in securing either of these benefits.

Living Accommodations

The Dean of Men and the Dean of Women list rooms that are for rent in private homes but do not make reservations for students. Rooms are available at approximately \$5.00 a week per person. In some cases, for a small additional charge, provision is made for cooking facilities in a community kitchen.

The College maintains two residence halls for women—Williston Hall for freshmen, sophomore, and junior women; and Adams Hall for junior, senior, and graduate women students. The rate for board and room at Adams Hall is \$14.50 per week for those living in double rooms and \$15.00 per week for those living in single rooms. Draperies, bedspreads, and linens (except towels) are furnished. Application for rooms in Adams Hall and all inquiries regarding housing for women should be addressed to the Dean of Women.

It is anticipated that the new residence hall for men, now under construction, will be ready during the 1951-1952 college year.

The College Cafeteria serves meals to students and faculty at a nominal cost. Fountain and short-order service is provided by the College Tea Room.

Grading System

Grades are recorded by the following letters: A, B, C+, C, C-, D, F. In order to qualify for the master's degree, a student must maintain a minimum grade average of "B" in courses taken for graduate credit.

REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN EDUCATION

Candidacy

Admission to the Graduate School does not necessarily imply admission to candidacy for the master's degree. Such candidacy will be determined after the student has completed a part of his graduate work, in accordance with criteria which will be established by the Graduate Council.

Deficiencies

A graduate student shall be presumed to be eligible for advanced work in any department except in education without deficiency if he presents a baccalaureate degree from an approved college or university with a major in the area of work of that department, except that any specific courses or their equivalents which are prerequisites to advanced courses shall be looked upon as deficiencies, to be made up at the undergraduate level before the student takes such advanced courses. However, no student will be admitted to candidacy for the degree until he is following a program approved by his advisory committee which insures satisfaction of the requirements for certification to teach in Illinois.

A graduate of an approved college or university wishing to take the major in education for secondary-school teachers will be expected to regard as deficiencies those courses necessary to bring the amount of education up to the level of that required for the baccalaureate degree in secondary education from Northern Illinois State Teachers College.

A graduate of an approved college or university wishing to take a major in education for elementary-school teachers will be expected to regard as deficiencies those courses necessary for certification as an elementary school teacher in the State of Illinois.

Credit Requirement

A candidate for the master's degree must earn a minimum of forty-five quarter hours of credit at the graduate level.

Residence Requirement

The residence requirement includes at least two quarters with a minimum load of eight quarter hours per quarter done while the student is not engaged in full-time employment other than graduate work.

Credits Transferable

A student will be allowed to transfer not more than nine quarter hours of graduate credit from another institution, none of which shall be in extension or correspondence work and none of which shall reduce the residence requirement.

Credit for Extension Work

With the approval of the major department, a student will be permitted to offer for credit a maximum of nine quarter hours in extension work taken from this institution.

Courses for Which Credit is Allowed

Only courses numbered 400-499 and 500-599 will carry graduate credit. Not more than fifty per cent of the credit counted toward the degree may be earned in courses numbered 400-499.

Completion of Graduate Work

All work for the master's degree must be completed within a period of six years unless exception is granted by the Graduate Council.

Examinations

Final examinations, comprehensive in nature and either oral or written or both, are required of all candidates for the master's degree at some time within the month preceding the completion of work for the degree. These examinations are given by the department or departments in which the major is taken.

Before taking the examination a candidate must submit a paper of acceptable standard. This paper must be approved by the candidate's advisory committee and a record showing its approval must be filed in the Office of the Director of the Graduate School at least one week before the candidate appears for examination.

Advisory Committees

Each student is assigned to an advisory committee, consisting of three or more members of the Graduate Faculty, whose purpose is to guide his selection of a program of studies and to recommend him, when properly qualified, for the degree. The chairman of each advisory committee is selected from the department in which the student is majoring, and the Department of Education is represented on every committee.

GENERAL INFORMATION

Northern Illinois State Teachers College is located in DeKalb, a city of 12,000 people. It is sixty miles west of Chicago on United States Highway Alternate 30 and State Highway 23. DeKalb is served by the Chicago and Northwestern Railroad and the Greyhound Bus Lines.

The Northern Illinois State Normal School was established by an act of the General Assembly in 1895 and began its work of educating teachers in September, 1899. By legislative enactment June, 1921, Northern Illinois State Normal School became Northern Illinois State Teachers College, and since that time two-year and four-year curricula have been offered to prepare elementary school teachers and high school teachers. A diploma was awarded upon the satisfactory completion of the two-year curriculum. Since 1921 the baccalaureate degree has been conferred upon the satisfactory completion of four years of college work. In July, 1943, the awarding of a diploma for completion of the two-year curriculum was discontinued.

In September, 1943, the Teachers College Board changed the original title of the degree conferred by the five State Teachers Colleges from Bachelor of Education to Bachelor of Science in Education. In the fall of 1945 a Two-Year General Education Curriculum was added with the approval of the Teachers College Board.

Early in 1951 the Teachers College Board approved a graduate program for Northern Illinois State Teachers College. This program, instituted in the summer session of 1951, will continue throughout the regular year.

BUILDINGS AND CAMPUS

The campus, covering over two hundred acres, is located in the west part of DeKalb and has entrances on Lincoln Highway, College Avenue, Lucinda Avenue, and Normal Road. The Kishwaukee River flows along its eastern border. Adjacent to the river are two small lakes. A part of the campus is heavily wooded, and the rest of it has been planted with shrubbery and flower gardens. The campus of "Northern Illinois" is not only one of the beauty spots of the state but one of the most beautiful teachers college campuses in the country.

The campus building group comprises the Administration Building, Science Building, Williston Hall, Adams Hall, the Home Management House, McMurry Laboratory School, the Industrial Arts Building, the Men's Gymnasium, the Veterans' Housing Project, the Cafeteria, and the College Tea Room.

A new library building, the Swen Franklin Parson Library now under construction, is located directly north of the Science Building and west of the Administration Building. In addition to reserve and reference reading rooms, it will include a browsing room, curriculum laboratory, seminar rooms, a small auditorium, art and music listening rooms, visual education department, and a department for instruction in library science. The library is being constructed of Illinois limestone and will adequately serve the expanding educational program at Northern Illinois State Teachers College.

A short distance from Lucinda Avenue the new residence hall for men is under construction. This residence hall will house 374 men. Dining room facilities, lounges, and recreational space will be available for residents of the hall.

The castle-like towers of the Administration Building contribute to the beauty of the whole campus. The building contains the administrative and business offices, an auditorium, library, student lounges, women's gymnasium, student health center, art and music rooms, classrooms, and offices for faculty members.

The Science Building, dedicated on Commencement Day in 1943, contains over one hundred rooms, including well-equipped laboratories, class and lecture rooms, auxiliary rooms, and offices.

Williston Hall, a four-story brick residence for 250 college women, is located near the Administration Building. The rooms are comfortably furnished and the hall has a home-like atmosphere. On the main floor are dining room facilities, a lounge, offices, and living quarters for residents. A recreation room and kitchenette are located in the basement.

Karl L. Adams Hall, which was opened in September, 1949, houses 120 junior, senior and graduate women students. It is constructed of Illinois limestone and planned to meet the needs of young women in accordance with recent trends in housing of women students. Adams Hall is decorated in bright colors and furnished attractively. Pictures by modern artists add to the interest of the living rooms.

The Home Management House, located across the street from the new college library is used by the Home Economics Department as a home for the seniors who wish to satisfy the requirements of high schools that employ vocational home economics teachers.

The Home Management House affords an ideal laboratory for an important part of education offered in the field of home economics.

The McMurry Laboratory School is a campus elementary school which serves as an observation and demonstration center and as a laboratory for student teaching. The college has recently completed the purchase of fifty-five acres of land located west of the main campus; some of this land is to be used in the future for a completely new laboratory school.

The Industrial Arts Building, located east of the Administration Building, contains laboratories for graphic arts, woods, metals, electricity and drawing, as well as classrooms and offices. A laboratory of industry and science occupies the entire second floor and represents one of the modern developments in industrial arts work.

In the Men's Gymnasium are classrooms, locker and shower rooms, a handball court, an athletic training room, and a basketball floor of regulation size with modern roll-away bleachers. East of the Men's Gymnasium lie the new varsity football field and track. North of the gymnasium and across Lucinda Avenue are the intramural athletic fields, which include facilities for such individual sports as tennis and badminton.

The Veterans' Housing Project includes forty-eight apartments and dormitory units for sixty-four men students.

The College Cafeteria is conveniently situated on the west side of the drive extending from Lucinda Avenue to the heating plant. At the east entrance to the campus on College Avenue is the College Tea Room, open for fountain and short-order service and offering facilities for special banquets and parties.

The main library, now located on the second floor of the Administration Building, will be housed in the new Swen Franklin Parson Library building. Industrial Arts material is kept in the Industrial Arts Building. An excellent juvenile library is housed in the McMurry Laboratory School for the elementary grades.

About 75,000 books and more than 1,000 pamphlets are available for use. While the direct needs of the various departments are given first consideration, recreational reading has not been neglected. Reference and reserve books and bound and current periodicals are found in the reading rooms. Books for general circulation are kept in the stack room, which is open to the students. More than 400 current magazines are received regularly and are on file in the periodical room. Six trained librarians are in charge and are ready at all times to help students.

HEALTH SERVICE

The Student Health Service, under the supervision of a physician, has headquarters in the Administration Building and is open during class hours. Students have the privilege of visiting the clinic for consultation, advice and treatment, and also for discussing health problems.

Hospitalization service, in either of the two hospitals in DeKalb, is furnished by the College for a period not to exceed seven days a year, in cases approved by the college physician. The service provides room and board for seven days in a semi-private room and laboratory fees up to \$15.00. Physicians', surgeons', and private nurses' fees are extra and are paid by the student.

STUDENT TEACHING

Facilities for student teaching will be made available for those graduate students who have not had such experience in their undergraduate work.

Student teaching is required for certification. Copies of the certification law are available in the Office of the Director of the Graduate School.

INTERNSHIP FOR GRADUATE STUDENTS

Field work under college supervision may be utilized to develop proficiencies and may be substituted for regular course work designed to help the student acquire the required proficiencies. Only those who have had practice teaching or experience in schools are eligible for internship credit. Field work may be of many different types, but in every instance admission to the program shall presuppose sufficient background and purpose that much of the internship time can be spent in planning, originating, and evaluating. Actual performance in teaching or administration will be evaluated during the internship and is expected to be superior in quality. Credit for internship experience will vary with the size of the task, which is co-operatively planned.

These internship courses in Education have been numbered 515 (Elementary), 525 (Secondary), 535 (Core), 545 (Supervisor and Curriculum Directors), and 555 (Administration).

THE PLACEMENT BUREAU

Northern Illinois State Teachers College maintains the Placement Bureau to aid students in securing desirable teaching positions. Sys-

tematically organized records and credentials are available to superintendents, principals, and other school officials. The credentials include the following data: (1) Academic record and scholastic standing (2) Student teaching record (3) Actual teaching experience (4) Personal evaluation by instructors, critic teachers, and other supervisors (5) Health. When the number of candidates seeking positions exceeds the number of calls for teachers, it is the policy of the Placement Bureau to place teachers in the order of their superiority with reference to the five points enumerated above.

All available information shows that there will be a continued need for teachers, especially in the elementary field, for many years. The Bureau not only arranges for the placement of current graduates but also promotes the interests of those who have had several years of successful teaching experience. The Placement Bureau is ready to serve all students enrolled in the Graduate School as well as all graduates of Northern Illinois State Teachers College and school administrators in need of teachers.

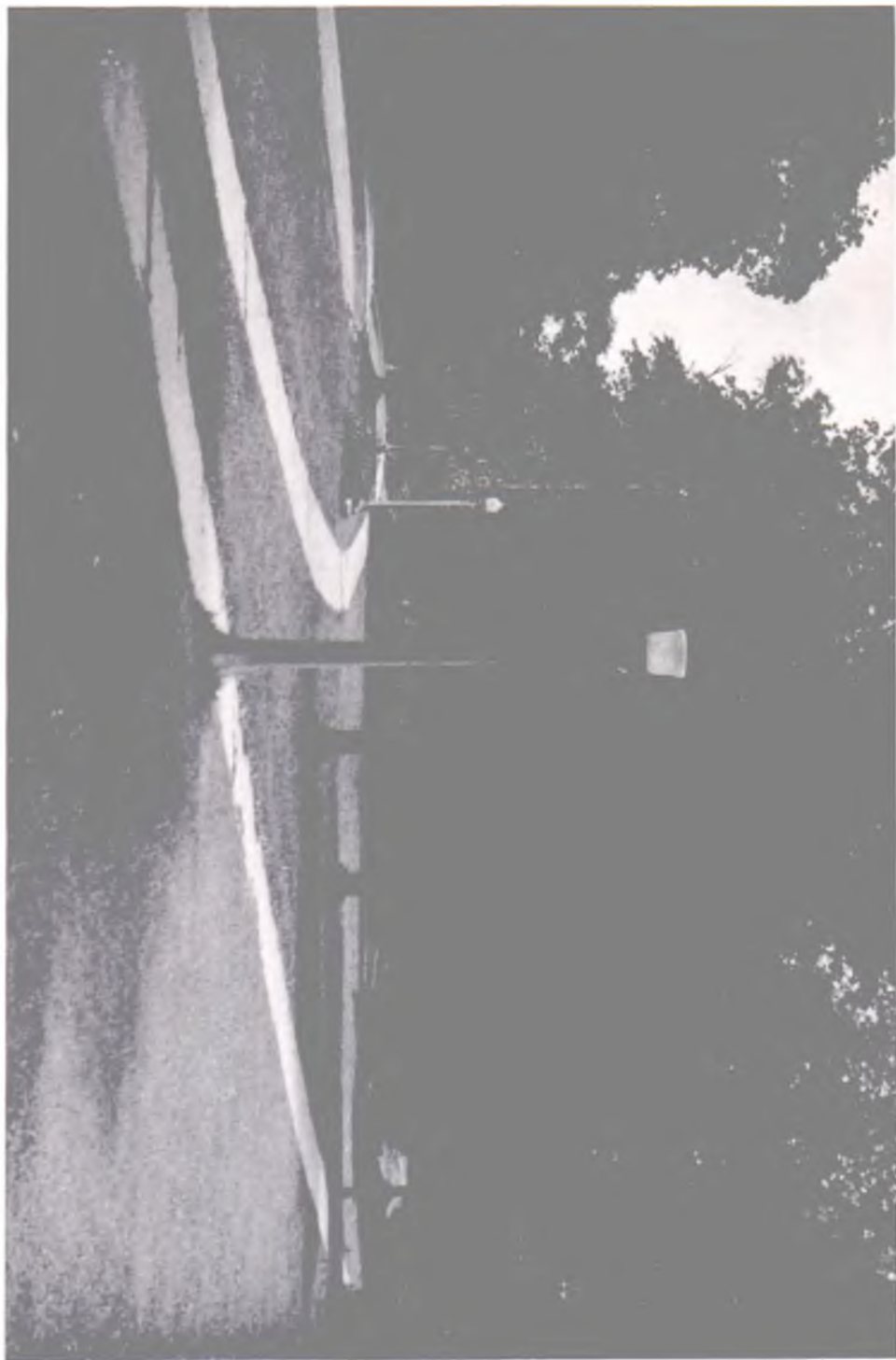


ARTIST'S CONCEPT NEW MEN'S RESIDENCE HALL

ARTIST'S CONCEPT SWEN F. PARSON LIBRARY



CAMPUS WALKS
SPTVA SURVEY



DEPARTMENTAL REQUIREMENTS FOR GRADUATE MAJORS AND DESCRIPTION OF COURSES

The student may select a program leading to the master's degree from any of the departments listed below; or, in some cases he may select an area major that cuts across departmental lines. Area majors are planned at present in the following combinations:

English-Social Sciences-Speech

English-Speech

Mathematics-Sciences

Information regarding area majors may be obtained by communicating with the head of any of the departments concerned.

When departmental programs are under consideration, the student is advised to consult carefully the section of this catalog devoted to requirements for admission to the Graduate School and requirements for the master's degree.

Departmental offerings will depend largely on the demand. In accordance with this policy, the College may find it necessary in some cases to withdraw courses designated to be offered in a given quarter and in other cases to offer courses not designated for the quarter.

DEPARTMENT OF BIOLOGICAL SCIENCES GRADUATE MAJOR IN BIOLOGY

Students who elect a graduate major in biology must satisfy the following course requirements in biology:

- (a) Courses 416, 500a or 500b, 540, 542, 565, and 570.
- (b) Eight additional quarter hours credit from courses offered on the 400 or 500 levels.

Description of Courses

BOTANY

- 410 **Plant Anatomy** **Winter Quarter**
This course is planned to give a knowledge of the structure, development, and function of plant tissues. It consists of a study of the various types of tissues in their different relations and adaptations.
Prerequisite: One year of botany.
Six periods a week. Four quarter hours credit.
- 412 **Plant Pathology** **Autumn Quarter**
This course is intended to give a general knowledge of the structure and classification of the fungi with special emphasis upon their patho-

logical relations. An introduction to the techniques used in such study is included.

Prerequisite: Course 211.

Six periods a week. Four quarter hours credit.

414 Taxonomy and Ecology **Spring Quarter**

This course covers the fundamental principles of classification of the high plants and their ecological distribution. In so far as possible, various systems of classification are introduced and explained. Laboratory work includes the study of ecological groupings and taxonomic relationships.

Prerequisite: One year of botany.

Six periods a week. Four quarter hours credit.

416 General Ecology **Spring Quarter**

This course will emphasize general ecological principles and the structure of various types of plant and animal communities. Several field trips to suitable areas will be taken during the course.

Prerequisite: Course 414.

Six periods a week. Four quarter hours credit.

510 Advanced Plant Physiology **Spring Quarter**

This course is primarily an investigation of the physico-chemical activities of plant growth and development. Abnormalities due to environmental conditions are emphasized.

Prerequisite: Course 310 and beginning college chemistry or physics.

Six periods a week. Four quarter hours credit.

512 Advanced Pathology **Winter Quarter**

This course presents the specific causal agents of plants diseases, their identification and control measures. Special emphasis is placed upon the anatomical and physiological aspects of parasitism and the economy of crop diseases.

Prerequisite: Course 412.

Six periods a week. Four quarter hours credit.

515 Plant Histology and Microtechnique **Autumn Quarter**

This course consists of practical laboratory methods in botanical (histochemical) and microtechnique. Tests for wall and protoplasmic substances as well as the preparation of permanent slides are the main objectives.

Prerequisite: Courses 310 and 410.

Eight periods a week. Four quarter hours credit.

516 Advanced Ecology **Autumn Quarter**

This is a continuation of 416. The influence of environmental factors upon the distribution of organisms is evaluated. Plant formations of North America are considered. Field trips to suitable areas are an integral part of the course.

Prerequisite: Course 414.

Six periods a week. Four quarter hours credit.

- 520 **Plant Morphology** **Winter Quarter**
This course is a study of the vegetative and reproductive structures and their development in green plants. Special emphasis is placed upon the relationships between the groups. Culture methods of living forms are included when possible.
Prerequisite: Courses 210, 211, and 212.
Six periods a week. Four quarter hours credit.

HEALTH

- 401 **Principles of School Health** **Winter Quarter**
This course is a study of the principles of planning for school health programs. It includes a study of the health services, the correction of defects, and the recognition of signs of health and ill-health in children, a study of the standards for a healthful school environment, and a study of methods, materials, and basic content of health and safety instruction.
Prerequisites: Courses 255 and 355.
Four periods a week. Four quarter hours credit.

- 402 **Community Health** **Spring Quarter**
This course is a study of community health needs including environmental sanitation and general measures for disease prevention and control in the world, nation, state, and local area through governmental and voluntary agencies. Studies are made of safety in the community, problems of adult health, including the chronically ill and aged, occupational health problems and consumer health.
Prerequisites: Courses 255 and 355.
Four periods a week. Four quarter hours credit.

- 501 **Advanced School Health** **Spring Quarter**
This course is designed to acquaint the graduate student with the important phases of the school health program as they relate to the administrator and the teacher. The total school health program is considered.
Four periods a week. Four quarter hours credit.

- 513 **Epidemiology** **Winter Quarter**
This course consists of a detailed study of approximately forty communicable diseases. Causes, detection, prevention, and treatment of diseases are considered.
Prerequisite: Course 313 and Bacteriology.
Four periods a week. Four quarter hours credit.

ZOOLOGY

- 450 **Parasitology** **Autumn Quarter**
This is a course dealing with various forms of animal parasites. It stresses both the external and internal parasites of man and their relationships to him.
Prerequisite: Course 251.
Six periods a week. Four quarter hours credit.

- 452 Comparative Anatomy** **Winter Quarter**
 This course gives a more complete organization of the organs and systems of the vertebrate group. Much emphasis is placed upon the embryological development of modern forms and its relations to present structures.
 Prerequisite: Courses 251 and 252.
 Six periods a week. Four quarter hours credit.
- 454 Embryology** **Spring Quarter**
 This course endeavors to give the fundamentals of embryology through a careful study of the serial sections of the chick and pig. Emphasis is being placed on both the structural and functional aspects of embryology.
 Prerequisite: One year of zoology or equivalent.
 Six periods a week. Four quarter hours credit.
- 540 Experimental Genetics** **Winter Quarter**
 This is essentially a laboratory course dealing with fruit fly and mold investigations of the facts and fundamental principles of genetics and cytogenetics. Other plants and animals are broadly considered.
 Prerequisite: Course 340.
 Six periods a week. Two quarter hours credit.
- 542 Evolution** **Autumn Quarter**
 A broad study of the steps by which living organisms have acquired the morphological and physiological characters which distinguish them. This study of the origin of modern animals and plants is based on facts disclosed particularly by paleontology, embryology, comparative anatomy, and genetics. Weismannism, heredity, variation, natural selection and mutation are particularly emphasized.
 Prerequisite: Graduate standing.
 Two periods per week. Two quarter hours credit.
- 543 Cytology and Histology** **Fall Quarter**
 A combination study of cell structure and tissue differentiation. Both plants and animals are considered.
 Prerequisite: Graduate standing.
 Eight periods a week. Four quarter hours credit.
- 554 Advanced Embryology** **Spring Quarter**
 A course designed for the graduate level, to carry on the concepts gained through a course in fundamentals of Embryology. Deals with the development of the embryo pig. Experimental work.
 Prerequisite: Beginning Embryology.
 Six periods a week. Four quarter hours credit.
- 555 Advanced Physiology** **Spring Quarter**
 This course emphasizes the functions of the circulatory, respiratory, and digestive systems. Special topics in other selected fields of physiology are considered. Laboratory consists chiefly of experimental techniques and practical demonstrations.
 Prerequisite: Course 355 or equivalent; a course in organic chemistry.
 Six periods a week. Four quarter hours credit.

- 560 **Field Zoology** **Spring Quarter**
The collection, preservation and identification of lower vertebrates and terrestrial and aquatic invertebrates. Habits and life histories of selected forms are studied in detail.
Prerequisite: Graduate standing.
Six periods a week. Four quarter hours credit.

PROFESSIONAL

- 500a **Science Problems of Elementary Grades** **Winter Quarter**
Development of constructive attitudes toward modern science in relation to current problems in the elementary school. Modern techniques and materials of value to beginning and experimental teachers are discussed. Students are given an opportunity to prepare and demonstrate various projects which can be adapted to the classroom. (Satisfies requirements for Education 584.)
Prerequisite: Graduate standing.
Two periods a week. Two quarter hours credit.
- 500b **Methods and Materials for High School Biology** **Winter Quarter**
This course deals with actual problems of teaching biology in high schools. Current research work in this area is studied.
Prerequisite: Course 300 or equivalent.
Two periods a week. Two quarter hours credit.
- 560-561 **Seminar** **Every Quarter**
Survey of scientific literature, publications, etc. Discussion of current problems with other students and members of the staff.
One period a week. Two quarter hours credit.
- 570 **Special Problems in Biology** **Every Quarter**
A course designed to aid the student in developing his ability to conduct independent study. Problems will be selected from the area of his greatest interest.
Prerequisite: To do research presupposes that the student has sufficient knowledge to solve a given problem. The advisor should determine the amount needed. Permission of major advisor.
Four periods a week. Four quarter hours credit.

DEPARTMENT OF EDUCATION GRADUATE MAJOR IN EDUCATION

Students who elect a graduate major in education must satisfy the following course requirements in education:

- (a) Courses 500, 501, 510, 511, 512, 513, and 572 are required of majors in Education for Elementary School Teachers.
- (b) Courses 500, 501, 510, 521, 523, 525, 561, and 572 are required of majors in Education for Secondary School Teachers.

- (c) Courses 531, 532A, 532B, 533, 534, 535, and 561 are required of majors in Education for Teachers of the Core Program. (This sequence is to be held in abeyance until the Departments of Education, English, the Social Sciences, and Speech have reached certain agreements pertaining to content.)
- (d) Courses 500, 501, 510, 541, 542, 543, 545, 551, and 572 are required of majors in Education for Supervisors and Curriculum Directors.
- (e) Courses 500, 501, 510, 542, 551, 552, 553, 554, and 555 are required of majors in Education for School Administrators.

Within each special sequence certain proficiencies are required. If the student has the proficiencies, he may be excused from the course or courses set up for the purpose of developing these proficiencies. Field work under college supervision may be utilized to develop proficiencies and substituted for regular course work.

Description of Courses

405 Supervision of Instruction Spring Quarter

This course aims to develop an understanding of supervision as leadership and to acquaint the student with teacher-supervisor relationships. Good supervisory practices are evaluated and the improvement of teaching by in-service training is emphasized. Teacher rating scales are examined, and self-rating is discussed. Suggested techniques for the scientific evaluation of supervision are illustrated by available studies. Course open only to seniors and graduate students.

Prerequisites: Courses 310 and 321 or 322.

Four periods a week. Four quarter hours credit.

406 Philosophy of Education in Spring Quarter American Democracy

This course considers the contemporary philosophies of education which influence school practice in America. How these originated and developed, the values and dangers of each, are studied intensively. The nature of contemporary problems of social change, of human needs in a democracy and of a growing world order is contemplated seriously. Extensive reading is necessary. Students are supposed to take this course as a culminating experience in the teacher education program. It may help them to integrate their professional experiences in the four years preservice period and aid them to formulate a personal philosophy of education or to choose intelligently a philosophy to which they can wholeheartedly subscribe.

Course open only to seniors and graduate students.

Prerequisite: Courses 350 or 356.

Four periods a week. Four quarter hours credit .

- 407 **School Administration** **Winter Quarter**
 This course acquaints the student with various administrative problems common to schools of ordinary size. It stresses such topics as: the superintendent, the school board, the instructional staff, pupil personnel, school plant, management of instructional materials, and finance.
 Open only to seniors and graduate students.
 Prerequisite: Courses 350 or 356.
 Four periods a week. Four quarter hours credit.
- 409 **Personnel and Guidance** **Spring Quarter**
 This course is a survey of the principles and techniques of guidance in educational institutions. Topics to be considered are as follows: evidence of need for guidance, the role of the classroom teacher with respect to guidance, objectives of a guidance program, orientation and adjustment of students, the interview, value of case study and other techniques used in personal counseling, techniques used in working with groups, organization and development of a social and extra-curricular program, necessary office equipment and records.
 Four periods a week. Four quarter hours credit.
- 415 **Treatment of Exceptional Children** **Autumn Quarter**
 Prospective classroom teachers are given an understanding of the needs of children who vary from the usual. The psychology, treatment, and care of mentally subnormal, physically handicapped, exceptional, and maladjusted children are studied. Visits to special schools are made. Course open only to seniors and graduate students.
 Prerequisite: Courses 350 or 356.
 Four periods a week. Four quarter hours credit.
- 416 **Personality Maladjustments and Mental Hygiene** **Every Quarter**
 This course is presented in two parts. Part one deals with the principal types of mental disorders. Such topics as the following are stressed: delusions, abnormalities of memory, emotions, intelligence, hysteria, episodic, compensatory, and regression disorders. Part two is devoted to mental hygiene and its relation to proper adjustment through education.
- 424 **Basic Procedures in Guidance of Learning (High School)** **Every Quarter**
 Modern principles of teaching and learning are surveyed. Such topics as the following are considered: the modern concept of learning, functional units, the improvement of traditional procedures, the core curriculum, and techniques of classroom organization. These topics are discussed in relation to major curricular problems of the secondary school.
 Prerequisite: Course 356.
 Four periods a week. Four quarter hours credit.

430 Audio-Visual Education **Fall and Spring Quarters**

This course stresses the selection, evaluation, and utilization of various sensory materials in the instructional program in the public schools. It also provides opportunities to learn to operate the various projectors and other equipment used in carrying on such a program.

Prerequisite: Courses 350 or 356.

Four periods a week. Four quarter hours credit.

433 Junior High School Organization and Problems **Spring Quarter**

This is a survey of the development of the junior-high-school idea, reason for reorganization, administration problems, program making, extracurricular activities, vocational guidance, student participation in school government, and the junior-high-school plant.

Offered every other year.

Prerequisite: Courses 350 or 356.

Four periods a week. Four quarter hours credit.

435 American Public Education **Autumn Quarter**

This course gives the student an overview of the organization of American public education at the federal, state, and local levels. It stresses such major aspects of the school as the types of administrative units, teacher and pupil personnel, school plant and equipment, and ethical and professional obligations of teachers.

Prerequisite: Courses 350 or 356.

Four periods a week. Four quarter hours credit.

490 Beginning Student Teaching (Elementary Grades) **Every Quarter**

This course for four-year elementary students is planned to meet the needs of those who have completed approximately three years of college work before beginning teaching. Allowance is made for the greater maturity of the student and the superior background provided in the additional years of study. With this in view the period of observation has been shortened so as to permit completion of the period of participation during the first quarter.

One-half day. Eight quarter hours credit.

or

One-fourth day. Four quarter hours credit.

491 Advanced Student Teaching (Elementary Grades) **Every Quarter**

This course for four-year elementary students provides opportunity to prepare and present large teaching units and to assume full classroom responsibility.

Prerequisite: Course 490.

One-fourth day. Four quarter hours credit.

or

One-half day. Eight quarter hours credit.

492 **Advanced Student Teaching** **Every Quarter**
(Elementary Grades Elective)

This course offers a third quarter of student teaching for those in the four-year curriculum who wish more advanced experience than may be acquired in two quarters. Assignment is optional with the Director of Student Teaching and will be given only when the facilities permit. Prerequisite: Course 491.

One-fourth day. Four quarter hours credit.

493 **Student Teaching (Elementary Grades, Special Subjects)** **Every Quarter**

This course consists of teaching in the grades and is required of all students who elect a major in any one of the following fields: fine arts, home economics, industrial arts, music, physical education, and speech correction. It is taken in addition to Education 495.

One-fourth day. Four quarter hours credit.

494 **Student Teaching** **Every Quarter**
(Elementary Grades Elective)

This course offers to students who are enrolled in the four-year curricula for the education of high school teachers an opportunity to do a quarter of student teaching in the grade school in addition to the required student teaching in the high school. This course also offers to students who elect a major in fine arts, home economics, industrial arts, music, physical education, or speech correction an opportunity to do a quarter of teaching in the grades in their respective fields additional to that usually required. Assignment is optional with the Director of Student Teaching and is given only when the facilities of the McMurry Laboratory School or Glidden School permit.

Three courses with 494 constitute a normal load.

One-fourth day. Four quarter hours credit.

495-a, b, or c. **Student Teaching (High School)** **Every Quarter**

This course or 496 is required of all students in the curriculum for the education of high school teachers. It requires eight quarter hours credit for completion, which may be earned in one of the following ways:

a. A student may be assigned to student teaching a half-day (four hours) for one quarter. During this time he will do responsible teaching with two high school groups, reserve an hour each day for the student teaching seminar, and an hour for conference with his supervising teacher.

Two courses in addition to this assignment constitute a normal load.

or

b. A student may be assigned to student teaching one-quarter of the day (two hours) for two quarters. During this time he will do responsible teaching with one high school group, reserve an hour each day during the first quarter for the student teaching seminar and an hour each day in both quarters for conference with his supervising teacher.

Three courses in addition to this assignment constitute a normal load.

or

- c. A student majoring in one of the fields requiring student teaching 493 may, after completing that course, be assigned for his 495 teaching in an out-of-town high school. The student lives in the community to which he is assigned for six weeks and gives his entire time to teaching.

496 Student Teaching (Off-Campus) Every Quarter

Student teaching in this course will be done at the appropriate school level in out-of-town schools. These schools and the training teachers who will supervise students taking this course will be very carefully chosen from among the best schools in this area. A student taking this course will be expected to live in the community in which that school is located for a period of twelve weeks and will spend a full day each day at that school. Assignments will be made on the basis of facilities available at the DeKalb Township High School, facilities available in out-of-town schools chosen for this work, and the total record of the students making application.

A full day for a period of twelve weeks. Sixteen quarter hours credit.

500 Social Foundations of Education Autumn Quarter

A study of the relation of education to society with particular emphasis upon problems of the present age; attention will be directed also to significant cultural trends and their implication for schools.

Four periods a week. Four quarter hours credit.

501 Psychological Foundations of Education Winter Quarter

This course deals with psychological methods of research and of experimentation used to ascertain ways in which objectives of education are being met and to develop improved methods of achieving these aims. Detailed study of some of the outstanding research and writing in educational psychology will be made. Each student will plan a piece of research to be used in his or her own teaching situation or study the literature pertinent to problems encountered in his or her work.

Four periods a week. Four quarter hours credit.

502 The Teaching of Arithmetic in the Elementary School

The first objective of the course is to develop scholarship in the subject to the level necessary to explain all procedures and interrelationships in arithmetic. The second objective is to acquire a knowledge of the important conclusions reached in the many investigations carried on in the field of arithmetic. The third objective is to help the student acquire the ability to use materials and activities in teaching and enriching the arithmetic of the elementary school.

Two periods a week. Two quarter hours credit.

510 Methods of Evaluation Spring Quarter

Emphasizes modern concepts of evaluation; construction and validation of evaluative instruments, reports for school subjects, reporting to

parents, teachers' marks, use of standardized tests and scales, and procedures of evaluating relatively intangible outcomes and personal-social adjustment.

Three periods a week. Three quarter hours credit.

511 Understanding and Guiding the Elementary School Child

A study, in a laboratory situation, of the social and psychological forces affecting the behavior of children from birth to puberty. The study will involve experience in gathering data on the needs of children, experimentation with child guidance, field and clinical studies of social relationships involving children, and field studies in the guidance of children. This includes intensive study of theories on the overall development of children and consideration of the Freudian and the cultural relativist approaches.

Eight periods a week. Eight quarter hours credit.

512 The Elementary School Curriculum **Autumn Quarter**

This course is a study of the research and current practices in the construction and administration of modern school curricula on local and state-wide basis. Major points stressed are: a study of present practices in schools; the relation of the curriculum to society; and the place of the various subjects and subject matter. Observation in various types of schools in order to acquaint the student with current practices.

Three periods a week. Three quarter hours credit.

513 Problems in Elementary Education

A seminar requiring individual investigations of problems in elementary education culminating in a research paper.

Three periods a week. Three quarter hours credit.

521 Understanding and Guiding Youth in the Secondary School **Autumn and Winter Quarters**

This is a laboratory course. Emphasis is placed on working with, playing with, and understanding boys and girls of secondary school age. While actual contact with boys and girls is emphasized, intensive study is demanded of research materials that deal with the nature of boys and girls, the developmental tasks of youth and the techniques of guidance. The types of school experiences needed for high school age students and the ways of organizing teaching-learning situations to achieve the growths desired will cause the class to re-examine the secondary curriculum field.

Four periods a week. Eight quarter hours credit. (Four hours per quarter.)

523 Problems in Secondary Education

A seminar requiring individual investigations of problems in secondary education culminating in a written research paper.

Three periods a week. Three quarter hours credit.

525 **Internship Experience in Secondary Schools**

This course provides an opportunity for the graduate student to work on real educational problems in real situations in public schools. The proposed program for a student must be planned cooperatively with the student, the college instructor or instructors and the representative or representatives of the public school. All arrangements in regard to credit, internship pay, supervision by college and public school personnel must be made individually as seems desirable for all concerned. Credit to be arranged.

531 **The Core Curriculum**

Designed primarily as a basic, introductory course for students interested in developing an understanding of the place and functions of the core and common learnings curricula in the junior and senior high school. A comprehensive view of newer curriculum practices, with emphasis upon the philosophy and psychology upon which the core concept is based. Curriculum planning, experimental programs, the subject-centered and experience-centered curricula, and suggested organizational patterns of general education such as core, common learnings, broad fields and unified studies are analyzed. Specific characteristics of the core program and administrative problems relative to the development of integrated general education curricula are discussed.

Four periods a week. Four quarter hours credit.

532-a and b. **The Selection, Organization, and Guidance of Learning Experiences in the Core Classes**

A laboratory course for advanced study and research in core curriculum and teaching. Qualified students are given practical experiences in selecting and organizing learning experiences for core and common learnings programs. Understandings and skills are developed in the subject-matter and experience unit method of organizing teaching and learning. Attention is given to effective teaching techniques and procedures applicable to the core: cooperative planning, fostering of creativity, audio-visual education, group discussion techniques, communication media, and teaching materials and aids. Major emphasis is placed upon the development of the resource unit as a comprehensive survey, analysis and organization of possible problems, issues and learning experiences that a core teacher may utilize in working cooperatively with youth.

Prerequisites: Course 531 and permission of the instructor.

Eight periods a week. Eight quarter hours credit.

534 **Evaluation of Pupil Progress in the Experience Unit Method**

A course designed to give students in the core sequence an understanding of newer evaluation practices. Major emphasis is upon the formulation of objectives, and analysis of evaluative instruments and procedures in the experience unit method. A study of techniques to evaluate personal-social adjustment, cumulative records, behavior descriptions, cooperative evaluation, and reports to parents in the core curriculum.

Two periods a week. Two quarter hours credit.

- 535 **Field Work in Core Curriculum and Teaching**
An opportunity for qualified students to work individually or in small groups under the guidance of a member of the staff of the department on an approved problem of special concern to students enrolled in the sequence. The practical curriculum and teaching field problem may be carried on by the student in his local situation; on an internship basis planned cooperatively by the staff of the department, the student, and those responsible in the practice situation; or as a part of a larger regional or state curriculum project, such as the Illinois Secondary School Curriculum Project. Credit will be determined in part by the nature of the problem, and the time devoted by the student to research and experimentation and by the college instructor to supervisory activities. Permission required.
Credit to be arranged.
- 541 **The Improvement of Instruction through Supervision**
An analysis of the teaching-learning situation with special emphasis upon the functions of the supervisor in diagnosing and providing for the improvement of instruction. Procedures, techniques, and organizations for supervision, as well as the supervisor-teacher relationships, are studied and practical assistance is provided for students to apply philosophical and psychological principles to supervision. Visits, observations, and discussions with teachers, supervisors, and superintendents.
Five periods a week. Five quarter hours credit.
- 542 **Curriculum of the Elementary/Secondary School**
A critical appraisal of the curriculum and an introduction into the methodology of curriculum development and change. For administrators, supervisors, and curriculum directors.
Three periods a week. Three quarter hours credit.
- 543 **Seminar in Techniques of Research in Supervision and Curriculum Improvement**
Review of research in supervision and curriculum with critical consideration of techniques used. Survey of research in various areas to define and discuss problems, and the planning on an individual or group basis of appropriate techniques of research to answer some of these questions. The carrying through of one short-time plan and critical evaluation of the procedure and the conclusions drawn.
Three periods a week. Three quarter hours credit.
- 545 **Internship in Curriculum and Supervision**
A basic course in the organization and administration of school systems. Develops a philosophy for school administration. Develops understandings of the relation of government at all levels to control, to administration and financing of education. An overview of the functions of the school board and administrative officers and problems of public relations.
Credit to be arranged.

551 School Organization and Administration Spring Quarter

A basic course in the organization and administration of school systems. Develops a philosophy for school administration. Develops understandings of the relation of government at all levels to control, to administration and financing of education. An overview of the functions of the school board and administrative officers and problems of public relations.

Four periods a week. Four quarter hours credit.

552 Duties of School Principals Including Supervision

This course deals with the basic duties of elementary and secondary school principals in the organization, administration and supervision of their schools in the following areas: Organization of the principalship for effective management; office organization and administration; personnel management of pupils; the organization and administration of extra-curricular activities; organization and administration of instruction; the principal as a supervisor of instruction; business duties of principals; the principal in the community; the professional status of principals.

Four periods a week. Four quarter hours credit.

553 Problems in School Administration

A seminar requiring individual investigation of fundamental problems in school administration culminating in a research paper. Possible problems are teacher recruitment and selection; evaluation of teaching and salary schedule construction; and other problems not given sufficient treatment in other required courses. Problems based on the past or anticipated experience of the students will be given a high priority.

Four periods a week. Four quarter hours credit.

554 School Finance and School Buildings

One half of this course is spent on the entire problem of educational finance, theory, practice and control including methods of financing, budgeting, school plant operation, maintenance and capital outlay, supplies, bonding campaigns, building program costs, and so forth. The second half of the course is spent on planning a school building program determining objectives, the planning of buildings around the curriculum, school building standards and equipment, evaluating existing plant and so forth. Field and laboratory work whenever possible. Panel discussions.

Four periods a week. Four quarter hours credit.

555 An Internship in Administration

Students who are well advanced in their work may obtain administrative experience in selected school systems. Conference hours for students and staff members are devoted to discussion of work and problems encountered in the internships. Each student is required to submit a report describing and appraising experience gained in the internship.

Credit to be arranged.

556 School Organization and Administration for Teachers

This course places its emphasis on the development of insight into the role of the teacher in organizational and administrative problems of the school. It deals with such problems as the organization of school units for administrative and instructional purposes, problems of curriculum, teacher selection, schedule making, extracurricular activities, records and reports, guidance, public relations and finance. Three periods a week. Three quarter hours credit.

561 The Teacher's Role in Personnel Work

This is an introductory course in Guidance. It shows how group procedures can be directed to fulfill the needs of pupils in schools. The home room and extracurricular activities, as well as the classroom situation itself, are presented as agencies for directing this aspect of the educational program. Attention is given to techniques for developing interests, attitudes and appreciations so that the student may plan and choose intelligently for the immediate and more remote future in his educational, social and vocational activities. Three periods a week. Three quarter hours credit.

562 Guidance and Counseling Techniques

A background in both psychological measurement and the principles of guidance. Stress on skill in interpreting diagnostic material rather than on theory. Attention to techniques for collecting information regarding a student, making of a diagnosis and techniques of counseling and interviewing. Training will lead to an adequate understanding of the individual student.

Prerequisite: Course 561.

Four periods a week. Four quarter hours credit.

563 The Education of the Exceptional Child

The purpose of this course is to give the prospective classroom teacher a scientific understanding of children who vary from the usual. The psychology, treatment, and care of mentally subnormal and gifted children, physically handicapped children, and children with school and personality difficulties are studied. Individual cases are analyzed intensively. Visits to special schools are made. The purpose of the course is not to produce specialists or clinicians, but to develop more sympathetic understanding on the part of classroom teachers and other school personnel.

Three periods a week. Three quarter hours credit.

564 Personality Maladjustments and Mental Hygiene

The purpose of this course is to develop insights into various types of personality maladjustments. It deals with simple cases of neuroses and psychoneuroses and indicates the trend of disintegration to the point of total disintegration as in the case of psychotic personalities. This course stresses delusion, abnormalities of memory, emotions, intelligence, hysteria, and also types of psychotic personalities, such as manic-depressives and the various types of schizophrenics, such as simple.

hebephrenic, catatonic, and paranoid. A large part of this course is devoted to applications of principles of mental hygiene and their relation to adjustment problems through education. Four periods a week. Four quarter hours credit.

572 Community-School Relationships **Winter Quarter**

This course is a study of the relationships between the basic community unit, the family, and the school; class differences and the related differences in behavior and values; how the family and the school can support and reinforce each other; participation of the larger community in the education and servicing of children and youth. Three periods a week. Three quarter hours credit.

573 Public Relations

Consideration is given to the task of interpreting the school to the community through the use of the newspapers, school reports, radio, and through the aid of professional and lay organizations. The proper relationship between the community, the board of education, the superintendent and his staff is emphasized. Emphasis is given to the understanding of the public as to the place of the school in local, state, and federal structure.

Two periods a week. Two quarter hours credit.

574 Parent Education

This course stresses the importance of co-operation between parent and teacher. Different methods of conducting study groups and programs for parent meetings are investigated and analyzed. Several suggested techniques for developing parent-child and school relationships will be considered. Some attention is given to the family and parent-child problems. A survey is made of the recent literature in the field. Practical problems of the class receive attention.

Three periods a week. Three quarter hours credit.

581 The Teaching of Reading in the Elementary School

This course primarily considers the developmental reading program in the elementary school. However, in order that this program may be continually diagnostic and remedial, some time is devoted to diagnosis and remediation. Emphasis is given to the reading program as a whole rather than being confined to particular grades. It is desirable that at least one other course in reading precede this course, although none is required.

Four periods a week. Four quarter hours credit.

582 Reading in the High School

This course includes a study of the reading problems among high school students. The course will be centered around the reading improvement of all high school students. Some attention will also be given to the special problems of the retarded reader.

Four periods a week. Four quarter hours credit.

583 Social Learnings in the Elementary School

This course is a synthesis of principles and procedures related to the development of children's social experiences. Although emphasis

is given to the social studies, the fact is recognized that social learnings are broader than any one area in the curriculum. Democratic living, child growth and development characteristics, improvement of learning, effective group processes, evaluation as a continuous process are stressed as well as actual cases of children living and working together in solving problems of common concern.
Two periods a week. Two quarter hours credit.

584 The Teaching of Science in the Elementary School

This course considers the methods and techniques used in selecting and providing for experiences in elementary school science. The course also includes a study of equipment and materials suitable for elementary school students. Students who plan to register for this course are not required to have a minor in science, but should have a background of information in science. (The requirements for this course may be satisfied by Social Science 491.)
Two periods a week. Two quarter hours credit.

586 Related Arts in the Elementary School

This course is designed to acquaint the student with the function of the arts in the total elementary school program. It includes an analysis of contemporary trends in the teaching of art, industrial arts, home economics, music, dance, and literature. Currently significant literature on the teaching of the arts in the elementary school will be evaluated. Desirable materials and equipment for children's use will be examined. When facilities are available children at work in the areas of the arts will be observed.
Three periods a week. Three quarter hours credit.

587 Problems in Audio-Visual Education

This course includes individual projects and research in the selection and utilization of audio-visual materials; selection, use, and maintenance of equipment; unit costs; evaluation procedures; and the setting up and administering of an audio-visual program.
Four periods a week. Four quarter hours credit.

590 Group Process in Education

Democratic principles and patterns of group action are analyzed and applied to teaching-learning situations on all levels. Relationships existing between the purposes and values of cooperative learning and the aims of modern education are determined. Studies are made of experimentation and research in group dynamics, emphasizing, among other aspects, the concept, values, techniques, methods of observation, recording and evaluating group processes, problems in human relations, and opportunities to utilize cooperative techniques in instructional programs.
Two periods a week. Two quarter hours credit.

591 Techniques of Educational Measurement—Applied Statistics

This course develops understanding of the concepts of testing and measurement which a teacher or school administrator meets in current educational practice. It also deals with the interpretation of informal and standardized tests as supervisory and guidance instruments

for the diagnosis, evaluation and improvement of instruction in the elementary and secondary schools. This course includes the statistics of simple test score analysis. Functional problems in remedial work and panel discussion are used extensively. Three periods a week. Three quarter hours credit.

592 Philosophy of Education

Through analysis of school practice the major issues in current education are considered. These issues are examined in terms of their historic origins and the controversies which have developed around them. The aims of the course are to help students understand the major current educational philosophies and to begin formulating their educational convictions. Individual, panel and seminar discussions are the principal techniques used in conducting this course. Four periods a week. Four quarter hours credit.

593 Supervision of Student Teaching

This course is primarily for those who are interested in serving as supervising and cooperating teachers in a student teaching program. The course is built around learning to deal adequately with the problems that student teachers face as they participate in their student teaching work. Three periods a week. Three quarter hours credit.

DEPARTMENT OF ENGLISH GRADUATE MAJOR IN ENGLISH

Students who elect a graduate major in English must satisfy the following course requirements in English:

The student will be expected to do approximately two-thirds of his graduate work in courses prescribed by the English Department. The nature and scope of the courses prescribed will be determined by an examination of the individual student's undergraduate academic record and his general background.

Description of Courses

470 The English Novel **Autumn and Spring Quarters**

The purpose of this course is to give a brief survey of the English novel. Emphasis is placed upon the novel as a type of literature which has developed from simple early forms to highly finished later forms. The members of the class study and discuss many novels of the eighteenth and nineteenth centuries. Four periods a week. Four quarter hours credit.

471 English Prose of the Nineteenth Century **Winter Quarter**

This course is a study of the main currents of nineteenth century thought as expressed in the writings of Carlyle, Mill, Ruskin, Macaulay, and others whose pronouncements exerted seminal influence. Four periods a week. Four quarter hours credit.

- 473 **Romantic Poetry** **Winter Quarter**
 This course begins with a study of Romantic themes and tendencies as they arose in the eighteenth century and continues with a detailed study of their flowering in Coleridge, Wordsworth, Byron, Shelley, and Keats.
 Four periods a week. Four quarter hours credit.
- 474 **English Poetry of the Victorian Period** **Autumn Quarter**
 This course is a survey of English poetry from Tennyson to Hardy, with special emphasis upon Tennyson, Browning, and the pre-Raphaelites.
 Four periods a week. Four quarter hours credit.
- 475 **Contemporary Poetry** **Winter Quarter**
 This course approaches the study of contemporary poetry both from the point of view of its intrinsic interest and of its position in modern literary developments. Representative British and American poets are stressed.
 Four periods a week. Four quarter hours credit.
- 476 **The Modern Novel** **Spring Quarter**
 This course offers a study of modern fictional trends, with considerable emphasis placed upon the development of various movements on the European continent and the impact of these upon the twentieth century English and American novel.
 Four periods a week. Four quarter hours credit.
- 480 **The Materials of High School English** **Autumn and Spring Quarters**
 This course is a study of the methods, devices, techniques, and curricular materials useful to the English teacher in the secondary schools of Illinois.
 Two periods a week. Two quarter hours credit.
- 481 **Grammar for Teachers** **Autumn and Spring Quarters**
 This course is a study of the structure of current usage.
 Two periods a week. Two quarter hours credit.
- 485 **English Drama to 1642** **Spring Quarter**
 This course gives the historical phases of the development of the drama from its origin in miracle and mystery plays through the period of the moralities, the interludes, the imitation of Latin tragedy and comedy, the dramas of such writers as Lyly, Greene, Kyd, Marlowe, Johnson, Beaumont and Fletcher, to the closing of the theatres in 1642.
 Four periods a week. Four quarter hours credit.
- 486 **Modern Drama** **Spring Quarter**
 This course acquaints the student with the structure and the style of the drama of the last half century, the tendencies in modern dramatic writing, and the relation of modern drama to contemporary art and life. Representative plays from Ibsen to the present day showing the trends of British, Continental, and American drama are discussed.
 Four periods a week. Four quarter hours credit.

- 505 **The History of Literary Criticism** **Autumn Quarter**
 The analytical, judicial, and interpretative functions of criticism will be considered in their relationship to creative achievement. Theories held by Plato, Aristotle, Horace, Plotinus, Boileau, Dryden, Pope, Coleridge, and other major figures will be emphasized. Attention will be given to such exponents of the New Criticism as T. S. Eliot, I. A. Richards, C. K. Ogden, and John Crowe Ransom.
 Four periods a week. Four quarter hours credit.
- 507 **Chaucer**
 Chaucer's principal works will be read and examined in some detail, with emphasis on the poet's literary growth and on his skill in interpreting English life of the late Middle Ages. In the early weeks of the course, intensive work will be done on the language of the Fourteenth Century.
 Five periods a week. Five quarter hours credit.
- 510 **Survey of Medieval Literature**
 The content of the course will consist of the reading, in translation, of such major medieval works as *The Cid*, *The Song of Roland*, *The Nibelungenlied*, *The Volsungasaga*, *The Elder Edda*, *The Mabinogian*, *Fled Bricrend*, *Consolation of Philosophy*, and *The Divine Comedy*. Some attention will be given to the French and English Romances and to religious and didactic literature.
 Four periods a week. Four quarter hours credit.
- 512a **Studies in American Literature** **Winter Quarter**
 The field of study will be the Puritan period and "The Age of Reason." Extensive reading will be assigned in such authors as Cotton Mather, Edwards, Winthrop, Franklin, Paine, Jefferson, and Freneau. Papers will be prepared for class presentation and discussion. Opportunity for conferences with the instructor will be provided.
 Four periods a week. Four quarter hours credit.
- 512b **Studies in American Literature** **Spring Quarter**
 Studies of "The Romantic Movement" will begin with Irving and Cooper, but will mainly be concerned with the great nineteenth century figures, Emerson, Poe, Hawthorne, Lowell, Melville, and Whitman. Papers will be prepared for class presentation and discussion. Opportunity for conferences with the instructor will be provided.
 Four periods a week. Four quarter hours credit.
- 512c **Studies in American Literature**
 The concepts of Realism and Naturalism will be considered and their manifestations observed in the writings of Twain, Harte, James, Howells, Garland, Dreiser, Norris, and certain poets. Papers will be prepared for class presentation and discussion. Opportunity for conferences with the instructor will be provided.
 Four periods a week. Four quarter hours credit.

- 560 **Elizabethan Non-Dramatic Literature**
 This course shows the development of Renaissance culture in England as it is reflected in the sonnets, romances, "courtesy books," criticism, fiction, history, essays, and translations. Emphasis will be placed upon More, Spenser, Daniel, Sidney, Bacon, and Donne.
 Four periods a week. Four quarter hours credit.
- 561 **Milton and His Contemporaries**
 Major attention in this course is given to the Renaissance-Puritan conflict in Milton as seen in the longer poems and plays, to the divided interest of poets and playwrights of the period in both theology and politics, and to the acceptance and rejection of the new science and new philosophy of the seventeenth century. An examination is made of the principle of absolutism as defended by Hobbes and attacked by Milton, and its eventual overthrow by Locke. Three revolutions—scientific-humanist-political, political, and theological—are studied in the works of writers from 1630 to 1670.
 Four periods a week. Four quarter hours credit.
- 563 **Pope and His Contemporaries** **Winter Quarter**
 Attention will be given to Pope's career as a satirist, his critical opinions, his religious and philosophical ideas, and his relations with contemporary literary and political figures. Papers will be prepared for class presentation and discussion.
 Four periods a week. Four quarter hours credit.
- 565 **Johnson and His Contemporaries** **Spring Quarter**
 As a representative of the persistence of classical dogma and tradition, Johnson will be studied, along with appraisals of his stature as psychologist, moralist, and critic. The recent discoveries of vast amounts of Boswell materials will give direction to this period study. The course will not overlook the voluminous correspondence of Walpole now being edited and published in more complete form than heretofore available.
 Four periods a week. Four quarter hours credit.
- 571 **Studies in Victorian Prose** **Winter Quarter**
 The works of two or more important writers of nonfictional prose of the period will be examined.
 Four periods a week. Four quarter hours credit.
- 573a **Studies in Coleridge and Wordsworth** **Winter Quarter**
 Attention will be centered on the philosophy of composition and practice of these poets, together with revelatory memoirs of this period. *The Prelude* will be studied as a prophetic introduction to psychoanalysis.
 Four periods a week. Four quarter hours credit.
- 573b **Studies in Shelley and Keats** **Spring Quarter**
 The work of Shelley as a proponent of political and social reform will take precedence over the popular approach to Shelley as a lyric poet. The controversial lines of attack and support by T. S. Eliot, Herbert Reed, F. R. Leavis, Newman Ivy White, and other twentieth century

critics of Shelley will be evaluated. Some emphasis will be placed on the classical elements in Keats rather than holding exclusively to the hackneyed romantic considerations.

Four periods a week. Four quarter hours credit.

574 Studies in Victorian Poetry **Spring Quarter**

The works of two or more important poets of the period and their relation to the literary, intellectual, and social movements of their age will be studied.

Four periods a week. Four quarter hours credit.

576 Trends in the Twentieth Century Novel

Considerations of kaleidoscopic form (Romains, Dos Passos); Biblical narrative as basis for fiction correlating impulses and disciplines of man in the Hebraic culture with those of man in the Western world in the present century (Mann, Asch); patterns of decadence (Faulkner, Kafka, Farrell); war's impact on civilization (Hersey, Mailer); negatives of Utopia (Huxley, Koestler, Orwell); and disruptions of traditional form (Joyce, Woolf)—indicate the main directions of study.

Five periods a week. Five quarter hours credit.

580 Studies in Shakespeare **Autumn Quarter**

An intensive study, showing Shakespeare as dramatic artist and theatrical craftsman, will be made of some of the plays of the dramatist's maturity, such as *Hamlet*, *Othello*, *King Lear*, *Antony and Cleopatra*, *Cymbeline*, and *The Winter's Tale*. Such a study will aim at the development of literary, historical, and textual dramatic criticism.

Four periods a week. Four quarter hours credit.

582a Problems in the Teaching of English in the Junior High School **Autumn Quarter**

Recent research in the teaching of literature and communication skills in the later elementary and junior high school years will be studied, and ways of utilizing research findings for improving the language arts program will be discussed. Emphasis will be placed on means whereby children may be taught to read critically, listen critically, and express ideas effectively.

Three periods a week. Three quarter hours credit.

582b Problems in the Teaching of English in the Senior High School **Winter Quarter**

Methods of teaching the various phases of English and the several types of literature in the senior high school will be studied. Emphasis will be placed on the objectives, materials, and current trends in the field of language education.

Three periods a week. Three quarter hours credit.

582c Problems in the Teaching of Reading **Spring Quarter**

This course is designed to prepare the student to carry out a developmental reading program and to handle remedial problems.

Three periods a week. Three quarter hours credit.

584 **Restoration Drama**

The heroic drama, Restoration comedy and farce, classical tragedy, the ballad opera, and the beginnings of middle class theatre are examined in this course. French theories of dramatic composition and the work of Moliere and Racine are compared with Dryden's criticism and the tastes of the Restoration. Continental stagecraft and its adoption in England, the beginnings of the modern theatre, and the indebtedness of the Restoration to the Elizabethan stage are also treated. Four periods a week. Four quarter hours credit.

585 **English Drama of the Nineteenth Century** **Autumn Quarter**

With the innovations of Garrick and the influence of the Gothic novel as background, this course takes up three main strands: the spread of lower-class drama (especially melodrama and farce), the literary theatre of Byron, Shelley, Coleridge, Browning, and Tennyson, and the turbulent and vital stage history of the century. Considerable attention is also given to the revival of Shakespeare, his great interpreters—Kean, Macready, Phelps, Irving, and Ellen Terry—and his great romantic critics: Hazlitt, Lamb, and Coleridge. Four periods a week. Four quarter hours credit.

586 **Trends in Twentieth Century Drama** **Winter Quarter**

This course shows the shifting trends of naturalism, realism, symbolism, and expressionism in drama and their relation to changing conditions in America, England, and Europe. Emphasis will be placed on the plays of Shaw, O'Casey, Chekhov, Rostand, Maugham, O'Neill, Paul Green, Maxwell Anderson, and T. S. Eliot. Four periods a week. Four quarter hours credit.

DEPARTMENT OF MATHEMATICS
GRADUATE MAJOR IN MATHEMATICS

Students who elect a graduate major in mathematics must satisfy the following course requirements in mathematics:

- (a) Courses 450 and 451 if these courses or their equivalents were not included in the student's undergraduate program.
- (b) At least two quarter hours credit in courses 550a or 550b.
- (c) At least six courses to be selected from courses 405, 410, 420, 430, 505, 510, 515, 520, 530, and 540. At least three courses must be on the 500 level.

Description of Courses

405 **Theory of Equations** **Autumn Quarter**

This course includes an extension of some of the work begun in Courses 220 and 221. Among the topics considered are: the solution of the cubic and quartic equations by radicals, Descartes' rule of signs, Sturm's theorem, the solution of numerical equations, determinants, systems of linear equations, and matrices.

Prerequisite: Course 320.

Four periods a week. Four quarter hours credit.

- 410 **Mathematics of Statistics I** **Winter Quarter**
 The purpose of this course is to study the classification and presentation of data; probability; the normal probability curve; errors and computation; moments; curve fitting, including the graduation of the normal curve; and the theory of correlation. Emphasis is placed upon the mathematical development of the formulas and theory. Offered every other year. (Not offered during 1951-1952.)
 Prerequisite: Course 321 or equivalent.
 Three periods a week. Three quarter hours credit.
- 415 **Advanced Synthetic Geometry** **Autumn Quarter**
 In this course the student reviews the nature and the content of the Euclidean geometry commonly studied in the high school and enlarges that content to include some of the topics of modern geometry. The foundations of the geometric structure; the methods of proof and the methods of discovering proof; theorems and original exercises on the geometry of the triangle, harmonic section, poles and polar, inversion, cross-ratio, and related topics are considered.
 Prerequisite: Solid geometry.
 Four periods a week. Four quarter hours credit.
- 420 **Differential Equations I** **Winter Quarter**
 It is the purpose of this course to present the more important methods of solution of ordinary differential equations of the first order and higher orders. Some attention is given to practical applications of differential equations in solving problems in geometry and in science. Offered every other year.
 Prerequisite: A year of calculus.
 Four periods a week. Four quarter hours credit.
- 430 **Advanced Calculus I** **Winter Quarter**
 The content of the course includes fundamental theorems on limits, differentiation, and Riemann integration; line integrals, surface integrals, Green's theorems, Stokes' theorem, Fourier's series, and vectors. Offered every other year. (Not offered during 1951-1952.)
 Prerequisite: A year of calculus.
 Four periods a week. Four quarter hours credit.
- 440 **History of Mathematics** **Spring Quarter**
 Mathematics 440 gives the student an opportunity to get acquainted with the men of history who made outstanding contributions in the field of mathematics. The course gives attention also to the important steps in the development of each of the several branches of mathematics through the first steps of the calculus. Offered every other year.
 Four periods a week. Four quarter hours credit.
- 450 **Teaching Practices in High School Mathematics I** **Autumn Quarter**
 This course deals with the teaching of arithmetic, algebra, informal geometry, and numerical trigonometry in the seventh, eighth, and ninth years. Emphasis is on the social and mathematical aims, selec-

tion and organization of content, methods of presenting topics in the classroom, classroom procedure, supplementary instructional equipment, and means of evaluating instruction.

Prerequisite: Course 320 or equivalent.

Four periods a week. Four quarter hours credit.

451 **Teaching Practices in High School Mathematics II** **Winter Quarter**

This course deals with the arithmetic, algebra, demonstrative geometry, and trigonometry commonly taught in the tenth, eleventh, and twelfth years. Emphasis is similar to that described in Course 450. Considerable time is devoted to the nature of geometric reasoning and its relation to reasoning in other fields. The importance of continuing the study of arithmetic in these years is stressed.

Four periods a week. Four quarter hours credit.

502 **The Teaching of Arithmetic in the Elementary School** **On Demand**

The first objective of the course is to develop scholarship in the subject to the level necessary to explain all procedures and interrelationships in arithmetic. The second objective is to acquire a knowledge of the important conclusions reached in the many investigations carried on in the field of arithmetic. The third objective is to help the student acquire the ability to use materials and activities in teaching and enriching the arithmetic of the elementary school.

Two periods a week. Two quarter hours credit.

505 **Modern Algebra** **Winter Quarter**

In this course the theory of algebra is studied in the following areas: (1) polynomials and their most fundamental properties, (2) properties of determinants, (3) theory of linear dependence, (4) linear equations, (5) properties of matrices, (6) invariants, and (7) quadratic forms.

Prerequisite: Course 405 or equivalent.

Four periods a week. Four quarter hours credit.

510 **Mathematics of Statistics II** **Spring Quarter**

This course is a continuation of Mathematics 410. The topics considered include probability and statistical theory, frequency curves, partial correlation, multiple correlation, fundamentals of sampling theory, the χ^2 distribution, and interpolation and graduation. Offered every other year. (Not offered during 1951-1952.)

Prerequisite: Course 410 or equivalent.

Three periods a week. Three quarter hours credit.

515 **Advanced Analytic Geometry** **Autumn Quarter**

This course includes the topics of coordinates and cosines, planes and lines, determinants and matrices, surfaces and curves, quadric surfaces, and transformations.

Prerequisite: Course 222 or equivalent.

Four periods a week. Four quarter hours credit.

- 520 **Differential Equations II** **Spring Quarter**
 This course is a continuation of Mathematics 420. Further consideration is given to ordinary differential equations of the first order and higher orders to include exact differential equations, integration in series, equations with more than two variables, and applications. Some attention is given to partial differential equations of the first and second orders. Offered every other year.
 Prerequisite: Course 420 or equivalent.
 Three periods a week. Three quarter hours credit.
- 530 **Advanced Calculus II** **Spring Quarter**
 This course is a continuation of Mathematics 430. It includes the topics of partial differentiation, vectors, power series, differential geometry, Stieltjes Integral, Laplace transform, and applications. Offered every other year. (Not offered during 1951-1952.)
 Prerequisite: Course 430 or equivalent.
 Three periods a week. Three quarter hours credit.
- 540 **Topics in Higher Mathematics for Teachers** **Autumn Quarter**
 This course includes selected topics from algebra, geometry, and analysis. The topics will vary to some extent, but will include such topics as the function concept, theory of numbers, an introduction to non-euclidean geometry, topology, postulational approach to mathematics, and constructions with ruler and compasses.
 Four periods a week. Four quarter hours credit.
- 550a **Seminar in the Teaching of High School Mathematics** **Spring Quarter**
 This course is devoted to individual and group problems related to the teaching of high school mathematics. Offered every other year.
 Prerequisite: Course 450 or course 451.
 Two hours a week. Two to five quarter hours credit.
- 550b **Seminar in the Teaching of High School Mathematics** **Spring Quarter**
 Same as Course 550a. Offered every other year. (Not offered during 1951-1952.)
 Two hours a week. Two to five quarter hours credit.

DEPARTMENT OF THE PHYSICAL SCIENCES
GRADUATE MAJOR IN THE PHYSICAL SCIENCES

Students who elect a graduate major in the physical sciences must satisfy the following course requirements in the physical sciences:

The minimum requirement for a major in a single field is sixteen quarter hours credit.

Description of Courses

CHEMISTRY

- 400 **Inorganic Preparations** **Autumn Quarter**
This is a laboratory course which includes preparation and purification of a number of inorganic compounds which illustrate certain fundamental principles in inorganic chemistry. Offered every other year. (Not offered during 1951-1952).
Prerequisite: Course 301.
Six periods a week. Three quarter hours credit.
- 402 **Quantitative Analysis** **Spring Quarter**
(previously listed as 302)
This course is varied to suit the options of the individual students enrolled. Analyses may be run on a variety of substances. It applies the general methods and techniques acquired in Courses 300-301.
Prerequisite: Course 301.
Six periods a week. Three quarter hours credit.
- 410 **Organic Preparations** **Winter Quarter**
This is a laboratory course in which several methods of organic synthesis are studied and used for the preparation of different organic compounds.
Offered every other year. (Not offered during 1951-1952.)
Prerequisite: One year of organic chemistry.
Four to eight periods a week. Two to four quarter hours credit.
- 415 **Biological Chemistry** **Spring Quarter**
This is an introductory course covering various topics such as the chemistry and metabolism of the carbohydrates, fats, proteins, and minerals; the chemistry of the tissues, blood, urine, vitamins, hormones, and enzymes; and related topics. It includes lectures and laboratory work. Offered every other year.
Prerequisite: Course 311 or 315.
Six periods a week. Four quarter hours credit.
- 420 **Qualitative Organic Analysis** **Spring Quarter**
This course involves a thorough review of organic group reactions. The laboratory work is largely concerned with the identification of a few organic compounds and simple mixtures. Offered every other year.
Prerequisite: One year of organic chemistry.
Eight periods a week. Four quarter hours credit.

430-431-432 **Physical Chemistry**

Autumn, Winter, and Spring Quarters

This course includes lectures and laboratory work dealing with gases, liquids, solids, solutions, phase rule, chemical reactions, colligative properties, electrometry, and thermodynamics. Offered every other year.

Prerequisites: Two years of college chemistry and one year of college physics.

Advisable Prerequisite: Differential and integral calculus.

Six periods a week for each unit. Four quarter hours credit for each unit.

500 **Advanced Inorganic Chemistry** **On Demand**

This course involves a thorough treatment of the fundamentals of inorganic chemistry. Special emphasis is given to the theoretical background of these fundamentals.

Prerequisite: Course 301.

Three periods a week. Three quarter hours credit.

504 **Special Topics in General and Physical Chemistry** **On Demand**

This course includes lectures, discussion, and reports on topics of special interest in general and physical chemistry.

Prerequisite: Course 400 or 432 or equivalent.

Two periods a week. Two quarter hours credit.

505 **Special Topics in Analytical Chemistry** **On Demand**

This course includes lectures, discussion, and reports on topics of special interest in analytical chemistry.

Prerequisite: Course 301 or equivalent.

Two periods a week. Two quarter hours credit.

506 **Special Topics in Organic Chemistry** **On Demand**

This course includes lectures, discussion, and reports of topics of special interest in organic chemistry.

Prerequisite: Course 312 or equivalent.

Two periods a week. Two quarter hours credit.

507 **Chemistry Seminar** **On Demand**

This is a seminar in which selected topics are discussed. One or more members of the chemistry staff may participate.

Prerequisite: A minor in chemistry.

One to two periods a week. One to two quarter hours credit.

510 **Advanced Organic Chemistry** **On Demand**

This lecture course is a survey of the field of organic chemistry. It includes a study of the limitations of the general rules presented in the elementary course, the mechanism of organic reactions, and an interpretation of the electronic nature of organic compounds.

Prerequisite: One year of organic chemistry.

Three periods a week. Three quarter hours credit.

535 Research

On Demand

This course consists of a systematic study of some original problem under the direction of a staff member in charge. It may involve experimental laboratory work. Or it may involve teaching procedure or a problem in professional education.

Two to eight periods a week. One to four hours credit.

PHYSICS AND PHYSICAL SCIENCE

44.) Science Teaching Procedure in the Elementary School

Spring Quarter

This course is designed for students who are interested in elementary science teaching and supervision. It treats the place of science in the elementary school of today. Numerous experiments and demonstrations are performed. Study trips are taken. Wide use is made of the newer science books for children.

Prerequisite: Permission from the instructor.

Four periods a week. Four quarter hours credit.

460-461-462 Advanced General Physics (not for physics majors) Autumn, winter, and Spring Quarters

This course is planned to serve the needs of students who have a limited training in fundamental physics or who feel the need of a refresher before going ahead with advanced courses. Stress is laid on concepts and applications. The treatment is adapted to the needs of the class. Lectures, discussion, problems, and laboratory work.

Prerequisite: One year of college physics or consent of the instructor. Six periods a week for each unit. Four quarter hours credit for each unit.

470-471 Stomic and Nuclear Physics

On Demand

This two-quarter course includes a study of cathode rays, positive rays, ionization, current and potential gradients, thermo and photoelectric effects. Lectures, discussion, reports, and laboratory work are included.

Prerequisite: One year of college physics.

Six periods a week for each unit. Four quarter hours credit for each unit.

475 Electronics I

On Demand

This course reviews D. C. and A. C. circuits, and covers the simple circuit components used in modern electrical equipment. It includes vacuum tubes and simple radio circuits. Lecture and laboratory are included.

Prerequisite: Course 375 or consent of instructor.

Six periods a week. Four quarter hours credit.

485 **Acoustics** **On Demand**

This course is a study of the fundamentals of wave motion and their application to sound. It includes reflection, diffraction, and absorption of sound, especially as related to the acoustic properties of rooms and buildings.

Prerequisite: One year of college physics or consent of instructor.
Four periods a week. Four quarter hours credit.

490 **History of Science** **On Demand**

This course includes a review of the development of science in general from the beginning of recorded history on down to the present. It confines the study to physical sciences in recent times. It stresses significant stages and present trends. It is intended to furnish background material for science teaching.

Three periods a week. Three quarter hours credit.

492 **Biography of Famous Scientists** **On Demand**

This course is intended to give the student familiarity with the work and personal characteristics of famous scientists. Assigned reading is supplemented with oral and written reports. This serves as background material for the classroom teacher.

Two periods a week. Two quarter hours credit.

499 **Teaching of Physical Sciences** **Spring Quarter**

This course deals with classroom and laboratory problems which the high school teacher is likely to face. Consideration is given to requisitions for supplies and equipment; texts, reference books, and periodicals; testing programs.

Prerequisite: Physical science major or consent of instructor.

Two periods a week. Two quarter hours credit.

*560 **Special Problems in Physics** **On Demand**

Each student selects a problem to be studied with the assistance of the physics staff. The problem may be a technical one in some branch of physics, or it may be one in professional education having to do with teaching procedure.

Two to eight periods a week. One to four quarter hours credit.

564-565-566 **Physical Science for Elementary Teachers** **On Demand**

The principles and applications studied in this course are illustrated by simple apparatus constructed by members of the class, using materials readily available at little or no cost. Each individual will construct such pieces and take them with him at the end of the course. Some equipment and supplies may be furnished at cost from the laboratories. Opportunity is provided for becoming familiar with some of the science texts and reference materials suitable for use in elementary grades.

Four to eight periods a week for each unit. Two to four quarter hours credit for each unit.

- *567 Physics Seminar** **On Demand**
 Problems in physics are discussed under the guidance of the physics staff. Applications and effects on the life of modern man are treated. One to two periods a week. One to two quarter hours credit.
- 575 Electronics II** **On Demand**
 This is a continuation of Course 475. It covers more advanced and complicated circuits including oscillators, amplifiers, and industrial controls.
 Prerequisite: Course 475 or consent of instructor.
 Six periods a week. Four quarter hours credit.
- 580 Thermodynamics** **On Demand**
 This course includes the laws of thermodynamics and their application to various thermal systems. The treatment is more complete and thorough than is permitted in Courses 360 or 430.
 Advisable Prerequisites: One year each of chemistry and physics; differential and integral calculus.
 Three periods a week. Three quarter hours credit.
- 595 Orientation of College Science to Public School Teaching** **On Demand**
 This course attempts to adapt the material of the various courses of a physical science major to classroom teaching in the primary and secondary schools. The instructor collaborates with personnel in the laboratory schools. The treatment varies with individual needs.
 Two periods a week. Two quarter hours credit.

* Course may be repeated in successive quarters or summer sessions for additional credit.

DEPARTMENT OF THE SOCIAL SCIENCES
GRADUATE MAJOR IN THE SOCIAL SCIENCES

Students who elect a graduate major in the social sciences must satisfy the following course requirements in the social sciences:

Every major in the social sciences will have completed by the end of the fifth year a minimum of twelve quarter hours credit in each of the fields comprising the general area: namely, history, economics, sociology, and political science. At least four quarter hours credit in each field must be at the graduate level.

Description of Courses

ECONOMICS

460 Business Cycles

Recent research which seeks to explain the prosperity-recession-depression-recovery patterns of modern economic society are presented against a background of earlier attempts to account for and live with the cyclical character of the economy.

Prerequisite: Course 360 or equivalent.

Two periods a week. Two quarter hours credit.

467 The Cooperative Movement

This course deals with the theory of cooperative enterprise, the practice of cooperative techniques in agriculture, industry, and distribution both in the United States and abroad, and the problems of competition between cooperative and non-cooperative forms of business.

Prerequisite: Course 260 or equivalent.

Two periods a week. Two quarter hours credit.

468 World Economic Problems

Among the topics discussed in this comprehensive survey are technology and cultural lag, nationalism, population trends and pressures, breakdown of international trade, distortion in distribution of basic raw materials, cartels, unemployment, and contemporary world organizations to deal with these problems.

Prerequisite: Course 360 or equivalent.

Three periods a week. Three quarter hours credit.

560 Advanced Economic Theory

The readings in this course are designed to give an intensive treatment of the major works of economic theories from Adam Smith through contemporary writings of accepted merit such as the theory of games and economic behavior. The History of Ideas is a desirable forerunner for this course.

Prerequisite: Course 360 or equivalent.

Four periods a week. Four quarter hours credit.

563 **Modern Economic Systems**

Critical, detailed study of capitalism, socialism, communism, fascism, and cooperatives. These are compared as to economic institutions, economic decisions, production, agriculture, the mechanism of exchange, investment, distribution of income, public finance, labor and international trade. Recommended pre-study: History of Ideas of Non-Democratic Governments.

Prerequisite: Course 360 or equivalent.

Four periods a week. Four quarter hours credit.

564 **Economic Well-Being and Education**

The content of this course is selected on the assumption that the public educational system is an agency of social control capable of affecting the long-run economic welfare of the United States. Specific aspects of consumption, savings, distribution, and production influenced by education are dealt with.

Prerequisite: Course 364 or permission of the instructor.

Two or three periods a week. Two or three quarter hours credit.

HISTORY

420 **American History, the Middle Period 1815-1850**

Winter Quarter

This is an intensive study of a shorter period of National history. Attention is centered on the greatest possible understanding of a few major developments.

Prerequisite: Courses 220 and 221.

Four periods a week. Four quarter hours credit.

421 **Recent History of the United States**

Autumn Quarter

This course is an intensive study of the civilization of the United States during its transition from a predominantly agricultural character to its present industrial and financial preeminence and an investigation of the nation's rise to leadership among the states of the West in world affairs.

Prerequisite: Courses 220 and 221.

Four periods a week. Four quarter hours credit.

422 **Economic History of the United States**

A descriptive survey of the evolution and expansion of American economic institutions and processes from colonial times to 20th century technological prominence. Stress will be placed upon environmental factors, the importance of strategic location of raw materials, the impact of functional technology and the development of industrial and finance capitalism.

Four periods a week. Four quarter hours credit.

423 **Intellectual and Social History of Twentieth Century United States**

A specialized treatment of cultural aspects of American life since the 90's, with extensive use of phonographic documentaries as illustrative materials. A general examination of changing tastes in literature.

drama, and music, along with concentration on attention upon changing attitudes, interests, and patterns of thinking during this three generation span.

Four periods a week. Four quarter hours.

426 **The Republican Period of Latin America**

A survey of the Latin American republics from the time of the revolutions against the European colonial powers to the present. The political, economic, and social institutions will be carefully examined, with special stress upon the phenomenon of the *caudillo* and dictator in Latin American political life.

Prerequisite: Course 325 or equivalent.

Four periods a week. Four quarter hours credit.

430 **Twentieth-Century Europe**

Spring Quarter

This course is an intensive study of European and World affairs in this century. The two World Wars, their causes, efforts at keeping the peace, attempts at international controls, and the issues, events, and trends in history since 1945 are analyzed.

Prerequisite: Course 332 or equivalent.

Four periods a week. Four quarter hours credit.

432 **The History of Ideas**

Every Quarter

This course is designed to give students some first-hand knowledge of what men throughout the ages have thought about the perennial problems which beset humanity, by reading the actual writings of great intellectual leaders from the Greeks to the present.

Prerequisite: Senior standing.

Four periods a week. Four quarter hours credit.

434 **English History to 1603**

This course provides a background for the study of Medieval and Renaissance English Literature, and for the historical understanding of the origins and development of the English nation and people through the Tudor period.

Four periods a week. Four quarter hours credit.

436 **British History, 1815 to Present**

This course provides a background for the study of Romantic, Victorian and Contemporary English Literature, and for the historical understanding of British institutions and peoples, including the growth of the Commonwealth of Nations and the development of socialistic institutions in England and the Dominions.

Four periods a week. Four quarter hours credit.

438 **American Social Reform Movements Since 1865**

This course will familiarize the student with a number of the important reform movements. Some of them will include those connected with the farmers, workers and intellectuals along with their declarations, platforms, social philosophies, techniques of action and principal achievements in national and local affairs.

Prerequisite: Course 221, 421, or equivalent.

Two periods a week. Two quarter hours credit.

520 **Historiography**

A study of the great historians and their literature, from the Greeks to the present. An analysis of what "history" has meant to historians of all ages, the methods they have used, the theories or philosophies they have held. It is expected that the Social Science teacher will gain from this course some insight into what history is today and the role it can play in understanding our world.

Two periods a week. Two quarter hours credit.

521 **Historical Method Seminar**

A brief introduction to the methods of defining an historical problem, collecting materials about it, organizing such materials about an outline, and techniques of writing, including the various systems of note taking, the making of an outline or table of contents, footnoting, and bibliographies. Recommended for beginning graduate students as preparation for all further work in the department.

One period a week. One quarter hour credit.

522 **Development of American Culture in the Eighteenth Century**

A study of the Eighteenth century background of some of the more important aspects of present day American culture, with major emphasis on a thorough understanding of the more significant forces in the Eighteenth century which were instrumental in shaping the concepts, ideas, and institutions which are the foundations of present day American culture. The particular topics for intensive study to be selected by the student after consultation with the instructor.

Two periods a week. Two quarter hours credit.

523 **Technology in American Culture**

This course deals with the development of technology in America and its resulting influence upon our culture. Special emphasis in this course will be placed on the influence of the machine on such phases of our culture as agriculture, industry, transportation, and communications. Further emphasis will be given to the influences on several of our social institutions.

Prerequisite: Course 280 or equivalent.

Two periods a week. Two quarter hours credit.

524 **Development of Urban Society in America**

This course deals with the gradual growth of urbanism in our society and the many changes brought about as a result of this development. Special emphasis will be placed upon the problems found in our modern cities. It will consist of both historical and sociological treatment.

Prerequisite: Course 280 or equivalent.

Two periods a week. Two quarter hours credit.

525 **Medieval Influences on Modern Ideas and Institutions**

A study of the Medieval fusion of Classical, Teutonic, Christian, Islamic, and Celtic cultures, followed by an analysis of education, philosophy, science, religion, government, law, and art, as they reflect the fusion, together with the lasting influence of Medieval ideas and institutions on modern culture.

Two periods a week. Two quarter hours credit.

531 **Renaissance Origins of the "Modern" in History**

The Renaissance of the 15th and 16th centuries in Italy and elsewhere. The course deals not only with literary and artistic reawakening, but also with the economic, political, scientific, intellectual, and social forces which have determined the character of "modern" history. Two periods a week. Two quarter hours credit.

532 **Religious Disunity and Intolerance in Western Civilization**

The Protestant Reformation, the Catholic Reformation, the Wars of Religion, the concept and practice of the "established" church, the origins of the idea of separation of church and state, and the beginnings of modern religious toleration are dealt with.

Two periods a week. Two quarter hours credit.

533 **Eighteenth Century Origins of Contemporary Thought and Institutions**

The Old Regime, the Intellectual Revolution or "Age of Enlightenment," the French Revolution and Napoleonic Era, studied as the seedbed of contemporary thought and institutions, including the "reactionary," liberal, and radical trends of the past century.

Two periods a week. Two quarter hours credit.

534 **The Great Revolutionary Movements of Modern History**

The English Revolutions of the 17th century, the French and American Revolutions of the 18th century, the Russian and Chinese Revolutions of the 20th century, analyzed and compared as an exercise in historical synthesis and interpretation.

Four periods a week. Four quarter hours credit.

536 **Reading Course in History**

Students needing one or two hours of graduate credit to complete a program may elect this course for individual reading on particular historical subjects with any member of the department.

One or two periods a week. One or two quarter hours credit.

POLITICAL SCIENCE

440 **American Parties and Pressure Groups**

A study of the leading pressure interest groups in the United States together with a descriptive survey of the policies, organization and functioning of American political parties. Attention is given to such topics as general electoral behavior and sectional patterns in politics. Course 240 recommended as a previous course.

Three periods a week. Three quarter hours credit.

445 **American Constitutional Development**

This course is a study of the growth of the Federal Constitution by judicial interpretation. Leading cases of the Supreme Court are analyzed and discussed.

Prerequisite: Courses 220, 221, 240.

Four periods a week. Four quarter hours credit.

446 **The Far East in Modern Times**

A study of Eastern Asia, which includes a survey of international politics since the opening of the orient and the development of political and social institutions in China, Japan, the Philippines, Malaya, and the East Indies. Recommended: A previous college course in European or World History.

Three periods a week. Three quarter hours credit.

448 **The United Nations**

A survey of the origin, structure and functioning of the United Nations and its specialized agencies. Included is a brief description of international organizations which existed before 1945. Recommended: A previous college course in European or World History.

Three periods a week. Three quarter hours credit.

449 **International Relations**

This course will emphasize politics and foreign policy rather than organization. Such subjects will be examined as revolutions in international relations, war and peace, disarmament, choice of foreign policy, nationalism, balance of power, foreign policies of major nations, the United Nations, world government, trouble spots in contemporary world politics, positive programs against communism. Recommended: A previous college course in European or World History.

Three periods a week. Three quarter hours credit.

540 **Public Administration**

A survey of the administration of governmental policies by state and national government in the United States. Included in this course are such topics as federal departmentalization, the functioning of the independent regulatory commissions, public personnel policies, and the most important rules of law controlling administrative action.

Prerequisite. Course 240 or equivalent.

Two periods a week. Two quarter hours credit.

546 **Democratic Foreign Governments**

The development and functioning of government and politics in Great Britain, France and the Dominions. Some attention will be given to Scandinavian countries or Czechoslovakia if student interest so warrants. Recommended: A previous college course in European or World History.

Prerequisite: Course 240 or equivalent.

Two periods a week. Two quarter hours credit.

547 **Non-Democratic Foreign Governments**

The development and functioning of government and politics in the USSR, Germany, Italy, and Spain. Recommended: A previous college course in European or World History.

Prerequisite: Course 240 or equivalent.

Two periods a week. Two quarter hours credit.

549a **Seminar in Political Science**

U. S. Politics and Government.

One period a week. One quarter hour credit.

- 549b **Seminar in Political Science**
International Affairs and/or Foreign Governments.
One period a week. One quarter hour credit.

SOCIOLOGY

- 480 **The Family** **Winter Quarter**
This course involves a study of the family as a functional institution. It aims at those aspects of the family having primarily to do with the welfare of children. The family is presented both as a normal and potentially disorganized institution. Some attention is paid to preparation for parenthood as well as to the relationship of the family to the school.
Four periods a week. Four quarter hours credit.
- 481 **Marriage and Family Counseling**
The purpose of this course is to provide the student with the available information for his own needs as an individual as well as to supply him the necessary aids for counseling in the secondary schools.
Two periods a week. Two quarter hours credit.
- 482 **Criminology**
This course deals with the underlying factors which tend toward a criminal career and with the attempts at reform of the convicted criminal. It emphasizes the part taken by the various social institutions in the attack on the problem. Although not a course in penology, it does deal with the history of reform of penal institutions.
Prerequisite: Course 280.
Four periods a week. Four quarter hours credit.
- 483 **Social Disorganization**
A detailed study of some of the major social problems arising out of a failure in social integration—divorce, crime, prostitution, racial and religious tensions, and the like. The student will do intensive work in one or more of these areas.
Prerequisite: Course 280 or equivalent.
Three periods a week. Three quarter hours credit.
- 490 **Materials and Problems of High School Instruction in the Social Sciences** **Every Quarter**
This course deals with materials, supplies, equipment, and teaching aids available and usable in a modern high school social science classroom. Acquaintance with textbooks, references, fiction, maps, charts, magazines, newspapers, radio programs, visual aids, trips, free materials, etc. will be gained by each student by means of individual and group projects.
Two periods a week. Two quarter hours credit.
- 491 **Materials and Problems of Elementary School Instruction in the Social Sciences** **Winter Quarter**
This course deals with the materials, supplies, equipment, and aids available and usable in the elementary school social studies. Acquaint-

ance with texts, fiction, free materials, etc. will be afforded each student through group and individual projects. The course aims to help prospective teachers correlate the social studies with other elementary subjects.

Four periods a week. Four quarter hours credit.

580 Systematic Sociology

An examination of the historic patterns of sociological thought as developed by Conte, Giddings, Coolidge, Sumner, Thomas and others, and an attempt to synthesize the current patterns of sociological thought into a coherent system.

Prerequisite: Course 280 or equivalent.

Two periods a week. Two quarter hours credit.

581 Social Dynamics

A study of some of the constants of social change, the variability of rates of change, the factors involved from a sociological point of view in the various forms of revolution typified by the industrial revolution, the Protestant Reformation, and various political movements, together with some of the factors involved in the prediction of the fact of change and its probable results.

Prerequisite: Course 280 or equivalent.

Two periods a week. Two quarter hours credit.

582 Social Attitudes

A study of the nature of social attitudes, their importance in a modern society, their growth and development, their measurement and their control. An advanced study of attitude forming techniques in a special area will be required of the student.

Prerequisite: Course 280 or equivalent.

Two periods a week. Two quarter hours credit.

583 Community Analysis

Techniques of community study from the special viewpoint of the teacher or school administration will be developed. The student will be required to use these techniques in the study of a specific aspect of a specific community as it relates to a specific school situation.

Prerequisite: Course 280 or equivalent.

Three periods a week. Three quarter hours credit.

584 Sociology Seminar

This course is designed to meet individual student needs through reading, discussion, or the working out of specific projects in minor areas of specialization not previously covered by the experience of the student. The student in this course may be a part of a group or may be working alone with close staff supervision.

Prerequisite: Consent of instructor required.

One period a week. One quarter hour credit.

DEPARTMENT OF SPEECH GRADUATE MAJOR IN SPEECH

Students who elect a graduate major in speech must satisfy the following course requirements in speech :

A student will be permitted to concentrate his graduate study largely within either the area of public address or the area of interpretation and dramatics, but the advisory committee will reserve the right to require courses in both areas if such are needed by the student. Whatever the specialization, seminar work in problems of speech will be required.

Description of Courses

DRAMA, ORAL INTERPRETATION OF LITERATURE, AND RADIO

- 410 **Advanced Play Production** **Autumn Quarter**
This course deals with contemporary methods of play production, with dramatic theory and play analysis, with little theater organization, and with specific problems of producing in educational and community theaters. The emphasis is on the teaching potentialities of extra-curricular dramatic activities at the secondary level.
Prerequisite: Courses 225, 230, and 310.
Four periods a week. Four quarter hours credit.
- 430 **Advanced Oral Interpretation of Literature** **Autumn Quarter**
This course, which is a continuation of Course 230, is designed to develop increased skill in the technique of reading, in creative imagination, and in the expression of emotional power.
Prerequisite: Courses 100, 225, 230, and 310.
Four periods a week. Four quarter hours credit.
- 450 **Radio Speaking** **Spring Quarter**
This course includes the study of the composition and delivery of various types of radio programs and continuity.
Prerequisite: Courses 100, 200, 225, 230, 201 or 345, and 310 or 311.
Four periods a week. Four quarter hours credit.
- 510 **History of the Theater** **Autumn Quarter**
The purpose of this course is twofold: to familiarize the student with the development of the drama in performance as a continuum directly related to the development of western civilization, and to increase his competency as a worker in the educational and community theater through a knowledge of dramatic technique.
Prerequisite: Course 410 (may be taken concurrently).
Four periods a week. Four quarter hours credit.

511 **Acting and Directing** **Winter Quarter**
This course treats the theater as a cultural and recreational outlet in the community. A study is made of the problems involved in the production of classics of dramatic literature, with emphasis on the problems of the actor in voice, movement, and characterization. Participation in class projects is required.
Prerequisite: Courses 410 and 510.
Three periods a week. Three quarter hours credit.

515 **Advanced Technical Practice** **Spring Quarter**
This course consists of a study of standard theory and practice in stage design, stage lighting, scenery and properties construction, and sound effects. Consideration is given to modern theater design and stage equipment as applicable to the needs of educational and community theaters.
Prerequisite: Courses 315 and 410.
Three periods a week. Three quarter hours credit.

530 **Lecture Recital** **Winter Quarter**
This course consists of intensive work in the preparation of lecture recitals for presentation.
Prerequisite: Course 430.
Three periods a week. Three quarter hours credit.

PUBLIC ADDRESS

400 **Introduction to the History and Criticism of Public Address** **Autumn Quarter**
This course introduces the student to basic concepts, terminology, and methods of rhetorical criticism, both classical and modern. It also emphasizes the historical continuity in the evolution of public speaking from the ancient Greeks to the present age, thus providing a terminal synthesis for undergraduate study and a frame of reference for subsequent graduate study.
Prerequisite: Courses 100, 200, 201 or 300, and 345.
Four periods a week. Four quarter hours credit.

500 **Critical Studies in the Theory and Practice of Ancient and Medieval Public Address** **Autumn Quarter**
This course includes a study of foundational rhetorical treatises, such as those of Aristotle, Plato, and Quintilian, of representative Grecian, Roman, Patristic, and Medieval speakers and their addresses, and of the influence of ancient and medieval rhetoric and public address on the development of public speaking, discussion, and debate, as reflected in present day theory and practice.
Prerequisite: Course 400 (may be taken concurrently).
Three periods a week. Three quarter hours credit.

501 **Critical Studies in Oratorical Theory** **Autumn Quarter**
This course gives attention to the contributions of Bacon, Wilson, Campbell, Blair, Whately, J. Q. Adams, and others to rhetorical theory with its adaptation to modern conditions. Together, this course and Speech

500 examine the theory of public speaking from the earliest times to the present.

Prerequisite: Course 400 (may be taken concurrently).

Three periods a week. Three quarter hours credit.

502 **History and Criticism of British
Public Address**

Winter Quarter

The principles of speech criticism are reviewed and articulated with studies of eighteenth and nineteenth century British speakers. The speeches of Burke, Chatham, Fox, Pitt the Younger, Sheridan, Erskine, Bright, Disraeli, Gladstone and Winston Churchill are analyzed and criticized.

Prerequisite: Course 400 (may be taken concurrently).

Three periods a week. Three quarter hours credit.

503 **History and Criticism of American
Public Address I**

Winter Quarter

The principles of rhetorical criticism are applied in studies of the speeches of some of the principal American speakers in the period from colonial times to the close of the Civil War. Otis, Henry, Madison, Hamilton, Parker, Emerson, Phillips, Sumner, Webster, Clay, Calhoun, Douglas, and Lincoln are representative of the speakers studied.

Prerequisite: Course 400 (may be taken concurrently).

Three periods a week. Three quarter hours credit.

504 **History and Criticism of American
Public Address II**

Spring Quarter

The principles of rhetorical criticism are applied in studies of the speeches of some of the principal American speakers in the period from the close of the Civil War to the present. Grady, Schurz, Clemens, Donnelly, Bryan, Beveridge, Wilson, LaFollette, Theodore Roosevelt, and Franklin D. Roosevelt are representative of the speakers studied. In these studies and in those in the other courses in public address, the pedagogical implications for today's teacher of public speaking are emphasized.

Prerequisite: Course 400 (may be taken concurrently).

Three periods a week. Three quarter hours credit.

505 **Organizing and Directing High School
Forensic Activities**

Spring Quarter

This course examines the educational objectives and the methods of organizing and directing the high school forensic program. Attention is given to the administration and evaluation of intra-school, community, and inter-school activities in debate, discussion, extempore speaking, and oratory. The course is designed to meet the specific needs of teachers and administrators who supervise these activities.

Prerequisite: Course 400 (may be taken concurrently).

Three periods a week. Three quarter hours credit.

SPEECH PEDAGOGY

- 440 **The Teaching of Speech** **Winter Quarter**
This course is a study of the problems confronting the teacher of speech. It includes lectures and collateral reading on the following major projects: the organization, content, and methods of teaching the foundation course in speech and other courses in a balanced speech curriculum.
Prerequisite: Courses 100, 200, 225, 230, 310 or 311, 320, and 345.
Four periods a week. Four quarter hours credit.
- 540 **Seminar in Problems in Radio, Interpretative Reading, and Dramatics** **Spring Quarter**
The purpose of this course is to aid the student who has a special interest in this phase of speech in the selecting and conducting of his major graduate investigation. The course is designed not only to widen the knowledge and appreciation of the student interested in this phase of speech education but also to develop his ability more efficiently to direct students in these areas.
Prerequisite: Courses 440, 450, 510, and 530.
Three periods a week. Three quarter hours credit.
- 541 **Seminar in Problems in the Teaching of Public Speaking, Discussion, and Debate** **Spring Quarter**
This course enables the student to become acquainted with the findings of modern research which pertain to the principal problems in the contemporary teaching of public speaking, discussion, and debate. The seminar is designed to aid the student interested in this phase of speech in the selecting and conducting of his major graduate investigation.
Prerequisite: Courses 400, 440, and one course in public address on the 500 level. This last course may be taken concurrently with course 541.
Three periods a week. Three quarter hours credit.

INDEX

	Page
Adams Hall	20
Administrative Council	7
Administration	7
Admission Requirments	13
Advisory Committee	18
Application for Admission.....	14
Area Majors	14, 27
Biological Sciences, Courses in.....	27
Biological Sciences, Graduate Major in	27
Buildings and Campus	19
Cafeteria	16
Calendar	4
Campus Map.....	2
Candidacy for Degree.....	17
Credit requirement	17
Deficiencies	17
Education, Courses in.....	32
Education, Graduate Major in.....	31
English, Courses in	44
English, Graduate Major in	44
Expenses	14
Extension Courses, Credit for.....	18
Faculty	8
Fees	15
Fields of Study.....	14, 27
General Information	19
Grading System	16
Graduate Council	7

INDEX—Continued

	Page
Health Service	22
History of the College.....	19
Internship for Graduate Students.....	22
Living Accomodations	16
Major, Selection of.....	14, 27
Map of Campus.....	2
Master's Degree, Requirements for.....	17
Mathematics, Courses in.....	49
Mathematics, Graduate Major in.....	49
Men's Residence Hall.....	24
Physical Sciences, Courses in.....	53
Physical Sciences, Graduate Major in.....	53
Placement Bureau	22
Registration	14
Residence Requirement	17
Rooming Facilities	16
Social Sciences, Courses in.....	58
Social Sciences, Graduate Major in.....	58
Speech, Courses in	66
Speech, Graduate Major in	66
Student Teaching	22
Veterans' Benefits	15
Veterans' Housing Project.....	21

