NORTHERN ILLINOIS STATE COLLEGE

Annual Graduate Catalog 1956-1957

DeKalb
This catalog describes course offerings for the academic year 1956-1957. For a listing of the courses offered in the Summer of 1956 see the Summer School Bulletin.
Key
to
CAMPUS MAP
NORTHERN ILLINOIS STATE COLLEGE
DeKalb, Illinois

1. Administration Building
2. Parson Library
3. Science Building
4. Home Management House
5. Williston Hall (Women)
6. Adams Hall (Women)
7. Cafeteria
8. McMurry Laboratory School
9. Gilbert Hall (Men)
10. Glidden Field
11. Men's Gymnasium
12. Industrial Arts Building
13. Parking
14. Student Union Building
15. Music Annex
16. Regional Services Offices
17. Classroom Building
18. Office Building
19. Veterans Housing
20. Bookstore & Duplicating
21. Maintenance Shops
22. Intramural Area
23. Golf Course
24. Driving Range
25. Laboratory School (Blueprint stage)
26. Neptune Hall (Women)
STATE OF ILLINOIS
WILLIAM G. STRATTON, GOVERNOR

CATALOG
OF THE
GRADUATE SCHOOL
OF
NORTHERN ILLINOIS
STATE COLLEGE

1956-1957
DeKalb, Illinois

[Printed by Authority of the State of Illinois]
STATE OF ILLINOIS
WILLIAM G. STRATTON, Governor
THE TEACHERS COLLEGE BOARD

Appointed Members

MR. LEWIS M. WALKER, Chairman
Gilman

MR. ROYAL A. STIPES, JR., Vice Chairman
Champaign

MR. ALEXANDER A. SUMMERS, Secretary
Mattoon

MR. CARL DUNBAR
Macomb

MR. J. A. HOULE, JR.
Chicago

MRS. HARRIET LOWDEN MADLENER
Oregon

MR. WILLIAM REED
Oak Park

MR. CLARENCE R. ROPP
Normal

MR. CHAUNCEY B. WATSON, SR.
DeKalb

Ex Officio Members

DR. VERNON L. NICKELL, Superintendent of Public Instruction
Springfield

MR. MORTON H. HOLLINGSWORTH, Director of Department of
Finance
Springfield

DR. RICHARD G. BROWNE, Executive Officer
Springfield

Northern Illinois State College is governed by the Teachers College Board. The Board consists of eleven members: the Superintendent of Public Instruction, the Director of Finance and nine members appointed by the Governor for a six-year term. The Executive Officer is an employee of the State Teachers College Board. The State Teachers College Board is the governing body for the four State Colleges of Illinois.
GRADUATE SCHOOL CALENDAR—1956-1957

Summer Session, 1956

Monday, April 30 .............................................. Preregistration begins
Monday, June 18 .............................................. Registration 8:00 A.M.—3:30 P.M.
Tuesday, June 19 .......................................... Class work begins 8:00 A.M.
Thursday, June 21 ...................................... Last day for filing petition for admission to
                                                  candidacy for August degree candidates
Friday, June 22 .............................................. Last day for filing application to take comprehensive examination for August degree candidates
Wednesday, July 4 ................................................ Holiday
Monday, July 9 .............................................. First day of comprehensive examinations for
                                                  August degree candidates
Friday, July 20 .............................................. Last day for filing qualifying paper for
                                                  August degree candidates
Tuesday, July 31 .............................................. Last day of comprehensive examinations for
                                                  August degree candidates
Thursday, August 9 .............................................. Commencement 4:00 P.M.
Friday, August 10 ........................................ Session closes at end of school day

First Semester, 1956-1957

Saturday, September 15 .................................. Registration 8:00 A.M.—3:30 P.M.
Saturday, September 15 .................................. Class work begins 9:00 A.M.
Monday, September 17 .................................. Registration 8:00 A.M.—6:30 P.M.*
Friday, October 26 .................................. Meeting of Rock River Division of I.E.A.
Friday, Saturday, and Sunday, November 2-4 .......... Homecoming
Wednesday, November 21 ................................ Thanksgiving recess begins at 12:00 noon
Monday, November 26 .................................. Class work resumes 8:00 A.M.
Friday, December 21 .................................. Christmas vacation begins after regularly scheduled classes
Thursday, January 3 .................................. Class work resumes 8:00 A.M.
Tuesday-Friday, January 22-25 ........................ Undergraduate examinations
Saturday-Friday, January 19-25 ........................ Graduate examinations
Saturday, January 26 .................................. First semester closes

Second Semester, 1957

Friday and Saturday, February 1-2 ........................ Registration 8:00 A.M.—5:00 P.M.
Saturday, February 2 .................................. Class work begins 9:00 A.M.
Monday, February 4 .................................. Registration 8:00 A.M.—6:30 P.M.*
Thursday, April 11 .................................. Last day for filing petition for admission to
                                                  candidacy for June degree candidates
Saturday, April 13 .................................. Easter recess begins after regularly scheduled classes
Monday, April 22 .................................. Class work resumes 8:00 A.M.

*Registration offices remain open late enough during the first week of classes to accommodate evening students. After the first week these offices close at 5:00 P.M. Since registration for evening and Saturday classes closes with the second meeting of each class, late registrants for an evening class must complete registration before 5:00 P.M. of the day when the class meets for the second time.
Friday, April 26. First day of comprehensive examinations for June degree candidates
Friday, May 3. Last day for filing qualifying paper for June degree candidates
Wednesday, May 22. Last day of comprehensive examinations for June degree candidates
Monday-Saturday, May 20-25. Graduate examinations
Thursday, May 30. Holiday
Sunday, June 2. Commencement 5:00 P.M.
Tuesday-Friday, June 4-7. Undergraduate examinations
Saturday, June 8. Second Semester closes

Summer Session, 1957
Monday, June 17. Registration 8:00 A.M.—3:30 P.M.
Tuesday, June 18. Class work begins 8:00 A.M.
Thursday, June 20. Last day for filing petition for admission to candidacy for August degree candidates
Friday, June 21. Last day for filing application to take comprehensive examination for August degree candidates
Thursday, July 4. Holiday
Monday, July 8. First day of comprehensive examinations for August degree candidates
Friday, July 19. Last day for filing qualifying paper for August degree candidates
Tuesday, July 30. Last day of comprehensive examinations for August degree candidates
Thursday, August 8. Commencement 4:00 P.M.
Friday, August 9. Summer Session closes after regularly scheduled classes

ADMINISTRATIVE STAFF
Leslie A. Holmes, Ph. D. President of the College
Francis R. Geigle, Ed. D. Administrative Assistant to the President
Romeo M. Zulauf, Ed. D. Dean of Instruction
J. R. Hainds, Ph. D. Dean of the Graduate School
Edith Leifheit, B. E. Registrar
Eugenie Walker, M. A. Director of Admissions
Dorothy McConn. Secretary to the Dean of the Graduate School

GRADUATE COUNCIL
J. R. Hainds, Ph. D., Chairman Dean of the Graduate School
Leslie A. Holmes, Ph. D. President of the College
Romeo M. Zulauf, Ed. D. Dean of Instruction
Miriam Anderson, Ed. D. Department of Physical Education for Women
Loren T. Caldwell, Ed. D. Department of Earth Sciences
Lowell Chapman, Ed. D. Department of Business Education
George P. Clark, Ph. D. Department of English
Paul Crawford, Ph. D. Department of Speech
Otto J. Gabel, Ph. D. Department of Education
Howard W. Gould, Ph. D. Department of Physical Sciences
Department representatives are elected by their departments.

GRADUATE FACULTY

Leslie A. Holmes, Ph. D. .......................................................... President
Francis R. Geigle, Ed. D. .................................................. Administrative Assistant to the President
Romeo M. Zulauf, Ed. D. .......................................................... Dean of Instruction
J. R. Hains, Ph. D. .......................................................... Dean of the Graduate School
Harold E. Aikins, Ph. D. .......................................................... Professor of Social Sciences
Virgil Alexander, Ph. D. .......................................................... Director of Instructional Materials
Miriam Anderson, Ed. D. .................................................. Associate Professor of Education
Eleanor Anglin, Ph. D. .......................................................... Professor of Education
S. Orville Baker, Ph. D. .................................................. Professor and Head of Department of English
Martin Bartels, Ph. D. .................................................. Director of Placement and Professor of Education
James W. Beach, Ph. D. .......................................................... Associate Professor of Mathematics
Bertha M. Bellis, Ph. D. .......................................................... Professor of Education
John S. Benben, Ph. D. .................................................. Associate Professor of Education
Ledford J. Bischof, Ed. D. .......................................................... Associate Professor of Education
John Bower, Ph. D. .......................................................... Associate Professor of Physical Sciences
Robert R. Brown, Ph. D. .................................................. Counselor and Assistant Professor of Education
Robert A. Bullington, Ph. D. .......................................................... Professor of Biological Sciences
Paul Burtness, Ph. D. .................................................. Assistant Professor of English
Loren T. Caldwell, Ed. D. .................................................. Professor and Head of Department of Earth Sciences
Margaret Carroll, Ph. D. .......................................................... Associate Professor of Education
Lowell Chapman, Ed. D. .......................................................... Associate Professor of Business Education
George P. Clark, Ph. D. .................................................. Associate Professor of English
Kenneth Cleland, Ed. D. .......................................................... Assistant Professor of Education
Joseph Clettenberg, Ph. D. .......................................................... Director of Extension
Lillian Cobb, Ph. D. .......................................................... Professor and Head of Department of Foreign Languages
Paul Crawford, Ph. D. .......................................................... Professor of Speech
Irene Feltman, Ph. D. .......................................................... Assistant Professor of Education
Harvey Feyerherm, Ph. D. .......................................................... Associate Professor of Biological Sciences
Stuart D. Fink, Ph. D. .......................................................... Principal of McMurry Laboratory School
Arnold B. Fox, Ph. D. .......................................................... Associate Professor of English
Robert H. Foulkes, Ph. D. .......................................................... Assistant Professor of Biological Sciences
William P. Froom, Ed. D. .................................................. Acting Director of Regional Services and Assistant Professor of English
O. J. Gabel, Ph. D. .......................................................... Professor of Education
Howard W. Gould, Ph. D. .................................................. Professor and Head of Department of Physical Sciences
Eugene Grant, Ed. D. ............................. Associate Professor of Education
Ruth Haddock, Ph. D. ............... Dean of Women and Associate Professor of Education
Ernest E. Hanson, Ed. D. .... Dean of Students and Professor of Education
Clarence Ethel Hardgrove, Ph. D. ............................ Professor of Mathematics
M. C. Hayes, Ph. D. * .................. Associate Professor of Education
Earl W. Hayter, Ph. D. .................. Professor of Social Sciences
William Healey, Ph. D. ........ Associate Professor of Physical Education
Eugene W. Hellmich, Ph. D. ........ Professor and Head of Department of Mathematics
Charles E. Howell, Ph. D. ....... Director of Research and Professor of Social Sciences
Max S. Huebner, Ph. D. .......................... Director of Student Teaching and Professor of Education
J. Frances Huey, Ed. D. .............. Associate Professor of Education
Hugh Jameson, Ph. D. ............. Professor and Head of Department of Social Sciences
Eino Johnson, Ph. D. .................... Professor of Education
Frederick Kent, LL. D. .......... Associate Professor of Social Sciences
Roderick Kohler, Ed. D. .......... Associate Professor of Industrial Arts
Howard B. Leavitt, Ed. D. ........ Associate Professor of Education
Louis Lerea, Ph. D. .................. Assistant Professor of Speech
Norman Levardsen, Ph. D. .... Assistant Professor of Biological Sciences
Wendell A. Lindbeck, Ph. D. .... Professor of Physical Sciences
John W. Lloyd, Ed. D. .............. Professor of Social Sciences
Robert McAdam, Ph. D. .............. Assistant Professor of Physical Education
Mary McCoy, Ph. D. .................. Assistant Professor of Physical Education
Dorothy McGeoch, Ed. D. .......... Professor of Education
James J. Martin, Ph. D. ........ Associate Professor of Social Sciences
William A. Mays, Ph. D. .......... Assistant Professor of Industrial Arts
James Merritt, Ed. D. .............. Associate Professor of Education
Helen R. Messenger, Ph. D. * .... Professor of Education
Wilma Miller, Pe. D. ............... Associate Professor of Physical Education
C. E. Montgomery, Ph. D. * .... Professor of Biological Sciences
John Nelson, Ph. D. ............... Associate Professor of Business Education
W. V. O'Connell, Ed. D. ........ Professor and Head of Department of Speech
William K. Ogilvie, Ed. D. .... Assistant Professor of Education
Wilda D. Pickett, Ed. D. .......... Assistant Professor of Physical Education
Carroll M. Pike, Ed. D. .......... Dean of Men and Assistant Professor of Education
John Pineault, Ed. D. .............. Associate Professor of Business Education
Paul V. Prior, Ph. D. ............... Associate Professor of Biological Sciences
Martin Reinemann, Ph. D. ........ Assistant Professor of Earth Sciences
Carl Rigney, Ph. D. .................. Assistant Professor of Physical Sciences
Charles Rohde, Ph. D. ............ Assistant Professor of Biological Sciences
Frederick W. Rolf, Ph. D. ........... Professor of Physical Sciences
Donald E. Roos, Ph. D. ............ Assistant Professor of Social Sciences
Martha Schreiner, Ph. D. .......... Associate Professor of Foreign Languages
George Senteney, Ed. D. .......... Assistant Professor of Industrial Arts
Arthur Singer, Ph. D. ............... Assistant Professor of Education

* Retired
W. Paul Street, Ph. D. ........................................Professor of English
William B. Storm, A. M.* .......................Associate Professor of Mathematics
E. Ruth Taylor, Ph. D. ..............................Professor of English
George L. Terwilliger, Ed. D. ...............Professor and Head of Department of Biological Sciences
Robert L. Thistlethwaite, Ph. D. ......Professor and Head of Department of Business Education
Maude Uhland, Ph. D. ...............................Professor of English
Eleanor Volberding, Ph. D. .....................Professor of Education
Allen Weaver, Ph. D. .............................Associate Professor of Physical Sciences
Frederic A. Weed, Ph. D. .....................Associate Professor of Social Sciences
George D. Weigel, Ed. D. ....................Associate Professor of Education
Raymond Wilderman, Ph. D. .............Assistant Professor of Speech
Esther Williams, Ed. D. .........................Professor of Education
D. Kenneth Wilson, Ph. D. ...............Associate Professor of Speech
Margaret Wood, Ph. D. .......................Professor of Speech
W. A. Yauch, Ed. D. ..............................Professor and Head of Department of Education

*Retired
The Graduate School

Under authority granted by the Illinois State Teachers College Board, Northern Illinois State College has offered work leading to the degree of Master of Science in Education since 1951. Twelve departments offer graduate study for properly qualified students: Biological Sciences, Business Education, Earth Sciences, Education, English, Foreign Languages, Industrial Arts, Mathematics, Physical Education for Women, Physical Sciences, Social Sciences, and Speech. Each of these departments except Foreign Languages offers a full major; the Department of Education lists four sequences; and groups of departments collaborate to offer majors in related areas. Within the fields covered by these twelve departments, therefore, a wide variety in programs is a distinctive feature of the offerings.

Purpose

The graduate program at Northern Illinois State College has as its primary objective the improvement of public school teaching in the Northern Illinois area. It attempts to do this by offering advanced work both in subject matter fields and in professional education for teachers, supervisors, and administrators.

The graduate program is also designed to meet the demand for further study by those teachers who seek advanced work for reasons of intellectual growth and professional advancement. The offerings of the graduate school are sufficiently flexible to permit the pursuance of a course of study particularly adapted to the individual needs of the student. The college acts as an educational service agency for the Northern Illinois area, and it is expected that the graduate program will further this function by providing educational leadership and intellectual stimulation for both the teachers and the general public of this territory. Further, in many cases the graduate school can provide for a student a foundation for more advanced study in his particular area of specialization.

Admission Requirements

A candidate for admission to the Graduate School as a classified student must (1) hold a baccalaureate degree from an approved institution whose requirements for the degree are substantially equivalent to those of Northern Illinois State College or (2) be in the last semester of work leading to that degree from Northern Illinois State College.

A student must also hold a baccalaureate degree in order to be admitted as unclassified. An unclassified student may register for any courses which he is qualified to carry. Such courses may or may not be recognized in computing credit required for the degree if a student transfers from unclassified to classified status, as he may with the consent of the Graduate Council. An unclassified student need not have a departmental advisor or advisory committee.

All entering full time students must have a physical examination. This should be given by the family physician and is to be 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 that semester 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 except Foreign Languages; or in some cases he may select an inter-departmental or "area" major. Such combined majors are offered in Biological Sciences-Earth Sciences, Biological Sciences-Physical Sciences, Biological Sciences-Earth Sciences-Physical Sciences, Education-Biological Sciences, Education-Business Education, Education-Earth Sciences, Education-English, Education-Industrial Arts, Education-Mathematics, Education-Physical Education, Education-Physical Sciences, Education-Social Sciences, Education-Speech, English-Foreign Languages, English-Social Sciences-Speech, English-Social Sciences, English-Speech, and Mathematics-Sciences. (See p. 29.)

Application for Admission

Students who wish to register for graduate study should write to the Director of Admissions or the Dean 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 of Admissions no later than a week before registration.

A student who holds a baccalaureate degree from another college should ask the registrar of that college to forward a transcript of his academic record to the Director of Admissions. If a transfer of graduate credit is desired, applicants, before undertaking graduate work at Northern Illinois, should request the registrar of any institution concerned to send transcripts to the Dean of the Graduate School.

Registration

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

Arrangements for registration and for assignment to an advisor are made through the Office of the Dean of the Graduate School.

Auditors

Any full time graduate student may be permitted to audit, without added fees, one or more additional courses, either undergraduate or graduate, provided approval is first obtained from the student's advisor, the instructor of the course, and the Dean of the Graduate School. A student who enrolls as an auditor in a course may not take the examinations in the course and will not receive credit.

Part time students may be permitted to audit additional courses on the same basis as regular students upon the payment of an added fee of $5.00 per semester hour, with the provision that the total amount of fees paid will not exceed $50.50 per semester.

Expenses

The average total expenses for room, board, books, and supplies is approximately $800 to $900 for the academic year. The fees for graduate students are as follows:
Full time students (per semester)
  Registration and activities fee ......................... $5.00
  Additional fee for non-residents of Illinois .......... 45.00

Part-time students (six semester hours or less)
  Minimum fee .................................................. 10.00
  Additional fee for non-residents of Illinois ......... 25.00
  Per class hour ................................................. 5.00
  Additional fee for non-residents of Illinois ...... 7.50
  (No activity privileges extended)

Special fees
  Matriculation fee (payable upon
    initial registration only) ......................... 5.00
  Graduation fee (payable at time of graduation only)........... 10.00
  Late registration fee ........................................... 3.00
  Change of program fee ...................................... 1.00
  Duplicate transcript of record (after the first is issued) 1.00

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

Fees are due at the time of registration. No refunds on fees are granted after nine calendar days following the regular registration day.

Changes in class programs will be permitted only with the approval of the student’s advisor, and a charge of $1.00 will be made for each program change after the third day of the semester.

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, speech events, and subscription to the weekly college newspaper and the college annual.

Veterans Affairs Office

The Veterans Affairs Office, which operates in conjunction with the Office of the Dean of Men, serves as a liaison between student veterans and governmental agencies concerned with educational benefits for veterans. Assistance is given to both undergraduate and graduate students in making necessary reports to the Veterans Administration and in obtaining educational benefits under the various public laws providing for the education and training of veterans. Inquiries concerning educational benefits for veterans should be directed to the Coordinator of Veterans Affairs.

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 $6.00 a week per person. In some cases, for a small additional charge, cooking facilities are provided.

The College maintains three residence halls for women—Neptune Hall for freshmen women; Williston Hall for sophomore and junior women; and Adams Hall for junior, senior, and graduate women students. The rate for
board and room at Adams Hall is $288.00 a semester, payable in advance. Application for rooms in Adams Hall and all inquiries regarding housing for women should be addressed to the Dean of Women.

Gilbert Hall, the residence hall for men, has rooms available for graduate students. The rate for board and room is $288.00 a semester, payable in advance. Further information regarding housing for men may be obtained at the Office of the Dean of Men.

A room deposit of $10.00 is required of all prospective dormitory residents. This amount, with room application, must be sent to the Office of Business Services.

All students living in college residence halls will be required to furnish their own towels, bed linens, and blankets.

Because of unsettled conditions in prices of food and labor, the college reserves the right to adjust charges for room and board during the college year. If an adjustment is necessary, it will become effective with the opening of any regular semester. Sufficient notice will be given to acquaint all students in the residences with this change.

In regard to housing in residence halls, applications from undergraduate students are given preference to applications from graduate students.

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

Twenty-four two-bedroom units and twenty-four one-bedroom units are available in the Veterans Housing Project. To be eligible for assignment in these apartments, either the husband or wife must be a veteran and the veteran must carry at least twelve semester hours of credit through each of the two semesters of the college year and carry at least six semester hours of credit during the summer session.

All subletting must be approved by the Dean of Students and is limited to those students who would be eligible for an apartment themselves. Students may sublet their accommodations only during the summer session.

Inquiries concerning accommodations in the Veterans Housing Project should be directed to the Dean of Students.
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. Upon the completion of eight semester hours of graduate work, and not later than the first month of his final semester, a student shall file application in the Office of the Dean of the Graduate School for admission to candidacy.

A student will not be admitted to candidacy for a degree until he is following a program approved by his advisor or advisory committee, which insures satisfaction of the requirements for certification to teach in Illinois.

Deficiencies

A graduate of an approved college or university is presumed to be eligible for advanced work in any department if he presents a major in the area of work of that department. Any specific courses or their equivalents which are prerequisites to advanced courses shall be looked upon as deficiencies, to be made up before the student takes such advanced courses.

Students who elect the sequence 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 and Grading System

A candidate for the master's degree must earn a minimum of thirty-two semester hours of graduate credit and a minimum grade average of B. (This average must be earned in the major field as well as in the total program.) The minimum required number of semester hours in residence is twenty-two. Graduate credit is given only in those courses in which a grade of C— or better is earned.

Normally, not less than ten semester hours are to be earned in courses outside of the candidate's major field. In exceptional cases, this requirement may be waived by the Dean of the Graduate School. In order for exception to be considered the candidate, with the consent of his advisor or advisory committee, must submit a written petition to the Dean of the Graduate School, stating clearly his reasons for desiring waiver.

Grades and their honor point values are as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Honor Points per unit credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
</tr>
<tr>
<td>C+</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
</tr>
<tr>
<td>C−</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td>-1</td>
</tr>
<tr>
<td>Inc. (Incomplete)</td>
<td>0</td>
</tr>
<tr>
<td>Dr. (Dropped)</td>
<td>0</td>
</tr>
<tr>
<td>S. (Satisfactory)</td>
<td>0</td>
</tr>
<tr>
<td>N.S. (Not-satisfactory)</td>
<td>0</td>
</tr>
</tbody>
</table>
An incomplete may stand for two calendar years from the close of the semester in which it is given and the student may petition the Dean of the Graduate School for extension prior to the end of the two year period. If no petition is presented or if the petition is denied, the incomplete becomes an "F" at the end of the two year period.

The grade average of all graduate students is computed on a cumulative basis, including the record of all graduate work which has been transferred to the record here. The honor point average at any time is the quotient obtained by dividing the total number of honor points by the total number of properly weighted credit courses which the student has taken up to that time.

In general, graduate classes meet on the basis of one hour of credit for each class hour. Certain classes, however, are of such nature that they require more than one hour of attendance for each hour of credit; and some courses confer more than one hour of credit for each hour in class. Particular information regarding a specific course may be obtained from the instructor, or from the Office of the Dean of the Graduate School.

Credits Transferable

Subject to the approval of the Dean of the Graduate School, a student will be allowed to transfer a maximum of six semester hours of graduate credit from another institution, none of which shall be in extension or correspondence work.

Credit for Extension Work

With the approval of the major department, a student will be permitted to offer for credit a maximum of eight semester hours in extension work taken from this institution. A list of centers approved for graduate extension work may be secured from the Dean of the Graduate School.

Courses for Which Credit Is Allowed

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

Some college courses numbered in the 400's carry only undergraduate credit. Only those courses listed in this catalog carry graduate credit.

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.

Advisory System

Each student is assigned, by the head of his major department, to an advisor or advisory committee whose purpose is to guide his selection of a program of studies and to recommend him, when properly qualified, for the degree. The advisor or advisory committee is selected by the head of the department in which the student is majoring.

The program of studies should be formulated by the student in conference with his advisor or advisory committee during the first semester of graduate work. Proper forms may be obtained from the Office of the Dean of the Graduate School and must be completed before a student may be admitted to candidacy. (See p. 15.)
Qualifying Paper

Before taking the final comprehensive examination, a candidate must submit a qualifying paper, which is to be a research study written in the candidate's major field. Its subject must be approved by the chairman of the student's advisory committee or by his advisor, and when completed it must be approved by the professor under whom it was written and the advisor. If the supervisor is also the advisor, a second reader must be appointed by the head of the major department. A minimum of 5,000 words, or its equivalent in studies of a scientific or statistical nature, is required. The paper must follow the recognized standard forms of footnoting and bibliography. The original paper and two carbon copies must be submitted in a standard folder to the Office of the Dean of the Graduate School. A statement showing approval by the staff members involved must be filed in the Office of the Dean of the Graduate School at least one week before the candidate appears for examination.

Examinations

Final written comprehensive examinations are required of all candidates for the master's degree at some time within the latter half of the semester which marks completion of work for the degree, but in any case at least one week before such completion. In some departments an oral examination is required as well. These examinations are given by the department or departments in which the major is taken. Students eligible for an examination must file with their major advisor and the Office of the Graduate School a notice of their intent to present themselves for it.

Departments concerned will post notices of the date and place for each examination at least two weeks before it is to be administered.

All students must meet the requirements of Senate Bill Number 195 of the 68th General Assembly of the State of Illinois. In brief, this law requires satisfactory completion of an examination on the Constitution of the United States, the Constitution of the State of Illinois, and the proper use and display of the American flag. Students who have not satisfied the requirement at the undergraduate level must satisfy it at the graduate level.
General Information

Northern Illinois State College is located in DeKalb, a city of 15,000 people. This thriving city is sixty miles west of Chicago on United States Highway Alternate 30 and on 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. However, in July, 1943, the awarding of a diploma for completion of the two-year curriculum was discontinued. Since 1921 the baccalaureate degree has been conferred upon the satisfactory completion of four years of college work.

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 College. This program was first offered in the summer of 1951.

By legislative enactment Northern Illinois State Teachers College became Northern Illinois State College July 1, 1955. The Teachers College Board then authorized the college to confer the Bachelor of Arts and Bachelor of Science in addition to the Bachelor of Science in Education.

ACCREDITATION

Northern Illinois State College is accredited by the North Central Association of Colleges and Secondary Schools and by the National Council for the Accreditation of Teacher Education as a baccalaureate and master's degree-granting institution.

BUILDINGS AND CAMPUS

The main campus, covering approximately three hundred forty acres, is situated in the western part of the city. Part of the grounds is heavily wooded with native vegetation and the remainder has been attractively landscaped with shrubbery and flower gardens. The picturesque lake and the meandering Kishwaukee River contribute to the beauty of the campus. Many believe Northern Illinois State College has one of the most beautiful college campuses in the country.

The campus building group comprises the Administration Building, Science Building, Williston Hall, Adams Hall, Neptune Hall, Gilbert Hall, the Home Management House, Parson Library, McMurry Laboratory School, the Industrial Arts Building, the Men's Gymnasium, the Veterans' Housing Project, the Cafeteria, the Student Union Building, the Book Exchange, and the barracks unit housing the Division of Regional Services, Extension Office, and the Physical Therapy Center.
The Sven Franklin Parson Library is located directly north of the Science Building and west of the Administration Building. In addition to reserve and reference reading rooms, it includes a browsing room, curriculum laboratory, seminar rooms, a small auditorium, art and music listening rooms, visual education department, and a classroom for instruction in library science.

Over 101,000 books and more than 4,700 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, as well as bound and current periodicals, are found in the reading rooms. A juvenile library is housed in the McMurry Laboratory School for the elementary grades. The library is staffed by thirteen librarians and forty-nine student assistants.

Requests for stack privileges are granted to graduate students by the Circulation Librarian. Also available to students is a limited number of carrels.

The Administration Building, easily identified by its castellated towers, is a familiar landmark in DeKalb. This impressive building contains the administrative and business offices, an auditorium, student lounges, the health center, classrooms, and offices for faculty members.

The Science Building, dedicated on Commencement Day in 1943, contains over one hundred rooms, including well equipped laboratories, classrooms, offices and auxiliary rooms designed for special purposes. The Museum of Biology and the Barber Collection of Fossils and Minerals are housed in this building. The four main floors are designed to serve fields as indicated: first floor—physics and earth sciences, including geography; second floor—home economics; third floor—biological sciences; fourth floor—chemistry. The fifth floor and tower, although now largely unfurnished, will eventually be converted into classrooms and laboratories.

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 homelike 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 women students, and is planned to meet their needs in accordance with recent trends in the housing of women students. Constructed of Illinois limestone, Adams Hall is decorated in bright colors and furnished attractively. Pictures by modern artists add to the interest of the living rooms.

Celine Neptune Hall, which was opened in September, 1955, and which is the first building erected on the west campus, houses 374 freshmen women. Completely modern rooms for students, dining room facilities, lounges, and offices are included in it.

Newell D. Gilbert Hall, a residence hall for men, houses 374 students. It includes dining room facilities, lounges, and offices in addition to completely modern rooms for students.

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 undergraduate education offered in the field of home economics.

The McMurry Laboratory School is the campus elementary school which serves as an observation and demonstration center and a laboratory for student teaching.

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, and athletic training room, and a basketball floor of regulation size with modern rollaway bleachers. East of the Men's Gymnasium lies 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 for married students.

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

A Book Exchange, operated by the College, is conveniently located north of the Administration Building on Garden Road. Used textbooks are bought and sold at this exchange and incidental supplies necessary for class work may be purchased there.

A new laboratory school, a classroom building, and a field house for men's physical education are under process of construction on the west campus.

LORADO TAFT FIELD CAMPUS

The Lorado Taft Field Campus is located approximately 35 miles west of DeKalb near the city of Oregon. This branch campus, adjacent to the Lowden Memorial State Park, is situated in the hilly and heavily wooded area on the east side of the Rock River. The buildings in this scenic area have been completely rehabilitated. All the buildings on this beautiful campus are equipped for year-around use. The area is ideal for practical natural laboratory work. Here students have an opportunity to study various aspects of outdoor educational activities not available in the traditional classroom.

Overlooking the river is spacious Poley Hall. This hall is used for multiple purposes. It has excellent dining facilities including a very well equipped kitchen. In addition, it can easily be converted into a conference room, classroom, or laboratory.

Taft House, the former home of the famous sculptor Lorado Taft, has a comfortable lounge room, a library, an office, and a small clinic. These rooms can be used for conference purposes.
The Brown House has been converted into a comfortable and well-equipped bunk house for 26 persons. The old Dickerson House has been made into a second bunk house.

A third bunk house is now in process of completion. The near-by Heckman House in Lowden Memorial Park can be used during the summer months for additional housing as well as professional meetings.

The Taft campus is used during the regular school year for direct experiences in outdoor education for all elementary education majors. It is also made available to public school systems which wish to give their students and teachers an opportunity to use the out of doors in the educational program of children. Student teachers work with the elementary school groups on a 24 hour a day basis while they are living at the field campus.

**NORTHERN ILLINOIS STATE COLLEGE FOUNDATION**

The Northern Foundation is a non-profit corporation formed to assist in developing and increasing the facilities of the college and to encourage gifts of money, property, works of art and other material having educational, artistic, or historical value. It receives, holds, and administers such gifts with the primary object of serving purposes other than those for which the State of Illinois ordinarily makes sufficient appropriations. Managed by a board of directors consisting of the President of the College, the Chairman of the Teachers College Board, the Business Manager of the College, a faculty member, a member elected by the Alumni Association, and at least two others, it is empowered to transfer to the college any property assigned or conveyed to it.

One of the Foundation’s major functions is the operation of a loan service for students. This service, which is located in the office of the Secretary-Treasurer, enables deserving students to borrow, at a low rate of interest, on personal notes.

Additional information may be secured from the Secretary-Treasurer, Z. H. Dorland.

**LOAN FUNDS**

**Northern Illinois State College Foundation.** The Foundation administers four funds from which deserving students may borrow, at a low rate of interest, on personal notes: the Emil A. Anderson Loan Fund, the Bertha Bennett Sawyer Loan Fund, the Lewis V. Morgan Loan Fund, and the Student Loan Fund. Loans are not made to entering students. Applications are made in the Office of the Secretary-Treasurer of the Foundation and must receive the approval of the Dean of the Graduate School.

**The Gilbert Memorial Loan Fund.** The Alumni of the College established this fund in recognition of the years of splendid service of Newell D. Gilbert, former head of the Department of Education. The fund is used to help worthy students, and a low rate of interest is charged. Information may be obtained from the Office of the Secretary of the Alumni Association.

**Rotary Loan Fund.** The Rotary Club of DeKalb has presented to the College the sum of five hundred dollars to be used as a loan for students in immediate need of cash. A committee composed of Rotary Club members
on the faculty administers the fund. Information concerning the conditions under which loans are made may be secured from the Dean of 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, upon the recommendation of the college physician, for a period not to exceed seven days a year. 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**

Since student teaching is required for certification in Illinois, facilities for student teaching will be made available for graduate students. Unless exception is granted, however, they will not be provided before the student completes fifteen semester hours of graduate study in this school.

**INTERNSHIP FOR GRADUATE STUDENTS**

Field work under college supervision may be utilized to develop the required proficiencies and may be substituted for regular course work. Only those who have had student teaching or experience in schools are eligible for internship credit. For further information see course description under Education 595, and inquire at the Student Teaching Office.

**ASSISTANTSHIPS**

A limited number of graduate assistantships are offered. They provide a maximum stipend of $150 per month for the nine months of the academic year. Assistants are selected for their ability and are appointed on a half time basis with the understanding that their academic load may not exceed eight hours each semester.

Application forms for graduate assistantships can be procured from the office of the Dean of the Graduate School.

**SPEECH REHABILITATION CENTER**

During the summer of 1956, Northern Illinois State College will again cooperate with the University of Illinois Division of Services for Crippled Children by offering a six weeks program for children with organic speech problems. Undergraduate and graduate credit can be earned by participating in the program; for example, speech correction majors and elementary-speech correction majors may earn clock hours credit in clinical practice. In addition, a number of students from the departments of music, education, art, and physical education may be assigned to conduct individual and group activities under the supervision of faculty members. There is also a limited number of staff positions available.
THE PLACEMENT BUREAU

All available information shows that there is an increasingly critical demand for teachers. All types of teachers, according to a recent study, are in greater demand than they were five years ago. To aid students in securing desirable teaching positions the college, through its Placement Bureau, makes available to school officials or other prospective employers the credentials of its graduates. These credentials contain the following information regarding each student: (1) Academic record and scholastic standing, (2) Student teaching record, (3) Actual teaching experience, (4) Personal evaluation made by instructors, critic teachers, and other supervisors. 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 points enumerated above.

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.

RECREATIONAL FACILITIES

The college sponsors an extensive intramural athletic program each semester. Regular tournaments are held in tennis, handball, playground ball, volleyball, basketball, wrestling, boxing, and golf.

Part of a new 50 acre area has been improved for intramural recreation, physical education classes, and athletic practice. There are tennis, handball, speedball, and volleyball courts; baseball and softball diamonds; football fields; athletic practice fields; hockey, soccer, and touch football fields; and a golf driving range. The area provides an opportunity for men and women to participate in various sports under excellent conditions.

Picnic areas are readily accessible in the Annie Glidden Woods adjacent to the campus and in Hopkins Park north of the city. The municipal swimming pool is also available to college students.

In general, graduate students are invited to participate in undergraduate activities, including band, orchestra, and chorus, which do not involve intercollegiate competition. Information regarding specific organizations may be obtained at the office of the Dean of the Graduate School.
Departmental Requirements for Graduate Majors and Description of Courses

The student may select a program leading to the master's degree with a major in any of the following departments:

- Biological Sciences
- Business Education
- Earth Sciences
- Education
- English
- Industrial Arts
- Mathematics
- Physical Education for Women
- Physical Sciences
- Social Sciences
- Speech

There is also a major in core, described on pp. 30-33, and area majors are planned at present in the following combinations:

- Biological Sciences—Earth Sciences
- Biological Sciences—Physical Sciences
- Earth Sciences—Physical Sciences
- Education—Biological Sciences
- Education—Business Education
- Education—Earth Sciences
- Education—English
- Education—Industrial Arts
- Education—Mathematics
- Education—Physical Education
- Education—Physical Sciences
- Education—Social Sciences
- Education—Speech
- English—Foreign Languages
- English—Social Sciences—Speech
- English—Speech
- Mathematics—Sciences
- Mathematics—Sciences

Information regarding area majors may be obtained by communicating with the heads 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 semester and in other cases to offer courses not designated for the semester. The numerals I and II indicate the semester (or semesters) designated for a course.

AREA MAJOR IN BUSINESS EDUCATION—EDUCATION

The departments of Business Education and Education jointly offer an area major in School Business Management at the graduate level. The program is intended to prepare graduates to assume positions of responsibility in school administration in the capacity of school business managers. The program is under the joint advisorship of the two departments. For further details see the offerings of the Department of Business Education, p. 37, and the Department of Education, p. 46.
AREA MAJOR IN GENERAL SCIENCE

The departments of Biological Sciences, Earth Sciences, and Physical Sciences collaborate to offer an area major in General Science. The program is under the joint advisorship of the three departments. Students who elect the area major in general science must have completed as undergraduates a major or equivalent in at least one of the science fields of biological sciences, earth sciences, or physical sciences or have completed an undergraduate general science major.

In those science fields where no undergraduate major or equivalent has been earned, the following graduate courses are required:

1. Biological Sciences: 405, 406, 416, and 542 (choose a minimum of eight hours).
2. Earth Sciences: 453, 520, 543, and 545 (choose a minimum of eight hours).
3. Physical Sciences: 500, 501 or other courses of 400 to 500 rank with advice of department head (choose a minimum of eight hours).

Further information concerning this major may be secured from any of the three department heads.

AREA MAJOR IN CORE

Two special curricula for the education of core teachers have been established at the graduate level. One of these is designed to equip teachers to use the core approach at the junior high school level. The other is designed to equip teachers to use a core program in the humanities at the senior high school level.

In each instance a special committee will guide the student in his assignment to a complete program. All required courses have been specifically designed for this program.

The Junior High School Core Program

Admission to this program is limited to those with a substantial subject matter major-minor background at the undergraduate level. In general this should be in the fields of general science, English, social sciences, or speech. Others interested are urged to consult the Dean of the Graduate School.

Electives, where included in the program, will be at the discretion of the student's advisory committee, with special reference to the student's previous training.

The following table is illustrative of the course requirements for the Junior High Core Curriculum. Parentheses indicate number of semester hours credit. All numbers of courses refer to core courses.

(See table on next page)
The Senior High School Humanities Centered Core Program

Admission to this program is limited to those with English majors, social science majors (or majors from other schools in any one of the social science fields with some work in the other areas), and speech majors with social science or English minors. Any other student will be considered on the basis of his individual background.

Electives, where included in the program, will be at the discretion of the student’s advisory committee, with special reference to the student’s previous training.

The following table is illustrative of the course requirements for the Humanities Centered Senior High School Core Curriculum. Parentheses indicate the number of semester hours credit. All numbers of courses refer to core courses.

<table>
<thead>
<tr>
<th>Undergraduate Major-Minor Combination</th>
<th>Undergraduate Social Sciences</th>
<th>English-Speech Social Sciences</th>
<th>English-Speech Sciences</th>
<th>English-Speech Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences</td>
<td>500 (3)</td>
<td>501 (3)</td>
<td>501 (3)</td>
<td>500 (3)</td>
</tr>
<tr>
<td>English-Speech</td>
<td>590 (4)</td>
<td>591 (2)*</td>
<td>591 (2)*</td>
<td>591 (2)*</td>
</tr>
<tr>
<td>English</td>
<td>591 (2)</td>
<td>591 (2)*</td>
<td>591 (2)*</td>
<td>591 (2)*</td>
</tr>
<tr>
<td>Speech</td>
<td>581 (2)</td>
<td>581 (2)*</td>
<td>581 (2)*</td>
<td>581 (2)*</td>
</tr>
<tr>
<td>Sciences</td>
<td>510 (2)</td>
<td>500 (3)</td>
<td>500 (3)</td>
<td>500 (3)</td>
</tr>
<tr>
<td>Education</td>
<td>532 (3)</td>
<td>532 (3)</td>
<td>532 (3)</td>
<td>532 (3)</td>
</tr>
<tr>
<td>Electives</td>
<td>500 (3)</td>
<td>500 (3)</td>
<td>500 (3)</td>
<td>500 (3)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>32</strong></td>
<td><strong>32</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

* English-Speech 590 may be substituted for English 581 and Speech 581 at discretion of the student's advisory committee.
**Description of Courses**

Students not majoring in the core curriculum must secure permission from the Office of the Graduate School to register for these courses.

**Core—Education 531  Guidance of Learning in the Core Curriculum**  
A laboratory course in which an opportunity is provided to observe, participate in, and study core programs. Attention is given to planning units of work and developing teaching techniques appropriate to core teaching.  
Six semester hours credit.

**Core—Education 532  Development of Core Programs**  
Consideration of the development of a core program as a whole: evaluating pupil progress, evaluating the total program in terms of objectives, ways of working to improve core programs, and ways of initiating core programs in school systems.  
Three semester hours credit.

**Core—English-Speech 590  Expository Speaking and Writing**  
Review of grammar; principles and methods of exposition applied in oral and written reports, in lecture-demonstrations, in essays, in group discussions, and in book reviews as employed in core programs in the junior and senior high school.  
Four semester hours credit.

**Core—English 591  Drama, Fiction and Poetry**  
A study of available materials in junior and senior high school literature; elementary literary techniques; methods of encouraging original writing and of producing plays and dramatizing fiction; analysis of activities related to the study of literature and their adaptability to the core classroom: music, art, community analysis.  
Two semester hours credit.

**Core—Humanities 500  The Relationship Between Society and Literature**  
A study of the relationships between forms of literature and the social milieu in which they were produced, with a view to understanding the impact of communication on society as a whole.  
Three semester hours credit.

**Core—Sciences 500-501  Science in Everyday Living**  
A study of basic scientific principles, broad concepts, interrelationships from among the various science areas, and advances in scientific
knowledge which influence human behavior and relate to problems of living.

It is recommended, but not required, that these two units be taken in number sequence.

Three semester hours credit for each unit.

Core—Science 510
Science in a Core Curriculum On Demand
Relations of science to other areas of knowledge and to the core curriculum. Teaching materials. Development of resource units.
Prerequisite: Science Core 500 or 501, a major in science, or permission of the instructor.
Two semester hours credit.

Core—Social Sciences 500
Approaches to the Social Sciences On Demand
An analysis of the various approaches to the social sciences, of the relationship of the social sciences to art and literature, to sciences, and to general education. Consideration of the problems of teaching current materials and controversial subjects. Three semester hours credit.

Core—Social Sciences 501
Content of the Junior-Senior High School Social Science Curriculum On Demand
A study of the relationship of the social sciences to vocational and educational guidance and of the content of the social sciences at the junior and or the senior high school level as related to the total social scene, and the relation of social science materials to the local community.
Three semester hours credit.

Core—Speech 581
Oral Interpretation of Literature and Dramatics On Demand
Principals and methods of oral interpretation of literature and educational dramatics adapted to core programs in the junior and senior high school.
Two semester hours credit.

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, 408 or 540, 542, 561 and 570.
(b) Eight additional semester hours credit from courses offered on the 400 or 500 levels.

Students who elect an area major in general sciences will find requirements listed among the Area Majors on page 30.
Description of Courses

GENERAL BIOLOGY

400 Materials for High School Biology
Aims of biology in the life of the individual and the community and the materials best suited in the development of these aims are considered. Visits to high schools are included. Prerequisite: One year of botany or zoology or equivalent. Three semester hours credit.

401 Principles of School Health
Principles of planning school health programs. Methods of promoting healthful school environment discussed. Prerequisite: Courses 255 and 355. Three semester hours credit.

402 Community Health
Community health needs, including environment sanitation and general measures for disease prevention. Role of governmental and voluntary agencies discussed. Prerequisite: Courses 255 and 355. Three semester hours credit.

405 Field Course in Natural History Summer Session
(For teachers in the elementary and secondary schools.) Discussions, demonstrations, visual aids, the identification and preservation of biological specimens, and study of literature pertaining to the natural history of the Lorado Taft Field Campus and nearby areas. Prerequisite: Course 305 or teaching experience. Two weeks. Two semester hours credit.

406 Biological Conservation
The biological basis of conservation practices and the relationship of those practices to human welfare. Three semester hours credit.

408 Heredity and Evolution I and II
Principles of heredity and evolution, the field of reproduction, development and heredity of individuals and races are considered. Prerequisite: A course in Biology. Three semester hours credit.

416 General Ecology II
General ecological principles and the structure of various types of plant and animal communities. Includes field trips to representative areas. Prerequisite: Courses 211, 251, or permission of the instructor. Three semester hours credit.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>500a</td>
<td>Science Problems of Elementary Grades</td>
<td>Development of constructive attitudes toward modern science in relation to problems in the elementary school. (Satisfies requirement for Education 584.)</td>
<td>Course 305 or permission of instructor.</td>
<td>Two</td>
</tr>
<tr>
<td>500b</td>
<td>Methods and Materials for High School Biology</td>
<td>Survey of problems of teaching biology in high school. Current research in this area studied.</td>
<td>Course 400.</td>
<td>Two</td>
</tr>
<tr>
<td>501</td>
<td>Advanced School Health</td>
<td>The school health program as it relates to the administrator and the teacher.</td>
<td>Course 401.</td>
<td>Three</td>
</tr>
<tr>
<td>513</td>
<td>Epidemiology</td>
<td>Causes, detection, and prevention of approximately forty common communicable diseases.</td>
<td>Course 313.</td>
<td>Three</td>
</tr>
<tr>
<td>516</td>
<td>Advanced Ecology</td>
<td>Continuation of Biological Science 416. Influence of environmental factors upon distribution of organisms evaluated. Representative areas analyzed in detail. Offered on demand.</td>
<td>Course 416 or permission of instructor.</td>
<td>Three</td>
</tr>
<tr>
<td>540</td>
<td>Experimental Genetics</td>
<td>Fundamental principles of genetics and cytogenetics illustrated by laboratory work with fruit fly, mold, or other suitable organisms. Laboratory fee—$3.00.</td>
<td>Course 408.</td>
<td>Two</td>
</tr>
<tr>
<td>542</td>
<td>Evolution</td>
<td>Theories of evolution; development of concept of evolution; factors in organic evolution.</td>
<td>Graduate standing.</td>
<td>Two</td>
</tr>
<tr>
<td>543</td>
<td>Cytology and Histology</td>
<td>Combination study of cell structure and tissue differentiation including both plants and animals.</td>
<td>Courses 211 and 251.</td>
<td>Three</td>
</tr>
</tbody>
</table>
Seminar
Discussion of scientific literature and current problems in the teaching of biology. Special topics assigned to students. Prerequisite: Thirty semester hours in biology. Two semester hours credit.

Special Problems in Biology
Independent study of problems under supervision of advisor appointed by Department Head. Writing of qualifying paper will be part of work. Prerequisite: Permission of Department Head. One to three semester hours credit. (Maximum six semester hours.)

BOTANY

Plant Anatomy
Structure, development, and kinds of plant tissue. Various types of tissues in their different relations and adaptations considered. Prerequisite: One year of botany. Three semester hours credit.

Mycology
Structure and classification of fungi with emphasis on pathological relations. Diagnostic techniques are included. Prerequisite: Course 211. Three semester hours credit.

Advanced Plant Physiology
Physico-chemical activities of plant growth and development. Prerequisite: Course 310: Physical Science 105, 165, or equivalent. Three semester hours credit.

Plant Pathology
Specific casual agents or plant diseases, their identification and control measures. Emphasis placed on parasitism and the economy of crop diseases. Offered on demand. Prerequisite: Course 412. Three semester hours credit.

Taxonomy
Fundamental principles of classification of higher plants. Ecological distribution. Prerequisite: One year of botany. Three semester hours credit.

Plant Histology and Microtechnique
Practical laboratory methods in botanical (histochemical) and micro-technique including tests for wall and protoplasmic substances. Offered on demand. Prerequisite: Courses 310 and 410. Three semester hours credit.

* Course may be repeated for additional credit.
520  Advanced Plant Morphology  On Demand
Vegetative and reproduction structures and their development. Emphasis on structural relationships between related groups.
Prerequisite: Course 212 and permission of instructor.
Three semester hours credit.

**ZOOLOGY**

450  Parasitology  I
Animal parasitism with emphasis on the external and internal parasites of man.
Prerequisite: Course 251.
Two semester hours credit.

454  Embryology  II
Principles and processes in the development of vertebrates. Detailed study of embryology of chick.
Prerequisite: Course 251.
Three semester hours credit.

456  Fish and Wildlife  I
A study of the taxonomy, ecology, distribution, conservation, and utilization of the natural and introduced forms.
Prerequisite: Courses 210, 211, 250, and 251 or their equivalents.
Two semester hours credit.

554  Advanced Embryology  On Demand
Continuation of Biological Science 454. Detailed study of mammalian development. Assigned experimental work.
Prerequisite: Course 454 or permission of instructor.
Three semester hours credit.

555  Advanced Physiology  On Demand
Functional interrelations of organ systems. Special topics in physiology. Laboratory consists of experimental techniques and practical demonstrations.
Prerequisite: Course 355.
Three semester hours credit.

560  Field Zoology  II
Collection, preservation and identification of lower vertebrates and terrestrial and aquatic invertebrates. Detailed study of habits and life histories of selected forms.
Three semester hours credit.

**DEPARTMENT OF BUSINESS EDUCATION**

**GRADUATE MAJOR IN BUSINESS EDUCATION**

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

(a) Course 500 or 510.
(b) At least six semester hours credit in courses 520, 521, 522, and 523.
(c) Additional semester hours of credit to make a total of twenty-two to be selected from courses offered on the 400 and 500 levels. At least two hours must be in 502.
AREA MAJOR IN SCHOOL BUSINESS MANAGEMENT*

The recommended courses for school business management are:

**Business Education 411, 416, 432, 433, 501, 502, 540, 541, 550; Education 500, 501, 503, 551, 553, 554, 595.**

The course sequence will, however, be determined through joint advisement in the Department of Business Education and the Department of Education, based on the previous preparation and experience of the student. A student in this program may expect to devote about one-half of his time in study in Business Education and one-half in Education.

**Description of Courses**

**401 Methods of Teaching Bookkeeping** I and II
A critical study is made of the teaching of bookkeeping on the secondary school level through an analysis of objectives, approaches, methods of presentation, testing and materials.
Two semester hours credit.

**402 Methods of Teaching General Business Subjects** I and II
A study of content, objectives, materials and specific methods of presentation as they apply to such non-skill subjects as general business or junior business training, business law, business economics, salesmanship, business organization, etc.
Two semester hours credit.

**403 Methods of Teaching Shorthand** I and II
The teaching methodology of Gregg Shorthand Simplified will be presented in relation to the following specific problems: guidance and selection of students, dictation and reading skills, fluency and proportion of outlines, testing and grading procedures, motivation, transcription and mailability.
Two semester hours credit.

**404 Methods of Teaching Typewriting** I and II
Basic consideration will be given to principles of motor skill development as applied to the teaching of typewriting in secondary schools. The following topics will receive special consideration: motivation, equipment, standards and grading, error elimination and remedial treatment, courses of study, curriculum problems, personal versus vocational typewriting, and statistical typewriting.
Two semester hours credit.

**411 Business Law** I and II
A study of the law of contracts, agency and negotiable instruments. Some attention is given to court systems and basic legal procedures. Case materials and problems are used.
Three semester hours credit.

*This area of specialization is also listed as a program of study in the Department of Education and among the Area Majors. See p. 29 and p. 42.

**Business Education undergraduate majors who have had many of these courses will be expected to elect from other advanced offerings within the Department of Business Education.*
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>412</td>
<td>Business Law II I and II</td>
<td>The significant phases of the law dealing with sales, personal property partnerships, corporations and some aspects of real property. Problems and case materials are used. Prerequisite: Course 411. Three semester hours credit.</td>
<td></td>
</tr>
<tr>
<td>413</td>
<td>Business Law III II</td>
<td>A study of the basic legal concepts of real property, including real estate mortgages, landlord and tenant and mechanics liens as well as the general principles of real property. Also considered are laws dealing with bankruptcy, torts and business crimes. Special applied projects on local law. Prerequisites: Courses 411 and 412. Three semester hours credit.</td>
<td></td>
</tr>
<tr>
<td>415</td>
<td>Consumer Economics On Demand</td>
<td>A study of the economics of consumption with particular attention given to an analysis of the factors and forces underlying consumer demand. Three semester hours credit.</td>
<td></td>
</tr>
<tr>
<td>416</td>
<td>Insurance On Demand</td>
<td>A study of the basic principles of life insurance, fire insurance, casualty insurance, marine insurance, and surety and fidelity bonds. Two semester hours credit.</td>
<td></td>
</tr>
<tr>
<td>420</td>
<td>Business English and Correspondence On Demand</td>
<td>The use of correct and forceful English for business purposes. Attention is given to the various types of business correspondence. Ample practice is given in writing various types of business letters and reports. Two semester hours credit.</td>
<td></td>
</tr>
<tr>
<td>430</td>
<td>Business Organization and Finance I and II</td>
<td>Fundamental principles of operating, organizing, and financing the individually owned and corporate form of business enterprise. Some topics discussed are: getting started in business; important relationships within the framework of the business organizations; problems of location, housing, equipment, layout, purchasing and shipping. Two semester hours credit.</td>
<td></td>
</tr>
<tr>
<td>431</td>
<td>Principles of Management On Demand</td>
<td>The fundamentals of management; phases of administrative, staff, and operative management; and application of principles and techniques. Three semester hours credit.</td>
<td></td>
</tr>
<tr>
<td>432</td>
<td>Office Management On Demand</td>
<td>Application of the principles of management to the planning, organizing and controlling of office work; problems of office standards, business forms, and office methods. Two semester hours credit.</td>
<td></td>
</tr>
</tbody>
</table>
Personnel Management  On Demand
Basic principles and procedures relating to employment, industrial health and safety, labor relations and morale, employee education and training, and wage and salary administration.
Two semester hours credit.

Principles of Marketing  On Demand
Functions of the marketing process and marketing institutions. Such topics as cost of marketing, produce exchanges, mail-order and chain stores, cooperatives and price are considered.
Three semester hours credit.

Advertising  On Demand
The fundamentals of advertising in relation to modern business activities; advertising media, campaigns, and systems are considered.
Two semester hours credit.

Principles of Salesmanship II
A study of salesmanship through selected cases and problems; topics include the sales process, sales efficiency, and the selection, training, and promotion of salesmen.
Three semester hours credit.

Money and Banking  On Demand
A short historical survey of money and the evolution of banking. The organization and the operation of banks, monetary theory and markets, and the functions of the Federal Reserve System are discussed.
Three semester hours credit.

Individual and Business Taxation  On Demand
A study of the various types of Federal, State, and local taxes as they apply to the individual and various types of business organizations. Blanks and forms are used in the analysis of taxation problems.
Three semester hours credit.

Principles and Problems of Business Education  On Demand
Designed to develop an understanding of the characteristics of present-day business education in terms of its basic principles and typical practices, problems, and trends.
Three semester hours credit.

Introduction to Research in Business Education  On Demand
This course is to acquaint the student with research which has been completed in business education during recent years. In addition, the student will become familiar with the methods, techniques, and procedures of research that may be applied to business education.
Two semester hours credit.

Independent Research in Business Education  On Demand
With the approval of the major advisor, a student may select a project on which to work during the term, either in the field or in the library, meet regularly with the advisor for consultation and guidance,
and prepare a research paper as a culmination of study. Two semester hours must be allocated to the writing of the qualifying paper. One to three semester hours credit.

510 Administration and Supervision of Business Education On Demand
General managerial problems of business education in the secondary school, designed for in-service business teachers. Administrative and supervisory problems pertaining specifically to business education are: curriculum construction and material, student measurement and evaluation, classroom supervision and rating, physical layout, and administration of supplies, textbooks and equipment.
Three semester hours credit.

520 Techniques for Improvement of Instruction in Stenography On Demand
A study of teaching techniques and an evaluation of research in methodology for the purpose of improving the instruction in shorthand and transcription. Remedial practices, methods of motivation, and the use of classroom materials will be discussed through an exchange of ideas and experiences.
Three semester hours credit.

521 Techniques for Improvement of Instruction in Typewriting On Demand
Methods of improving the techniques of teaching typewriting through an examination of current research and the discussion of such problems as: typewriting in the curriculum; objectives; testing and grading for beginning, advanced and personal-use classes; remedial practices; motivation; and the use of materials and supplies.
Three semester hours credit.

522 Teaching Procedures in Bookkeeping and Accounting On Demand
A study of the problems and techniques in the teaching of bookkeeping. The place of bookkeeping in the curriculum, methods of motivation, the use of visual aids and practice sets, testing and grading, and problems of individual teachers will be discussed.
Three semester hours credit.

523 Methods and Materials in Teaching General Business On Demand
Designed primarily to improve the techniques of teaching the general and social-business subjects generally found in the secondary school business curriculum. An evaluation of classroom materials, methods, research, and current trends will be made through a mutual exchange of ideas and experiences.
Three semester hours credit.

530 Seminar in Consumer Problems On Demand
Some of the problems considered in this course are: personal budgeting; the cooperative movement; consumer standards and grade labels;
governmental aids for consumers; the buying of shelter; insurance and investments; the use of installment buying and other forms of credit. Three semester hours credit.

540 Financial Statement Analysis
Analysis and interpretation of financial reports with particular reference to the construction of statements, the meaning of accounts, ratios, and other evaluating indices. Three semester hours credit.

541 Accounting: School Business Management
This course is designed to give school business managers and other school administrators an understanding of the principles of accounting, including a study of the balance sheet, profit and loss statement, accounting for interest, voucher system, valuation of assets. Special attention to accounting for extra-curricular funds will be given. Not open to students with previous college training in accounting. Two semester hours credit.

550 Practicum in Office Machines
Fundamentals of operating the dictaphone and transcription machines; key driven and rotary calculators; adding and listing machines; and duplicating machines. Three semester hours credit.

560 Seminar in Marketing
A study of the problems involved in the performance of the marketing functions at the various levels of distribution and of the problems of policy determination by the manufacturer, the wholesaler, and the retailer. Three semester hours credit.

DEPARTMENT OF EARTH SCIENCES
GRADUATE MAJOR IN THE EARTH SCIENCES

Students who elect a graduate major in the earth sciences must satisfy the following course requirements in earth sciences.*

(a) Courses 453, 542, 545, 549, 557 and 570
(b) Six additional semester hours of credit from courses offered on the 400 or 500 levels.

Students who elect an area major in general sciences will find requirements listed among the Area Majors on page 30.

Description of Courses
EARTH SCIENCES

449 Earth Sciences Teaching Procedures in the Elementary and Secondary School
A study of teaching materials and procedures from the areas of geol-

*Graduate students not majoring in earth sciences may elect graduate courses offered in this major if they meet the prerequisites listed or show credit for Earth Science 520.
ogy and geography in the elementary and secondary school curricula. (Credit may not be earned in both this course and Earth Sciences 520.)

Three semester hours credit.

453 **Regional Problems in Conservation**

Summer Session

This is a study of the social or human elements in conservation practices as they are related to the scientific aspects of natural resources conservation.

Three semester hours credit.

°520 **Earth Science for Public School Teachers**

**Summer Session**

A study of the principles and applications of earth science by means of student demonstrations which are usable in the elementary and secondary schools. Course satisfies requirements for Education 584. (Not open to graduate students who have undergraduate earth science majors or minors. Nor to those who have taken Earth Science 449.)

Three semester hours credit.

545 **Field Study Techniques**

in the Earth Sciences

II and Summer Session

A study is made of field observations, techniques, record taking, mapping, photographing, and interpreting the geology and geography of this area.

Two semester hours credit.

549 **Problems in Teaching Earth Sciences in the Elementary and Secondary Schools**

II

A study of the problems of teaching selected basic concepts from the earth sciences in the elementary and secondary schools.

Prerequisite: Course 449.

Two semester hours credit.

557 **Survey of Literature in the Earth Sciences**

**On Demand**

Individual reading is directed to those phases of literature which are needed for critical thinking in earth sciences.

One or two semester hours credit.

**570 **Special Problems in Earth Sciences**

On Demand

Independent study of problems as made under the supervision of advisor appointed by the Department Head. Writing of qualifying paper will be a part of work.

One to three semester hours credit.

**GEOGRAPHY**

450 **Geography of Illinois**

**On Demand**

An intensive regional study of the state. Also treats the relationship and significance of various regions to each other and to the whole United States.

Two semester hours credit.

*This course or its equivalent will meet prerequisite requirements for graduate courses in the Earth Science Major.

**May be repeated. A limit of six semester hours may be earned.*
451 Political Geography
Relating of the physical and social environments of human groups with the political character of the state or nation to which they belong and in which they live. This is a world survey of political geography.
Prerequisite: Course 101 or equivalent.
Two semester hours credit.

452 Advanced Economic Geography
Investigation and analysis of special problems dealing with the areal differentiation of the earth's economic life as reflected in the production, movement, and consumption of raw materials, agricultural products and commodities of industry in national and international trade.
Three semester hours credit.

455 Cartography and Graphics
The principles of map construction; techniques of map drawing; reproduction of maps and charts; and kinds of materials capable of map presentation in their most effective form.
Two double laboratory periods. Two semester hours credit.

458 Geography of U. S. S. R.
Study based on both a topical and regional approach. An attempt is made to obtain an accurate appraisal of the natural resources base of Russia as well as an estimate of her industrial and agricultural strength.
Prerequisite: Course 101 or equivalent.
Three semester hours credit.

GEOLOGY AND METEOROLOGY

444 Economic Geology (Metallic Minerals)
Study of the nature, origin, and accepted refinement methods of the metallic minerals, reserves of the world. Special reference given to their recovery costs and problems. Classroom work supplemented by hand study of the representative specimens and by field observations.
Prerequisite: Course 240 or equivalent.
Two semester hours credit.

445 Economic Geology (Non-Metallic Minerals)
Study of the nature, origin, and accepted refinement methods of the non-metallic and fuel mineral reserves of the world. Special reference given to their recovery costs and problems. Classroom work supplemented by hand study of representative specimens and by field observations.
Prerequisite: Course 240 or equivalent.
Two semester hours credit.

542 Geomorphology
A study of the origin and development of typical landforms through-
out the world. Past landforms and processes of formation are included.
Prerequisite: Course 341 or 342 or equivalent.
Three semester hours credit.

543 Climatology II
A study of the statistical data dealing with past and present climatic elements. This study is based on world wide information.
Prerequisite: Course 243 or 348 or equivalent.
Three semester hours credit.

544 Glacial Geology I
A detailed study of the origin, development and topographical effects of the Pleistocene period in North America. Implications are made relative to the influence of the Pleistocene glacial deposits of the North Central states in the United States upon the agricultural and industrial activities.
Prerequisite: Course 346 or equivalent.
Two semester hours credit.

546 Paleontology (Vertebrate and Invertebrate) II
A study of the history identification, and ecology of past life forms. This includes plant fossils as well as invertebrate and vertebrate animal forms. Major emphasis is placed on the living conditions of vertebrate animal forms.
Prerequisite: Course 346 or equivalent.
Three semester hours credit.

DEPARTMENT OF EDUCATION
GRADUATE MAJOR IN EDUCATION

Students who elect a graduate major in education must satisfy the following requirements:
(a) Successfully complete courses 500, 501, 503.
(b) Develop certain proficiencies in one of the areas of specialization listed below.
(c) Earn not less than 22 semester hours of credit in the Department of Education.

Areas of Specialization

I. Teaching in the Elementary School. Designed to acquaint the elementary school teacher with new developments in child development, elementary curriculum, and the guidance of learning. An opportunity to gain increased knowledge in special curriculum areas as needed.

II. Supervision. Two areas of specialization are recognized in the field of supervision:
A. Supervision and Curriculum. Preparation in supervisory techniques, curriculum planning, and improvement of in-
struction for curriculum coordinators, supervisors of instruction, assistant superintendents in charge of instruction, and others whose duties include responsibility for curriculum improvement.

B. Supervision of the Beginning Teacher. Preparation for classroom teachers who supervise student teaching or other supervisory personnel who are responsible for the orientation and guidance of beginning teachers in the field.


IV. Administration. Programs of study in three areas of educational administration are offered:

A. General School Administration. Designed to prepare students for the small school superintendency. Includes instruction in guidance, directorship and coordination of personnel, curriculum, finance, public relations, and the school plant.

B. The School Principalship. Preparation for the school principalship including an acquaintance with fundamentals of school organization and administration with an emphasis on the principal's responsibility in the improvement of instruction.

C. School Business Management. Designed to give the student a thorough understanding of education coupled with preparation for management of business affairs in a school system. The course sequence will be determined through joint advisement by the Department of Business Education and the Department of Education, based on the previous experience and preparation of the student. A student in this program may expect to devote about one-half of his time in study in Business Education and one-half in Education.

(Only students employed in some educational administrative capacity or those with teaching experience are eligible to register for study in school administration. Others must have the approval of a Committee appointed by the Head of the Department of Education.)

*This area of specialization is also listed as a program of study in the Department of Business Education and among the Area Majors on p. 29.
In each of the four areas above, the student will, with the help of his advisor, plan a program which will help him to gain the required proficiencies. Courses in the area of specialization will be recommended after careful consideration of the student's background, interests, and purposes. Field work under college supervision may be utilized to develop proficiencies and substituted for course work. Some students, because of acquired proficiencies and experience, may be prepared to work in an area upon fulfillment of minimum requirements. Others, however, may have to undertake study beyond the minimum requirements to attain the necessary background.

Students interested in further preparation for teaching in the secondary school are expected to major in a subject matter field or to elect an area major in a subject matter field and Education as described on page 29. Many courses in the Department of Education are open to students in other departments on an elective basis. Further information may be obtained from the Head of the Education Department or from the instructor.

**Description of Courses**

400  Guiding Young Children in School  II
The school program for children ages three to seven. Planning the learning environment, developing learning activities, organizing the school day, interpreting children's growth to parents, exploring community resources. Special help for each student in planning for individual classroom situations.
Prerequisite: Senior standing.
Three semester hours credit.

408  Educational Statistics  On Demand
(Also listed as Mathematics 408 and as Physical Education 408)
Frequency distributions, measures of central tendency, measures of variability, percentiles, the normal curve, correlation and regression, reliability of measures, sampling, and analysis of variance. For students who have a need for meaning, interpretation, and application of statistical concepts without rigorous mathematical development.
Prerequisite: Mathematics 120 or equivalent.
Three semester hours credit.

409  Personnel and Guidance  II
Introduction to the study of personnel work in elementary and secondary schools. Emphasis upon recognizing needs for personnel work, planning orientation, vocational and educational guidance.
Prerequisite: Senior standing.
Three semester hours credit.

410  Outdoor Education  Summer Session
A course to acquaint teachers with the concepts and relationships of the natural environment and child learning which may serve as guides to the teaching procedures in outdoor education. This is to be accomplished through direct laboratory experiences in living, learn-
ing, and interpreting in outdoor situations. All teachers in the course will live on the field campus during the school week. The instructional staff will be interdepartmental.
Prerequisite: Student teaching or teaching experience.
Three five-day weeks. Three semester hours credit.

411 Problems of Administration in Outdoor Education  Summer Session
An advanced course in outdoor education. The subject matter will be determined by the needs of the teachers who enroll. Such problems as initiating a pilot program, financing the operation, insurance, suitable facilities, proper staffing, providing resources, and training the staff will be considered. This course is geared to meet the needs of superintendents, principals and teachers who are contemplating the initiation of a program of outdoor education in their own school system.
Prerequisite: Education 410 or comparable experience.
Three five-day weeks. Three semester hours credit.

415 Treatment of Exceptional Children
Psychology of atypical children— gifted, mentally subnormal, physically handicapped, socially maladjusted, educationally retarded. Ways of meeting their needs in special or regular classes, and in institutions.
Prerequisite: Course 300 or 301 or senior standing.
Three semester hours credit.

416 Personality Maladjustments and Mental Hygiene
Personality development from infancy through adulthood. Healthful and unhealthful modes of adjustment, prevention of maladjustments, treatment of personality problems in school, clinic, and mental hospital.
Prerequisite: Course 300 or 301 or senior standing.
Three semester hours credit.

424 Basic Procedures in Guidance of Learning (High School)
Modern principles of teaching and learning studied in relation to the guidance of learning activities in the high school class.
Prerequisite: Course 356 and by permission of the Head of the Education Department.
Three semester hours credit.

430 Audio-Visual Education
A study of the selection, evaluation, and utilization of various audiovisual materials and techniques used in the instructional program. Provides understanding of the operation and maintenance of equipment.
Prerequisite: Course 350 or 356, or permission of instructor.
Three semester hours credit.

433 Junior High School Organization and Problems
A survey of the development of the junior high school idea, reason
for reorganization, administration problems, program making, co-
curricular activities, vocational guidance, student participation in
school government, and the junior high school plant.
Prerequisite: Course 350 or 356, or permission of instructor.
Three semester hours credit.

435 American Public Education
An overview of the organization of American public education,
stressing school legislation and a teacher's point of view of the
major aspects of organization and administration of public schools.
Prerequisite: Course 350 or 356.
Three semester hours credit.

466 Diagnosis and Treatment of
Reading Difficulties
A study of the causes of reading difficulties, their diagnosis and
treatment.
Prerequisite: Course 361.
Three semester hours credit.

482 Reading in the High School
(Also listed as English 482)
A study of reading problems of high school students. Some attention
also given to special problems of retarded readers.
Three semester hours credit.

488 An Introduction To Philosophy
Lays the foundations for understanding the meaning of philosophy.
Develops reflective thinking about the relations of contemporary man
to his many worlds. Relates the results of reflective thinking about
experience to basic issues in philosophy and significant solutions as
presented by systematic philosophies in the past and present. Stimu-
lates development of an attitude of critical and synoptic understand-
ing in the student.
Three semester hours credit.

490 Beginning Student Teaching
(Elementary School)
The first experience in student teaching for elementary majors with
approximately three years of college or more. Experiences in guid-
ing learning for both small and large groups of children.
Prerequisite: See regulations concerning assignment, p. 23.
One-half day, nine weeks: three semester hours credit or
One-half day, eighteen weeks: six semester hours credit or
Full day, nine weeks: six semester hours credit.

491 Advanced Student Teaching
Emphasis on preparation and presentation of major teaching units
and full classroom responsibility.
Prerequisite: Course 490.
One-half day, nine weeks: three semester hours credit or
One-half day, eighteen weeks: six semester hours credit or
Full day, nine weeks: six semester hours credit.

492 Advanced Student Teaching
(Elementary School Elective)
Provides opportunities to earn additional credit in student teaching
for students needing or desiring it. Assignment is made only when
facilities permit.
Prerequisite: Course 491.
One-half day, nine weeks: three semester hours credit.

493 Student Teaching
(Elementary School Special Subjects)
Experiences in teaching one of the following fields to children: fine
arts, home economics, industrial arts, music, physical education, and
speech correction. Required of majors in these areas.
Prerequisite: Adequate background in the field of choice. See regu-
lations concerning assignment, p. 23.
One-fourth day, eighteen weeks: three semester hours credit; or
One-half day, nine weeks: three semester hours credit.
Speech rehabilitation center, summer session: credit to be arranged.

494 Student Teaching
(Elementary School Elective)
Students majoring in the curricula for high school teachers may
elect this course for either the first or an additional opportunity to
work with elementary children in any phase or phases of the ele-
mentary curriculum depending upon available facilities.
Prerequisite: See regulations concerning assignment, p. 23.
One-half day, nine weeks: three semester hours credit or
One-half day, eighteen weeks: six semester hours credit or
Full day, nine weeks: six semester hours credit.

495 Student Teaching
(High School Special)
Offered by special permission to graduate students.
Prerequisite: See regulations concerning assignment, p. 23.
One-half day, eighteen weeks: five semester hours credit or
Full day, nine weeks: five semester hours credit.

496 Student Teaching
(Elementary or Secondary School)
Elementary School:
Nine weeks of full-time student teaching to be taken in the same
semester as Education 476 and 477. *Either of the following patterns
may be selected:
(a) Nine weeks of full-time student teaching followed by Educa-
tion 476 and 477.*
(b) Education 476 and 477 followed by nine weeks of full-time
student teaching.*

*Education 476 and 477 do not carry graduate credit.
Prerequisite: Course 375.
Five semester hours credit.

**Secondary School:**
Nine weeks of full-time student teaching to be taken in the same semester as Education 480. Either of the following patterns may be selected:

(a) Nine weeks of full-time student teaching followed by Education 480 for three semester hours and, in addition, not more than six semester hours to be elected.

(b) Education 480 for three semester hours and, in addition, not more than six semester hours to be elected, followed by nine weeks of full-time student teaching.

Prerequisite: Course 302.
Five semester hours credit.

500 **Social Foundations of Education**
I and II
A study of the relation of education to society with particular emphasis upon problems of the present age; attention directed to significant cultural trends and their implications for schools.
Three semester hours credit.

501 **Psychological Foundations of Education**
I and II
A constructive review of principal theories and significant interpretations in psychology that influence practice in our schools. Attention focused on areas of fundamental importance in education, theories of learning, motivation, transfer of training, personality development, etc. Practical topics in such areas and of special interest to individual students and teachers are investigated in research literature and reported independently.
Three semester hours credit.

502 **The Teaching of Arithmetic in the Elementary School**
II
(Also listed as Mathematics 502)
Consideration of the implications of research for methods of teaching, and the selection and arrangement of concepts and materials.
Prerequisite: Mathematics 400 or equivalent or teaching experience.
Three semester hours credit.

503 **Independent Research in Education**
I and II
With the approval of the major advisor, a student may select a project on which to work during the term, either in the field or in the library, meet regularly with the advisor for consultation and guidance, and prepare a research paper as a culmination of study.
One to three semester hours credit.

510 **Methods of Evaluation**
I
Emphasis on modern concepts of evaluation; construction and validation of evaluative instruments; use of standardized tests and scales; and procedures of evaluating relatively intangible outcomes.
Two semester hours credit.
511 Understanding and Guiding the Elementary School Child Summer Session
Exploration of both individual and group problems in child development in which recent research and laboratory situations will be utilized. Viewing the schools in light of the theory of human growth. Six semester hours credit.

512 The Elementary School Curriculum I
A study of basic principles in the construction and administration of modern school curricula, the relation of the curriculum to society, and present practices in the schools. Two semester hours credit.

513 Problems in Elementary Education II
A seminar requiring individual investigations of problems in elementary education culminating in a research project. Two semester hours credit.

521 Understanding and Guiding Youth in the Secondary School Summer Session
Laboratory course with emphasis on direct experiences with secondary school youth. Intensive study of research materials that deal with understanding the nature of adolescents and techniques of guidance. Six semester hours credit.

523 Problems in Secondary Education II
A seminar requiring individual investigation of problems in secondary education culminating in a research paper. Two semester hours credit.

531 Guidance of Learning Experience in the Core Curriculum Summer Session
A laboratory course in which an opportunity is provided to observe, participate in and study core programs. Attention is given to planning units of work and developing effective teaching techniques appropriate to core teaching. Six semester hours credit.

532 Development of Core Programs Summer Session
Consideration of the development of a core program as a whole; evaluating pupil progress, evaluating the total program in terms of objectives, ways of working to improve core programs, and ways of initiating core programs in school systems. Three semester hours credit.

541 The Improvement of Instruction I and II
Techniques, functions and responsibilities of educational leaders in in-service improvement of the entire educational staff. Practical experience of members of the class used as a basis for development of emerging principles. Three semester hours credit.
542 Fundamentals of Curriculum Development I and II
A critical appraisal of principles and procedures applicable to development of educational programs in elementary and secondary schools. Particular attention given to theory and practice in the field of curriculum development and educational human relations. Three semester hours credit.

543 Problems in Curriculum and Supervision On Demand
A seminar offering opportunity for intensive investigation of curriculum problems of concern to individual students. Study will be summarized in a research paper. Should be taken after Education 542. Two semester hours credit.

551 School Organization and Administration I and II
A basic course in organization and administration. Develops a philosophy for school administration and understanding of the following areas of school administration: curricula, pupil administration, supervision, public relations, finance, executive efficiency. Three semester hours credit.

552 Duties of School Principals I and II
A study of the basic duties of elementary and secondary school principals in school organization and administration as well as the supervision of instruction. Three semester hours credit.

553 Problems in School Administration I and II
A seminar requiring individual investigation of fundamental problems in school administration and school business management culminating in a research paper. Problems will be based largely on past or anticipated experience of the students. Prerequisite: Course 551 and 552 or permission of the instructor. Three semester hours credit.

554 School Buildings and School Finance I and II
Problems dealing with educational finance and with planning school building programs. Field and laboratory work whenever possible. Open to students who are members of building planning committees. Prerequisite: Course 551 and 552 or permission of the instructor. Three semester hours credit.

556 School Organization and Administration for Teachers Summer Session
Emphasis on the development of insight into the role of the teacher in organizational and administrative problems of the school. Two semester hours credit.

559 Seminar—Nature and Theory of Administration II and Summer Session
Inquiry into the nature of the school administrative process. Discussion of administration in terms of principles. Research, study,
and analysis of the latest thought in the areas of administration. Emphasis will be on the basic concepts rather than practices. Prerequisite: Education 553 or permission of the instructor. Three semester hours credit.

560 Personnel and Guidance I and II

Introduction to the study of personnel work in elementary and secondary schools. Principles, practices, recognition of needs for guidance. Emphasis upon group activities in orientation, vocational, educational, and social guidance programs and upon methods of studying individuals. Two semester hours credit.

561 The Teacher's Role in Personnel Work I

Study of the need for personnel work, including guidance, of ways of meeting needs of elementary and high school pupils by the classroom or homeroom teacher, or specialized services to which teachers may refer individuals needing help. Two semester hours credit.

562A Counseling Techniques, Theory and Practice I

Study of prevailing types of counseling with techniques used in each. Training in actual counseling of individuals by students. Prerequisite: Course 416 and 560 and consent of instructor. Three semester hours credit.

562B Counseling Techniques, Theory and Practice II

Continuation of 562A with more emphasis upon the practical phase. Prerequisite: 562A and consent of instructor. Three semester hours credit. (Education 562A and 562B must be taken in consecutive semesters.)

563 Educational and Psychological Measurement I and Summer Session

An introductory course dealing with the essential principles of measurement and basic statistical concepts needed for the understanding and use of tests and other measures in educational personnel work. Topics include statistics as applied to educational personnel work; a study of achievement and special aptitude tests, interest and personality inventories, and other measures. Experience in administering, scoring and interpreting tests is provided. Two semester hours credit.

564 Techniques in Student Personnel Work II

The use of various techniques in educational personnel work. Rating scales, records, autobiographies, anecdotes, sociograms, case studies, and other techniques are studied. Consideration is given to the use of interviews and tests. Emphasis on testing and interviewing is found in other courses. Two semester hours credit.
565 Developmental Psychology I and II
Studies the span of human life from conception to death, emphasizing the outstanding characteristics of normal individuals in each period. Designed to show how all experiences of previous stages leave their mark on following stages. Treatment of each stage shows how changes in interest, attitudes, and behavior occur as the individual develops and then declines with advancing age.
Two semester hours credit.

566 Clinical Problems in Child Study II
A course providing clinical experiences in diagnosis of reading difficulties and the application of remedial procedures.
Prerequisite: Course 300, 466, Student Teaching.
Three semester hours credit.

567 Occupational Information and Guidance I
How to obtain, evaluate, file, and use occupational and educational information in the vocational counseling process. Some experience provided in conducting local vocational surveys.
Three semester hours credit.

568 Guidance in Elementary Education On Demand
A course dealing with principles and methods and practical problems pertinent to the elementary school. Recognition of early remedial problems in reading, behavior, etc.; emphasis on the use and importance of anecdotal personal data records, parent and teacher interviews and interpretation for referrals. Planning programs for individual pupils with teachers is stressed.
Two semester hours credit.

569 Individual Intelligence Testing On Demand
Analysis of individual intelligence tests in present-day use. Administration of Stanford-Binet and of Wechsler-Bellevue tests.
Three semester hours credit.

571 Organization and Administration of Guidance Services II and Summer Session
A study of the function, basic elements and effective organization of pupil personnel services. Problems in activating, organizing and administering personnel services; selection and education of the staff; evaluating the services; utilizing community resources; developing records are considered.
Prerequisite: Course 561 and consent of the instructor.
Two semester hours credit.

572 School-Community Relations I and II
Stresses the school's responsibility as a leader and interpreter of home-school-community relationships. Gives consideration to the task of interpreting the school to the community.
Three semester hours credit.
581 The Teaching of Reading in the Elementary School I and II
A study of the developmental reading program in the elementary grades. Consideration is given to this program from the language arts point of view.
Three semester hours credit.

583 Social Learnings in the Elementary School On Demand
Principles and procedures in the development of social experiences. Child growth and development, democratic values and processes, actual life situations and common life problems are stressed.
One semester hour credit.

584 The Teaching of Science in the Elementary School On Demand
A consideration of techniques used in selecting and providing experiences in elementary school science; includes the study of equipment and materials suitable for elementary school students.
One semester hour credit.

586 Related Arts in the Elementary School On Demand
The functions of the arts in the total elementary school program; an analysis of contemporary trends in the teaching of art, industrial arts, home economics, music, dance and literature.
Two semester hours credit.

587 Problems in Audio-Visual Education On Demand
Individual projects and research in selection and utilization of audio-visual materials and equipment; unit costs, evaluation procedures, and setting up and administering an audio-visual program.
Three semester hours credit.

590 Group Process in Education Summer Session
Democratic principles and patterns of group action analyzed and applied to teaching-learning situations on all levels. Studies of experimentation and research in group dynamics are examined with emphasis on understanding human relations and utilizing cooperative techniques in instructional programs.
One semester hour credit.

591 Techniques of Educational Measurement—Applied Statistics On Demand
Concepts of statistics and measurement as applied to practical school problems. Uses and misuses of measurement.
Two semester hours credit.

592 Philosophies of Education II
Development of method and tools for systematic examination of assumptions and premises underlying principal philosophies of education, and critical examination of their respective interpretations of aims, values, and organization of education. Individual students
investigate and report on important related topics such as professional ethics, politics and education, the economic order and education, school and social progress, religious and moral education.

Three semester hours credit.

593 Supervision of Student Teaching  

Summer Session
A study of the orientation, guidance, and evaluation of the prospective or beginning teacher in the classroom. Areas to be considered include induction procedures, analysis and evaluation of teaching-learning situations, cooperative teaching, conferences, and participation in the range of the professional responsibilities of the teacher. Should be taken with Education 543.
Prerequisite: Permission of the instructor.
Six semester hours credit.

595A Internship  

I, II, and Summer
An opportunity for qualified students to work individually or in small groups in a practical school situation under the guidance of a member of the school's administrative staff and the college supervisor. Internships are offered in the areas of elementary teaching, core curriculum, supervision and curriculum, guidance, school business management, and administration. Graduate students in school business management or in any one of the administrative sequences, engaged in full-time study and with no teaching or administrative experience will be expected to complete the minimum requirements of internship. Assignment only by special arrangement with the Student Training Office.
Credit to be arranged.

595B Internship  

I and II
An opportunity for those actively engaged in supervisory work to study under the guidance of the college instructor. Individual observation and conferences and a number of Saturday meetings to consider common problems will be provided. Anecdotal records and other materials will be analyzed and evaluated.
Prerequisite: Education 543 and 593 and permission of the Student Teaching Office.
Credit to be arranged.

DEPARTMENT OF ENGLISH
GRADUATE MAJOR IN ENGLISH

Students who elect a graduate major in English will be expected to do approximately two-thirds of their 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. There are no specific prerequisites for any of the courses in this department. It is advisable, however, for the student to consult with each instructor before enrolling in his class.
### Description of Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>Creative Writing II</td>
<td>3</td>
</tr>
<tr>
<td>435j</td>
<td>School Publicity I</td>
<td>3</td>
</tr>
<tr>
<td>470</td>
<td>The English Novel I</td>
<td>3</td>
</tr>
<tr>
<td>471</td>
<td>English Prose of the Nineteenth Century I</td>
<td>3</td>
</tr>
<tr>
<td>473</td>
<td>Romantic Poetry I</td>
<td>3</td>
</tr>
<tr>
<td>474</td>
<td>English Poetry of the Victorian Period II</td>
<td>2</td>
</tr>
<tr>
<td>475</td>
<td>Contemporary Poetry I</td>
<td>2</td>
</tr>
<tr>
<td>476</td>
<td>The Modern Novel II</td>
<td>2</td>
</tr>
</tbody>
</table>

*Creative Writing II*
Practice in developing papers of varying length and character. The class is conducted informally, much of the time being devoted to conferences and to critical evaluation of papers written by the members of the class.
Three semester hours credit.

*School Publicity I*
This course is aimed at preparing prospective teachers to interpret the school to the public through such media as press, radio, and bulletin and pamphlet materials. It gives the student practice in preparation of news and other materials about the school and its problems and requires preparation of at least one paper in a form for publication.
Three semester hours credit.

*The English Novel I*
Study and discussion of many novels of the eighteenth and nineteenth centuries. Emphasis upon the novel as a type of literature which has developed from simple early forms to highly finished later forms.
Three semester hours credit.

*English Prose of the Nineteenth Century I*
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.
Three semester hours credit.

*Romantic Poetry I*
A study of Romantic themes and tendencies as they arose in the eighteenth century and came to flower in Coleridge, Wordsworth, Byron, Shelley, and Keats.
Three semester hours credit.

*English Poetry of the Victorian Period II*
A survey of English poetry from Tennyson to Hardy, with special emphasis upon Tennyson, Browning, Arnold, and Swinburne.
Two semester hours credit.

*Contemporary Poetry I*
A 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.
Two semester hours credit.

*The Modern Novel II*
A study of modern fictional trends, with emphasis upon the development of various movements on the European continent and
their impact upon the twentieth century English and American novel. Three semester hours credit.

480 Materials of High School English
A study of the methods, devices, techniques, and curricular materials useful to the English teacher in the secondary schools of Illinois. Three semester hours credit.

481 Grammar for Teachers
A study of the structure of current usage. Two semester hours credit.

482 Reading in the High School
(Also Listed as Education 482)
A study of the reading problems of high school students. Three semester hours credit.

485 English Drama to 1642
Miracle and mystery plays, moralities, interludes, imitations of Latin tragedy and comedy, and the plays of such writers as Lyly, Greene, Kyd, Marlowe, Jonson and Beaumont and Fletcher. Two semester hours credit.

486 Modern Drama
Trends in British, Continental, and American drama from Ibsen to the present day, as illustrated by representative plays. Three semester hours credit.

501 Independent Study and Research
Individual research in problems in English and American language and literature, under the supervision of a designated member of the department. Prerequisite: Consent of instructor. Two semester hours credit.

505 History of Literary Criticism
Analytical, judicial, and interpretative functions of criticism considered in their relationship to creative achievement. Attention will be given to the exponents of the New Criticism. Three semester hours credit.

507 Chaucer
Detailed readings of Chaucer's principal works, with emphasis on his literary growth and skill in interpreting medieval English life. There will be intensive study of Chaucer's language. Four semester hours credit.

512a Studies in American Literature
The Puritan period and "The Age of Reason", with extensive reading in such authors as Cotton Mather, Edwards, Winthrop, Franklin, and Freneau. Three semester hours credit.
512b Studies in American Literature II
“The Romantic Movement” with reading in such leading nineteenth century figures as Emerson, Poe, Hawthorne, Lowell, and Melville. Three semester hours credit.

512c Studies in American Literature On Demand
Realism and Naturalism and their manifestations in the writings of Whitman, Twain, Harte, James, Howells, and others. Three semester hours credit.

560 Elizabethan Non-Dramatic Literature II

561 Milton and His Contemporaries On Demand
The Renaissance-Puritan conflict in Milton as seen in the longer poems and plays. Three revolutions—scientific-humanist, political, and theological—are studied in works of writers from 1630 to 1670. Three semester hours credit.

563 Pope and His Contemporaries On Demand
Pope’s career as a satirist, his critical opinions, religious and philosophical ideas, and relations with contemporary literary and political figures. Three semester hours credit.

565 Johnson and His Contemporaries I
Johnson as a representative of the persistence of classical dogma and tradition, and as a psychologist, moralist, and critic. Attention will be given to recently published Boswell and Walpole material. Three semester hours credit.

571 Studies in Victorian Prose On Demand
Examination of the works of two or more important writers of non-fictional prose of the period. Three semester hours credit.

573a Studies in Coleridge and Wordsworth II
The philosophy of composition and practice of these poets, together with revelatory memoirs of the period. The Prelude will be studied as a prophetic introduction to psychoanalysis. Three semester hours credit.

573b Studies in Shelley and Keats On Demand
Emphasis on Shelley as a proponent of political and social reform, with attention to critical opinion regarding him. Study will be made of classical, as well as romantic, elements in Keats. Three semester hours credit.
574 Studies in Victorian Poetry
The works of two or more important poets of the period and their relation to the literary, intellectual, and social movements of their age.
Three semester hours credit.

576 Trends in the Twentieth Century Novel
Consideration of kaleidoscopic form; Biblical narrative as basis for fiction; patterns of decadence; war's impact on civilization; negations of Utopia; and disruptions of traditional form.
Four semester hours credit.

580 Studies in Shakespeare
Shakespeare's development as a dramatist, studied through representative plays. Consideration of his debt to contemporaries, his use of source studies, theories of tragedy, Shakespearean criticism.
Three semester hours credit.

582a Problems in the Teaching of English in the Junior High School
Study of recent research in the teaching of literature and communication skills in the later elementary and junior high school years.
Three semester hours credit.

582b Problems in the Teaching of English in the Senior High School
Methods of teaching language and literature in the senior high school. Emphasis is placed on objectives, materials and current trends in language education.
Three semester hours credit.

584 Restoration Drama
A study of the heroic drama, Restoration comedy and farce, classical tragedy, the ballad opera, and the beginnings of middle class theatre.
Three semester hours credit.

585 English Drama of the Nineteenth Century
Spread of lower-class drama (especially melodrama and farce); the literary theatre of Byron, Shelley, Coleridge, Browning and Tennyson; the revival of Shakespeare, his great interpreters and his great romantic critics.
Three semester hours credit.

586 Trends in Twentieth Century Drama
An analysis of representative plays of dramatists from Shaw to T. S. Eliot, showing trends in naturalism, realism, romanticism, symbolism and expressionism. Special attention given to poetic drama.
Three semester hours credit.
DEPARTMENT OF FOREIGN LANGUAGES

Though a graduate major in foreign languages is not offered, properly qualified students may carry the following courses for graduate credit. It is advisable, however, for the student to consult with the instructor of the class before enrollment.

Description of Courses

FRENCH

403-404 French IV-A Seventeenth Century Literature I and II
A survey course of the French literature of the seventeenth century, conducted entirely in French, with work in advanced composition. Offered every third year. (Not offered in 1956-57.)
Prerequisite: Course 202 or equivalent.
Four semester hours credit each semester.

405-406 French IV-B Eighteenth Century Literature I and II
A survey course of the French literature of the eighteenth century, conducted in French, with work in advanced composition. Offered every third year. (Not offered in 1956-1957.)
Prerequisite: Course 202 or equivalent.
Four semester hours credit each semester.

411-412 French IV-C Nineteenth Century Literature I and II
A survey course of the French literature of the nineteenth century, coming to contemporary authors. Conducted in French, with work in advanced composition.
Offered every third year. (Offered in 1956-1957.)
Prerequisite: Course 202 or equivalent.
Four semester hours credit each semester.

421-431 French IV-D I and II
French 421
A survey course of early French literature with special emphasis on the authors of the sixteenth century. Conducted in French, with work in advanced composition.
Offered on demand.
Four semester hours credit.

French 431 On Demand
French writers of the twentieth century. Conducted in French, with work in advanced composition.
Offered on demand.
Four semester hours credit.

GERMAN

451-452 German IV-A Nineteenth Century Literature I and II
A survey course of nineteenth century literature conducted in German. Work in composition and conversation is included.
Offered every other year. (Not offered during 1956-57.)
Prerequisite: German II or equivalent.
Four semester hours credit each semester.

453-454  German IV-B  I and II
A survey of German literature before the eighteenth century. These
courses are conducted in German. Work in composition and conver­
sation is included.
Offered on demand.
Four semester hours credit each semester.

455-456  German IV-C Eighteenth Century Literature  I and II
A survey course of eighteenth century literature conducted almost
entirely in German. Work in composition and conversation is in­
cluded.
Offered every other year. (Not offered during 1956-57.)
Prerequisite: German II or equivalent.
Four semester hours credit each semester.

SPANISH

461-462  Spanish IV-A Siglo de Oro — Dramatic Literature  I and II
Spanish dramatic literature of the “Siglo de Oro,” with work in com­
position. Carried on in Spanish.
Offered every third year. (Not offered during 1956-1957.)
Prerequisite: Spanish II or equivalent.
Four semester hours credit each semester.

463-464  Spanish IV-B Siglo de Oro — Non-Dramatic Literature  I and II
Spanish non-dramatic literature of the “Siglo de Oro,” with work in composition. Carried on in Spanish.
Offered every third year. (Not offered during 1956-1957.)
Prerequisite: Spanish II or equivalent.
Four semester hours credit each semester.

471-472  Spanish IV-C
Nineteenth and Twentieth Century Literature  I and II
Spanish literature of the nineteenth and twentieth centuries with
work in composition. Carried on in Spanish.
Offered every third year. (Offered during 1956-1957.)
Prerequisite: Spanish II or equivalent.
Four semester hours credit each semester.

481-482  Spanish IV-D Spanish-American Literature  I and II
Spanish-American literature with work in composition. Carried on in Spanish.
Offered on demand.
Prerequisite: Spanish II or equivalent.
Four semester hours credit each semester.
DEPARTMENT OF INDUSTRIAL ARTS
GRADUATE MAJOR IN INDUSTRIAL ARTS

Students who elect a graduate major in industrial arts must satisfy the following course requirements in industrial arts:
(a) Courses 500, 541, and 570.
(b) Additional semester hours credit to make a total of 20 selected from courses offered on the 400 and 500 levels.

Description of Courses

413 Design in Industrial Arts
On Demand
A study of the principles of design and the application of these principles to designing of industrial arts projects.
Two semester hours credit.

440 Laboratory Planning
Experience in planning laboratories and shops for industrial arts and industrial vocational classes. Problems relating to new buildings and new equipment, as well as the problems of redevelopment of present buildings and equipment. Accurate scale layouts of school shops are planned and executed in this course.
Prerequisite: Course 341 and 344.
Three semester hours credit.

484 Teaching Aids in Industrial Arts
On Demand
A review of the available teaching aids for industrial arts will be made. Proper use of teaching aids will be discussed and opportunities for their construction will be given.
Two semester hours credit.

485 Workshop in Driver Education
On Demand
This is an advanced course in Driver Education planned especially for those who have had experience in this field. The course deals with the principles of traffic engineering, traffic enforcement, and the understanding of legislation affecting driver education; the development of course materials, teaching aids, etc.; and the problems of administering courses in Driver Education.
Prerequisite: Industrial Arts 385 or other approved Driver Education course.
Two semester hours credit.

500 Introduction to Graduate Work in Industrial Arts
I and Summer Session
A study of the methods of research available for use by graduate students in industrial arts, a review of the current research studies in this field, and the application of the findings of these studies to improve the industrial arts programs in junior and senior high schools.
Three semester hours credit.

*501 Technical Problems in Industrial Arts
Summer Sessions
This course provides an opportunity for the individual student to

*May be repeated. A limit of six semester hours may be earned.
undertake advanced study of technical problems in industrial arts.  
Prerequisite: Consent of instructor.  
One to three semester hours credit.

541 History and Philosophy of Industrial Education
A study of the leaders, organizations, and movements that have contributed to the development of industrial education. A study of the philosophies of industrial arts, vocational industrial education, etc., will be made.  
Three semester hours credit.

542 Industrial Arts in Elementary Education
A study of industrial arts in the modern elementary school program. Problems will emphasize the use of a wide variety of tools and materials and encourage the planning and organization of an activity program in the elementary grades. (Six periods each week.)  
Prerequisite: Industrial Arts 342 or consent of instructor.  
Three semester hours credit.

544 Content and Method of Industrial Arts
Designed primarily to improve the techniques of teaching industrial arts subjects generally found in the secondary schools. An evaluation of classroom materials, methods, research, and current trends will be made.  
Three semester hours credit.

545 Curriculum Construction in Industrial Arts
A study of the principles involved in effective curriculum construction in industrial arts. Courses of study in various areas will be evaluated.  
Two semester hours credit.

546 Evaluation in Industrial Arts
A study of objectives and methods for evaluating industrial arts programs, student growth and development in industrial arts, and teaching success.  
Two semester hours credit.

558 Seminar in Industrial Arts
Individual and group problems related to the teaching of industrial arts in the junior and senior high school are studied.  
Two semester hours credit.

570 Individual Problems in Industrial Arts
Open to qualified students who wish to do individual advanced work in industrial arts education, and in which the qualifying paper should be written.  
Prerequisite: Consent of instructor.  
One to three semester hours credit.

*May be repeated. A limit of six semester hours may be earned.
576 Administration and Supervision of Industrial Arts
Problems of industrial arts in the secondary school. Administrative and supervisory problems pertaining specifically to industrial arts: curriculum construction and materials, student measurement, evaluation, laboratory supervision, and administration of supplies, textbooks and equipment.
Three semester hours credit.

584 Modern Trends in Industrial Arts
On Demand
Emphasis is placed upon the significance of modern trends from the viewpoint of both theory and practice.
Two semester hours credit.

590 Industrial Arts for the In-Service Teacher
On Demand
Problems of in-service education that need to be considered in upgrading programs of industrial arts. Special emphasis will be given to individual problems.
Three semester 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 or equivalents if these courses were not included in the undergraduate program.
(b) At least two semester hours credit in course 550.
(c) At least six courses to be selected from courses 405, 408, 410, 415, 420, 430, 440, 505, 510, 515, 520, 530, and 540. At least three courses must be on the 500 level.

Description of Courses

402 Teaching Practices in Arithmetic I and II
A study of the function of arithmetic in the elementary school, selection and organization of material, and good teaching methods as indicated by scientific studies on the teaching of arithmetic.
Prerequisite: Course 202 or 204.
Three semester hours credit.

405 Theory of Equations I
Solution of the cubic and quartic equations by radicals, Descartes' rule of signs, Sturm's theorem, solution of numerical equations, determinants, systems of linear equations, and matrices.
Prerequisite: Course 320 or equivalent.
Three semester hours credit.

408 Educational Statistics I or II
(Also listed as Education 408 and Physical Education 408)
Frequency distributions, measures of central tendency, measures of variability, percentiles, the normal curve, correlation and regression,
reliability of measures, sampling, and analysis of variance. For students who have a need for meaning, interpretation, and application of statistical concepts without rigorous mathematical development. Offered on demand. 
Prerequisite: Course 120 or equivalent. 
Three semester hours credit. 

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>410</td>
<td>Mathematics of Statistics I</td>
</tr>
</tbody>
</table>
|          | Classification and presentation of data; probability; the normal probability curve; errors and computation; moments; curve fitting, including the graduation of the normal curve; theory of correlation. Offered on demand. 
Prerequisite: Course 320 or equivalent. |
| 415      | Advanced Synthetic Geometry              |
|          | Foundations of the geometric structure; methods of proof and of discovering proof; geometry of the triangle, harmonic section, poles and polar, inversion, cross-ratio, and related topics. Prerequisite: Course 130 or equivalent. |
| 420      | Differential Equations I                 |
|          | Methods of solution of ordinary differential equations of the first order and higher orders. Practical applications of differential equations in solving problems in geometry and in science. Offered on demand. Prerequisite: Course 321 or equivalent. |
| 430      | Advanced Calculus I                      |
|          | A further development of such topics as differentiation, partial derivatives, definite integrals, multiple integrals, and line integrals. Offered on demand. Prerequisite: Course 321 or equivalent. |
| 440      | History of Mathematics                   |
|          | Development of each of the several branches of mathematics through the first steps of the calculus and outstanding contributors in the field of mathematics. Four periods a week (9 weeks.) Two semester hours credit. |
| 450      | Teaching Practices in High School Mathematics I |
|          | Mathematics of the seventh, eighth, and ninth years. Social and mathematical aims, selection and organization of content, methods of presenting topics in the classroom, classroom procedures, supplementary instructional equipment, and means of evaluating instruction. Prerequisite: Course 320 or equivalent or consent of instructor. Three semester hours credit. |
451 Teaching Practices in High School Mathematics II
Mathematics of the tenth, eleventh, and twelfth years. Topics similar to those listed for Mathematics 450.
Prerequisite: Course 320 or equivalent or consent of instructor.
Three semester hours credit.

502 The Teaching of Arithmetic in the Elementary School
(Also listed as Education 502)
Consideration of the implications of research for methods of teaching, and the selection and arrangement of concepts and materials.
Prerequisite: Course 402 or equivalent.
Three semester hours credit.

505 Modern Algebra
Includes the topics of real and complex numbers, polynomials, groups, rings, fields, matrices and determinants.
Offered on demand.
Prerequisite: Course 405 or equivalent.
Two semester hours credit.

510 Mathematics of Statistics II
Continuation of Mathematics 410. Probability and statistical theory, frequency curves, partial correlation, multiple correlation, theory of sampling, Chi-square distribution, and interpolation and graduation.
Offered on demand.
Prerequisite: Course 410 or equivalent.
Two semester hours credit.

515 Advanced Analytic Geometry
Coordinates and cosines, planes and lines, determinants and matrices, surfaces and curves, quadric surfaces, and transformations.
Offered on demand.
Prerequisite: Course 221 or equivalent.
Two semester hours credit.

520 Differential Equations II
Continuation of Mathematics 420. Further consideration given to ordinary differential equations of the first order and higher order. Partial differential equations of the first and second orders.
Offered on demand.
Prerequisite: Course 420 or equivalent.
Two semester hours credit.

530 Advanced Calculus II
A continuation of topics in Mathematics 430 and also vectors and series.
Offered on demand.
Prerequisite: Course 430 or equivalent.
Two semester hours credit.
540 Topics in Higher Mathematics for Teachers
Selected topics from algebra, geometry, and analysis including the function concept, theory of numbers, non-Euclidean geometry, postulational approach to mathematics, and constructions with ruler and compasses.
Two semester hours credit.

550 Seminar in the Teaching of High School Mathematics
Individual and group problems related to the teaching of high school mathematics.
Prerequisite: Course 450 or 451 or equivalent.
Two semester hours credit.

DEPARTMENT OF PHYSICAL EDUCATION FOR WOMEN
GRADUATE MAJOR IN PHYSICAL EDUCATION

There are few prerequisites for many of the courses offered by the Department of Physical Education for Women at Northern Illinois State College. It is advisable, however, for the student to consult with the instructor of the class before enrollment.

Student, both men and women, who elect a graduate major in physical education must successfully complete a minimum of sixteen to eighteen semester hours graduate credit in Physical Education.

Description of Courses

408 Educational Statistics (Also listed as Mathematics 408 and Education 408)
Frequency distributions, measures of central tendency, measures of variability, percentiles, the normal curve, correlation and regression, etc.
Prerequisite: Mathematics 120 or equivalent.
Three semester hours credit.

440 Physical Education Organization and Administration
Problems of organization and administration for health and physical education in the elementary and secondary schools.
Three semester hours credit.

450 Adapted Physical Education Activities for Atypical Individual
Modification of physical education activities to meet the needs of the physically handicapped. Considers materials, methods and the development of a program of adapted physical education activities.
Three semester hours credit.

451 Body Mechanics
Principles and analysis of human motion in everyday and physical

*Course may be taken for additional credit.
education activities. Analysis and procedure in the control of atypical deviations.
Prerequisite: Kinesiology or permission of instructor.
Three semester hours credit.

460 Folk, Square, and Social Dance in Education
Analysis of techniques and materials for schools and recreation as they relate to education.
Three semester hours credit.

465 Problems in Modern Dance Compositions
Dance in the historical development of cultures. Approaches to creative work and production. Trends in dance as an educational medium.
Three semester hours credit.

510 Applied Anatomy (Kinesiology)
Analysis of joint and muscle action in the balance and movement of the human body in everyday and physical education activities.
Prerequisite: Anatomy
Three semester hours credit.

540 Seminar in Elementary School Physical Education
Study of present day programs and problems related to elementary school physical education.
Three semester hours credit.

541 Organization and Administration of Athletics
Organization and administration of athletics with reference to national, state, and local levels. Considers staff, program, budget, health, safety, and facilities. Relationship of athletics to education and to physical education.
Three semester hours credit.

543 Supervision of Health and Physical Education
Consideration of methods and procedures of supervision in school physical education programs.
Three semester hours credit.

544 Problems in Curriculum and Program of Physical Education
A seminar requiring individual investigation of principles and procedure in developing the physical education program for elementary and secondary schools. Consideration will be given to specific curricular problems of concern to individual students. A research paper is required.
Three semester hours credit.

546 Evaluation in Health and Physical Education
Uses and limitations of evaluating devices, construction and administration of tools for evaluations, and interpretation of results.
Three semester hours credit.
555 Seminar in Teaching Skills
Practical and theoretical study of methods of teaching physical activities. Emphasis is placed on the scientific foundations of education.
Three semester hours credit.

560 Seminar in Rhythms and Dance
Rhythms and dance as a basic educational technique. Designed to assist in planning, teaching, and for supervising the rhythm and dance program. Experiences in the group process.
Prerequisite: Permission of the instructor.
Three semester hours credit.

570 Methods of Research in Physical Education
Introduction to methods and materials basic to research in the field.
Approved methods of writing term papers and research papers.
Three semester hours credit.

571 Source Materials in Physical Education and Related Areas I and II
Opportunity for extensive reading in health, physical education, and related areas. Current films in pertinent areas may be previewed.
Two semester hours credit.

572 Current Trends in Physical Education
Consideration of contemporary trends in the field of physical education and related areas.
Two semester hours credit.

573 Individual Study of Problems in Physical Education I and II
Opportunity to work individually under guidance on a problem of special concern. May be carried on in local situation. Two hours credit given for research paper. Course may be repeated to a maximum of three semester hours.
One to three semester hours credit.

DEPARTMENT OF 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 eleven semester hours.

Students who elect an area major in general sciences will find requirements listed among the Area Majors on page 29.

Description of Courses
CHEMISTRY

410 Inorganic Preparations
Application of fundamental principles in inorganic chemistry. Preparation and purification of selected inorganic compounds.
Prerequisite: Course 420.
Three semester hours credit.

420 Quantitative Analysis
Principles and practices of gravimetric and volumetric analysis.
Prerequisites: Course 211 and Mathematics 220.
Five semester hours credit.

421 Advanced Quantitative Analysis
Analyses of limestone and brass. Iodimetry and electrolytic determinations.
Prerequisite: Course 420.
Three to five semester hours credit.

425 Analytical Chemistry
Selected experiments including instrumental analysis.
Prerequisite: Course 420.
Three semester hours credit.

430 Organic Preparations
Synthesis of representative organic compounds by application of fundamental organic reactions.
Offered every other year.
Prerequisite: Course 331 or equivalent.
One to three semester hours credit.

432 Qualitative Organic Analysis
Organic group reactions. Identification of organic compounds and mixtures by characteristic reactions.
Offered every other year.
Prerequisite: Course 331.
Three semester hours credit.

435 Biological Chemistry
Chemistry of biological processes.
Prerequisite: Course 330.
Four semester hours credit.

440 Physical Chemistry
Study of the gaseous, liquid, and solid states. Atomic structure, elementary thermodynamics, colligative properties.
Prerequisite: Course 420.
Five semester hours credit.

441 Physical Chemistry
Thermodynamics, chemical equilibrium, kinetics, and electrochemistry.
Prerequisite: Course 440 and Mathematics 320.
Three semester hours credit.

510 Advanced Inorganic Chemistry
Thorough treatment of fundamentals of inorganic chemistry.
Prerequisite: Course 420.
Three semester hours credit.

Chemistry Seminar
Discussion of selected topics in chemistry under staff supervision.
Prerequisite: A minor in chemistry or equivalent.
One semester hour credit.

Research
Individual study of a problem in experimental work, teaching procedure, or professional training under supervision of appointed staff member.
Prerequisite: Permission of departmental head.
One to five semester hours credit.

Topics in Analytical Chemistry
Lectures, discussions and reports on topics of special interest in analytical chemistry.
Prerequisite: Course 420.
One to three semester hours credit.

Advanced Organic Chemistry
Survey of field of organic chemistry including limitations of generalized group reactions, mechanism of organic reactions, and electronic nature of organic compounds.
Prerequisite: Course 331.
Three semester hours credit.

Topics in Organic Chemistry
Lectures, discussions and reports on topics of special interest in organic chemistry.
Prerequisite: Course 331.
One to three semester hours credit.

Topics in General and Physical Chemistry
Lectures, discussions, and reports on topics of special interest in general and physical chemistry.
Prerequisite: Twenty-four hours chemistry.
One to three semester hours credit.

Advanced General Physics
Topics selected to furnish thorough background for teaching and advanced study.
Prerequisite: One year of college physics or equivalent and permission of departmental head.
Two to four semester hours credit.

*Course may be repeated for additional credit.

PHYSICS
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>451</td>
<td>Advanced General Physics</td>
<td>On Demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuation of Physical Science 450.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Course 450 or equivalent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two to four semester hours credit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>465</td>
<td>Acoustics</td>
<td>On Demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fundamentals of wave motion and their application to sound. Reflection, diffraction, and absorption of sound as related to acoustic properties of rooms.</td>
<td>Two semester hours credit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: One year of college physics or equivalent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>470</td>
<td>Electricity and Magnetism</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrostatics, Gauss's law, magnetic field, electric circuits, Kirchhoff's rules, induced EMF, elementary A. C. circuits, magnetic media, transformers, motors and generators.</td>
<td>Three semester hours credit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: General physics and Mathematics 320 or equivalent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>471</td>
<td>Electrical Measurements</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Laboratory practice and apparatus used in measuring resistance, capacitance, potential difference, mutual and self-inductance, temperature coefficients; use and calibration of Voltmeters, galvanometers, potentiometers and bridges.</td>
<td>Two semester hours credit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Concurrent registration in, or completion of, Course 470.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>475</td>
<td>Electronics I</td>
<td>On Demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D.C. and A.C. circuit theory applied to simple circuits used in modern electronics equipment. Vacuum tubes and radio receivers included.</td>
<td>Three semester hours credit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Course 375 and Mathematics 320 or permission of instructor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>480</td>
<td>Atomic Physics and Spectra</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary particles; wave-particle dualism; the Bohr-atom; quantum numbers, energy states, and optical, beta, gamma, and X-ray spectra.</td>
<td>Three semester hours credit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: One year of college physics or equivalent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>481</td>
<td>Atomic Physics and Spectra Laboratory</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supplement to Physical Science 480; electronic charge, specific charge, Spectroscopy and energy level diagrams.</td>
<td>Two semester hours credit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Concurrent registration in, or completion of, Course 480.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>482</td>
<td>Nuclear Physics</td>
<td>On Demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radioactivity, nuclear structure and reactions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Course 480 or equivalent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three semester hours credit.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
555  **Physics Seminar**  
Problems in physics discussed under guidance of staff. 
Prerequisite: One year of college physics or equivalent. 
May be repeated for credit, but total credit is limited to six semester hours. 
One or two semester hours credit.

559  **Special Problems in Physics**  
Special problems in physics under supervision of staff. Problems may be technical in nature or concerned with teaching procedure. 
Prerequisite: One year of college physics or equivalent. 
May be repeated for credit, but total credit is limited to ten semester hours. 
One to five semester hours credit.

563  **Thermodynamics**  
Laws of thermodynamics and their application to various thermal systems. 
Prerequisite: One year of college physics, differential and integral calculus. 
Two semester hours credit.

575  **Electronics II**  
Continuation of Physical Science 475. Oscillators, amplifiers, transmitters and industrial controls. Network theory considered. 
Prerequisite: Course 475 or permission of instructor. 
Three semester hours credit.

**PHYSICAL SCIENCE AND PROFESSIONAL EDUCATION**

405  **History of Science**  
II 
Development of physical science from the beginning of recorded history to the present time. Significant past stages and present trends emphasized. 
Two semester hours credit.

406  **Biography of Famous Scientists**  
II 
Work and personal characteristics of famous scientists. Oral and written reports required. 
Two semester hours credit.

490  **Science in the Public Schools**  
I and II  
(For Teacher, Supervisors, and Administrators.) Principles and applications of science illustrated by simple apparatus constructed by members of the class. (Not open to physical science majors or minors.) 
Two semester hours credit.
499 Teaching of Physical Sciences (Second 9 Weeks) 1
Classroom and laboratory problems confronting the high school teacher.
Prerequisite: Physical science major or permission of instructor.
Two semester hours credit.

500 Chemistry for Teachers of General Science On Demand
Chemistry for graduate students majoring in general science. Topics selected to furnish background in chemistry for science teaching and advanced study. Lectures, discussion, problems, and laboratory work. Not open to chemistry majors.
Four semester hours credit.

501 Physics for Teachers of General Science On Demand
Physics for graduate students majoring in general science. Topics selected to furnish background in physics for science teaching and advanced study. Lectures, discussion, problems, and laboratory work. Not open to physics majors.
Four semester hours credit.

590 Physical Science for Elementary Teachers On Demand
Principles and applications of physical science illustrated by simple apparatus constructed by members of class. Satisfies requirements for Education 584. (Not open to physical science majors or minors.)
Two to five semester hours credit.

591 Physical Science for Elementary Teachers On Demand
A continuation of Physical Science 590. (Not open to physical science majors and minors.)
One to three semester hours credit.

595 Orientation of College Science to Public School Teaching On Demand
Adaptation of content of physical science courses to classroom teaching in primary and secondary schools.
Prerequisite: Major or minor in physical sciences.
Two semester hours credit.

DEPARTMENT OF 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 eight semester hours credit in each of the fields comprising the general area; namely, history, economics, sociology, and political science. At least three semester hours credit in each field must be at graduate level.

A maximum of six semester hours in independent study may be taken, not more than four semester hours of which may be in any one field.
Description of Courses

410 European Seminar
(Offered Summer 1956 and every third year)
A study-tour that includes five weeks in residence at Ashridge College, near London; lectures by British leaders on contemporary British life, the Empire and Commonwealth, and Britain’s relations with the rest of the world; study trips to places in and near London and a five-day tour of the Southwest of England; a three-week tour of the continent; and about one week crossing the ocean in each direction. Includes advance reading assignments, shipboard lectures, discussions following the lectures at Ashridge, evaluation discussions on shipboard returning to America—all under the supervision of two NISC Social Science staff members; a graduate paper to be prepared by those taking the course for graduate credit after returning from the tour. Specific details concerning costs, fees, etc., will be published in a special announcement about one year in advance of the tour.

For departmental requirements, this course may be counted as History, Political Science, Economics or Sociology.
About ten weeks. Eight semester hours credit.

ECONOMICS

464 Public Finance and Public Education
On Demand
Local, state, and national tax systems within the total economy; public debt and fiscal policies; public finance and education in Illinois. Prerequisite: Course 360.
Two semester hours credit.

467 The Cooperative Movement
On Demand
Theory of cooperative enterprise, the practice of cooperative techniques in agriculture, industry, and distribution here and abroad, and competition between cooperative and non-cooperative business. Prerequisite: Course 260.
Two semester hours credit.

468 International Economics
On Demand
International payments, international economic theory, contemporary economic nationalism, international investment and currency problems, and the commercial policies of the major nations. Prerequisite: Course 360.
Three semester hours credit.

562 Business Cycles
On Demand
Prosperity-recession-depression-recovery patterns of modern economic society presented against a background of earlier attempts to account for the cyclical character of the economy. Prerequisite: Course 360 or equivalent.
Two semester hours credit.
563 Modern Economic Systems On Demand
The economic systems of the United States, Great Britain, the Soviet Union, Fascist Italy and Nazi Germany. This course stresses the actual operation of the respective economies.
Prerequisite: Course 360 or equivalent.
Two semester hours credit.

564 Economic Well-Being and Education On Demand
Public education as an agency of social control and its effect on long run economic welfare. Specific aspects of consumption, savings, distribution and production influenced by education are dealt with.
Prerequisite: Permission of the instructor.
Three semester hours credit.

*566 Independent Study in Economics I and II
Individually arranged readings for graduate students to complete requirements in Economics and to meet student’s needs.
Prerequisite: Course 360.
Two semester hours credit. (Maximum four semester hours.)

HISTORY

420 American History, the Middle Period—1815-1850 I
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.
Two semester hours credit.

421 Twentieth Century United States II
The United States during its transition from a predominantly agricultural character to industrial and financial preeminence and an investigation of the nation’s rise to leadership in world affairs.
Prerequisite: Courses 220 and 221.
Three semester hours credit.

422 Economic History of the United States On Demand
The evolution and expansion of American economic institutions and processes from colonial times to twentieth century prominence. Stress will be placed upon environmental factors, strategic location of raw materials, the impact of functional technology and the transition to finance capitalism.
May be used to meet Departmental requirement in Economics.
Three semester hours credit.

423 Intellectual and Social History of Twentieth Century United States On Demand
The cultural aspects of American life since the 90’s with extensive use of phonographic documentaries as illustrative materials. The

*Course may be repeated for additional credit.
changing tastes in literature, drama, and music as well as attitudes, interests, and patterns of thinking during this three-generation span. Three semester hours credit.

425 History of Colonial Latin America
The Spanish, Portuguese and French colonial empires in America from their establishment to the wars of independence. The cultural and institutional aspects of the Indian and Latin peoples are stressed. Three semester hours credit.

426 The Republican Period of Latin America
The Latin American republics from the time of the revolutions against European colonial powers to the present. Political, economic, and social institutions will be carefully examined, with special stress upon the phenomenon of the Latin-American caudillo and dictator. Prerequisite: Course 332 or equivalent. Three semester hours credit.

430 Twentieth Century Europe
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, issues, events and trends in history since 1945. Prerequisite: Course 331 or equivalent. Three semester hours credit.

432 History of Ideas
I and II
Designed to give some first-hand knowledge of what men throughout the ages have thought about the perennial problems which beset humanity. Lectures, readings, discussions. Prerequisite: Senior standing. Two semester hours credit.

434 English History to 1603
(Offered in alternate years; not offered in 1956-57)
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. Three semester hours credit.

436 British History—1815 to Present
(Offered in alternate years; to be offered in 1956-57)
Background for romantic, Victorian, and contemporary English literature, and for the historical understanding of British institutions and peoples, including the Commonwealth of Nations and the development of socialistic institutions. Prerequisite: Courses 335 and 434 are desirable, but not required. Three semester hours credit.

438 American Social Reform Movements Since 1865
II
A study of a number of the important reform movements. Includes those of the farmer, workers and intellectuals along with their declar-
ations, platforms, social philosophies, techniques of action and principal achievements in national and local affairs.
Prerequisite: Course 221.
Two semester hours credit.

520 Historiography
Great historians and their literature, what history has meant to historians of all ages, methods they have used, theories or philosophies they have held, history’s role in understanding our world.
Two semester hours 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. The particular topics for intensive study to be selected by the student after consultation with the instructor.
Two semester hours credit.

523 Technology in American Culture
Development of technology in America and its resulting influence upon our culture. Special emphasis on the influence of the machine on our agriculture, industry, transportation, and communications.
Prerequisite: Course 280 or equivalent.
Two semester hours credit.

524 Development of Urban Society in America
The growth of urbanism in our society and the many changes brought about as a result of this development. Consists of both historical and sociological treatment.
Prerequisite: Course 280 or equivalent.
Two semester hours credit.

530 Medieval Influences on Modern Ideas and Institutions
Medieval fusion of Classical, Teutonic, Christian, Islamic, Celtic cultures; Education, philosophy, science, religion, government, law, art, as they reflect the fusion. Influence of Medieval ideas and institutions on modern culture.
Two semester hours credit.

531 Renaissance Origins of the “Modern” in History
Renaissance of the 15th and 16th centuries in Italy and elsewhere. Literary and artistic reawakening. Economic, political, scientific, intellectual, and social forces which have determined the character of “modern” history.
Two semester hours credit.

*For departmental requirements these may be counted either as history or sociology courses.
532 Religious Disunity and Intolerance in Western Civilization On Demand
Protestant Reformation, Catholic Reformation, Wars of Religion, concept and practice of "established church," origins of idea of separation of church and state, and beginnings of modern religious toleration.
Two semester hours credit.

533 Eighteenth Century Origins of Contemporary Thought and Institutions On Demand
"Old Regime," Intellectual Revolution or "Age of Enlightenment," French Revolution and Napoleonic Era, studied as seedbed of contemporary thought and institutions, including "reactionary," liberal, and radical trends of past century.
Two semester hours credit.

534 Great Revolutionary Movements of Modern History On Demand
English Revolutions of 17th century, French and American Revolutions of 18th century, Russian and Chinese Revolutions of 20th century, analyzed and compared as an exercise in historical synthesis and interpretation.
Two semester hours credit.

536 Independent Study in History I and II
Open to qualified students who wish to do individual advanced work in history.
Prerequisite: Consent of instructor.
Two semester hours credit. (Maximum four semester hours.)

POLITICAL SCIENCE

441 Modern Political Theory I
(Not to be offered in 1956-57)
A survey of the leading political thinkers in modern times from Machiavelli to the present.
Prerequisite: A college course in European or World History.
Two semester hours credit.

445 American Constitutional Development I
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: Course 240.
Three semester hours credit.

446 The Far East II
The impact of the Western nations on Eastern Asia since the open-

*Course may be repeated for additional credit.
ing of the Orient. Development of political and social institutions in China, Japan, and the Philippines.
Advisable prerequisite: A previous college course in European or world history.
Two semester hours credit.

449 International Relations
(Offered in alternate years; not to be offered in 1956-57)
National power, formulation of foreign policy, world organization, international law, techniques of power politics and the problems of the major world regions.
Prerequisite: American Government or introductory course in Political Science.
European History is recommended.
Two semester hours credit.

495 Seminar in Current Problems of National Security
Issues and policies in government, politics, and economics in their historical and sociological perspective for elementary and secondary teachers. Specific units for teaching may be developed by individuals or groups.
Prerequisite: Senior or graduate standing. Auditors by permission of staff.
Four semester hours credit.

540 Public Administration
The administration of governmental policies by state and nation. Included are federal departmentalization, the independent regulatory commissions, personnel policies, some administrative law, and the policy contributions of administrators.
Prerequisite: Course 240 or equivalent.
Three semester hours credit.

545 American Parties and Pressure Groups
A descriptive survey of the policies, organization and functioning of American parties and the leading pressure groups. Included are general electoral behavior and sectional and group patterns in politics.
Advisable prerequisite: Course 240 or equivalent.
Two semester hours credit.

546 Foreign Governments
The development, structure and functioning of government and politics in Great Britain, France, the U.S.S.R., Japan, Germany, and Italy, with principal emphasis on the first three.
Prerequisite: Course 240 or equivalent.
Three semester hours credit.

548 The United Nations
The origins, structure and functioning of the United Nations and its
specialized agencies. Included is a brief description of international organizations which existed before 1945.
Advisable prerequisite: A college course in European or world history.
Two semester hours credit.

549 Independent Study in Political Science
Open to qualified students who wish to do individual advanced work in political science.
Prerequisite: Consent of instructor.
Two semester hours credit. (Maximum four semester hours credit.)

SOCIOLOGY

480 The Family
A study of the family as a functional institution. 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.
Two semester hours credit.

481 Marriage and Family Counseling
Provides the student with the available information for his own needs as an individual and supplies him the necessary aids for counseling in the secondary schools.
Two semester hours credit.

482 Criminology
The underlying factors which tend toward a criminal career and the attempts at reform of the convicted criminal. It emphasizes the part taken by the various social institutions in the attack on the problems.
Prerequisite: Course 280.
Two semester 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.
Prerequisite: Course 280 or equivalent.
Two semester hours credit.

490 Materials and Problems of High School Instruction in the Social Sciences
Acquaintanceship afforded through individual and group projects with supplies, equipment, texts, references, fiction, magazines, newspapers, etc., available for use in high school social science classes.
Prerequisite: Senior standing.
Two semester hours credit.

*Course may be repeated for additional credit.
Materials and Problems of Elementary School Instruction in the Social Sciences I and II

Acquaintanceship afforded through individual and group work with supplies, equipment, texts, and other aids available for use in the elementary social science classes correlates social studies with other classes.
Prerequisite: Senior standing.
Two semester hours credit.

Systematic Sociology On Demand

An examination of the historic patterns of sociological thought as developed by Comte, 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 semester hours credit.

Social Dynamics I

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.
Prerequisite: Course 280 or equivalent.
Two semester hours credit.

Social Attitudes On Demand

A study of the nature of social attitudes, their importance in 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 semester hours credit.

Community Analysis II

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 specific aspect of a specific community as it relates to a specific school situation.
Two semester hours credit.

Independent Study in Sociology I and II

Open to qualified students who wish to do individual advanced work in sociology.
Prerequisite: Consent of instructor.
Two semester hours credit. (Maximum four semester hours.)

*Course may be repeated for additional credit.
Students who elect a graduate major in speech must satisfy the following course requirements:

(1) Approximately two-thirds of the graduate study program must be in courses offered by the Department of Speech.

(2) A student may concentrate his graduate study in the area of Drama, Interpretation, and Radio, or in the area of Public Address, or in the area of Speech Correction; but the student's advisor will reserve the right to require courses in more than one area if such are needed by the student.

(3) If the student's area of specialization is Drama, Interpretation, and Radio, the seminar in problems in that area, Speech 540, will be required; if the student's area of specialization is Public Address, the seminar in problems in this area, Speech 541, will be required; if the student's area of specialization is Speech Correction, one of the seminars in that area will be required and the student also will be expected to fulfill the state's requirements for certification as a speech correctionist.

Since the graduate study program is adapted to the background and the needs of the individual student, the only prerequisite for enrolling in any graduate course in speech is the consent of the instructor.

A student who elects a graduate major in the area of English-Social Sciences-Speech or in the area of English-Speech should consult his advisor relative to the planning of his program of study. In order to adapt to the individual student's needs, a high degree of flexibility is retained in the general policy relative to area majors. In planning the program, consideration is given to such factors as the student's specialization in his undergraduate study, his teaching program or plans, and the possibilities for enriching teaching resources.

Whether one elects an area major or a departmental major, the first step in planning a program of graduate study is consultation with one's advisor.

Description of Courses

DRAMA, ORAL INTERPRETATION OF LITERATURE AND RADIO

410 Advanced Play Production

Section I—Contemporary methods of play production, dramatic theory and play analysis, little theater organization, specific problems of producing in educational and community theaters, and the teaching potentialities of extra curricular dramatic activities at the secondary level.

Prerequisite: Consent of instructor.

Section II—An adaptation of Section I with emphasis on creative dramatics in the elementary school.

Prerequisite: Consent of instructor.

Two semester hours credit for either section.
430 Advanced Oral Interpretation of Literature On Demand
A continuation of Speech 230 designed to develop increased skill in the technique of reading, in creative imagination, and in the expression of emotional power.
Prerequisite: Consent of instructor.
Three semester hours credit.

450 Radio Speaking On Demand
Section I—Composition and delivery of various types of radio programs and continuity.
Prerequisite: Consent of instructor.
Section II—Composition and delivery of various types of radio programs and platform addresses which school administrators and teachers are called upon to present.
Prerequisite: Consent of instructor.
Two semester hours credit for either section.

510 History of the Theater On Demand
History of the drama in performance as a continuum directly related to the development of western civilization, together with the implications of the development of the educational and community theaters.
Prerequisite: Consent of instructor.
Three semester hours credit.

511 Acting and Directing On Demand
Consideration of the theater as a cultural and recreational outlet in the community and of the problems involved in the production of classics of dramatic literature, with emphasis on projects in characterization, voice, and movement.
Prerequisite: Consent of instructor.
Two semester hours credit.

515 Advanced Technical Practice On Demand
The theory and practice of stage design, stage lighting, scenery and properties construction, sound effects, with special reference to modern theater design and stage equipment as applicable to the needs of educational and community theaters.
Prerequisite: Consent of instructor.
Two semester hours credit.

530 Lecture-Recital On Demand
Intensive work in the preparation and presentation of lecture-recitals.
Prerequisite: Consent of instructor.
Two semester hours credit.

PUBLIC ADDRESS

400 Introduction to Rhetorical Criticism On Demand
Basic concepts, terminology, and methods of classical and modern criticism, with emphasis on the evolution of public speaking from the era of the ancient Greeks to the present era.
Prerequisite: Consent of instructor.  
Three semester hours credit.

500 Ancient and Medieval Rhetoric and Public Address On Demand  
The contributions of Plato, Aristotle, Cicero, Quintilian, Augustine and others to rhetorical theory and analysis of the speeches of some of the principal ancient and medieval orators.  
Prerequisite: Consent of instructor.  
Two semester hours credit.

501 Critical Studies in Oratorical Theory On Demand  
The contributions of Bacon, Wilson, Campbell, Blair, Whately, John Quincy 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: Consent of instructor.  
Two semester hours credit.

502 History and Criticism of British Public Address On Demand  
The application of the principles of rhetorical criticism in the study of the speeches of some of the principal eighteenth and nineteenth century British speakers.  
Prerequisite: Consent of instructor.  
Two semester hours credit.

503 History and Criticism of American Public Address I On Demand  
The application of the principles of rhetorical criticism in the study of the speeches of some of the principal American speakers in the period from colonial times to the close of the Civil War.  
Prerequisite: Consent of instructor.  
Two semester hours credit.

504 History and Criticism of American Public Address II On Demand  
The application of the principles of rhetorical criticism in the study of the speeches of some of the principal American speakers in the period from the close of the Civil War to the present.  
Prerequisite: Consent of instructor.  
Two semester hours credit.

505 The High School Forensic Program On Demand  
The organization, direction, and evaluation of intra-school, community, and inter-school activities in debate, discussion, extempore speaking, and oratory.  
Prerequisite: Consent of instructor.  
Two semester hours credit.

506 Advanced Public Speaking and Group Discussion On Demand  
A course designed especially for school administrators and teachers who are not specialists in speech but who, in the discharge of their professional and civic duties, are called upon to give various types
of speeches, to lead group discussions, and to preside at meetings
governed by parliamentary law.
Prerequisite: Consent of instructor.
Two semester hours credit.

**SPEECH PATHOLOGY AND HEARING**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>On Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>420</td>
<td>Hearing Testing</td>
<td>On Demand</td>
</tr>
</tbody>
</table>
|          | Students are instructed in the use of hearing testing equipment such as the speech and pure tone audiometers. The course also includes the anatomy of the ear, medical and surgical problems of the ear, and the physics of sound. (Students are required to participate in the clinical practicum and to attend weekly staffings.)  
Prerequisite: Consent of instructor.  
Three semester hours credit. |

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>On Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>421</td>
<td>Communication Problems of Hearing</td>
<td>On Demand</td>
</tr>
</tbody>
</table>
|          | The teaching of lip reading skills and techniques employed in speech and auditory training for the deaf and hard of hearing. Students are required to participate in clinical practicum and to attend weekly staffings.  
Prerequisite: Consent of instructor.  
Three semester hours credit. |

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>On Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>422</td>
<td>Clinical Methods in Speech Pathology</td>
<td>On Demand</td>
</tr>
</tbody>
</table>
|          | Clinical therapies for the correction of the various types of defective speech as well as public school speech correction methods and administrative procedures. Students are required to participate in clinical practicum and to attend weekly staffings.  
Prerequisite: Consent of instructor.  
Three semester hours credit. |

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>On Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>423</td>
<td>Clinical Practices in Speech Pathology</td>
<td>On Demand</td>
</tr>
</tbody>
</table>
|          | Clinical practice in the college clinic, out-patient service, the DeKalb County Therapy Center, and/or the Summer Speech and Hearing Center.  
Forty-five hours of clinical practice per semester hour of credit plus attendance at staff meetings are required.  
Prerequisite: Courses 100, 225, Biological Science 256, 320, 422, or consent of instructor.  
One to three semester hours credit. May be repeated for credit to a maximum of three semester hours. |

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>On Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>424</td>
<td>Advanced Speech Correction</td>
<td>On Demand</td>
</tr>
</tbody>
</table>
|          | Advanced study of speech correction theories and therapies. Special emphasis is placed on the basic approaches to the problem of stuttering in children and adults.  
Prerequisite: Consent of the speech correction staff.  
Two semester hours credit. |

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>On Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>520</td>
<td>Introduction to Speech Pathology</td>
<td>On Demand</td>
</tr>
<tr>
<td></td>
<td>Causes of speech problems and their diagnosis as related to therapy</td>
<td></td>
</tr>
</tbody>
</table>
and rehabilitation are presented. Survey of current texts and research regarding various methods for diagnosis of speech defects and the development of specific therapies.

Prerequisite: Consent of instructor.
Three semester hours credit.

521 Principles and Methods for Correction of Organic Disorders of Speech On Demand
Causes and therapies for various organic disorders of speech, such as cleft palate, cerebral palsy, and aphasia.
Prerequisite: Consent of instructor.
Three semester hours credit.

522 Advanced Clinical Practice in Speech and Hearing On Demand
Supervised clinical practice in the college clinic, grade schools, high schools, and special schools. One class hour per week with two clock hours per week of clinical work required per semester hour.
Prerequisite: Consent of instructor.
One to three semester hours credit.

523 Laboratory Methods in Speech On Demand
Use of instruments for standardizing testing procedures in the study and diagnosis of speech disorders with special reference to rehabilitative measures.
Prerequisite: Consent of instructor.
Two semester hours credit.

524 Voice Science On Demand
Study of the transmission of speech with special reference to pitch, loudness, and quality aspects. Orientation into the fields of psychoacoustics and psychophysics.
Prerequisite: Consent of instructor.
Two semester hours credit.

525 Seminar in Speech Pathology: Voice and Articulation On Demand
Critical study of research dealing with the causes and diagnosis of voice and articulation problems as related to remedial procedures.
Prerequisite: Consent of instructor.
Two semester hours credit.

526 Seminar in Speech Pathology: Stuttering On Demand
Study of the various schools of thought on stuttering, their theories and therapies. Basic approaches to the problem of stuttering in children and adults.
Prerequisite: Consent of instructor.
Two semester hours credit.

*Course may be repeated for additional credit.
527 Advanced Audiology and Audiometry On Demand
Critical study of research in hearing and its application to the testing and rehabilitation of the hard of hearing and deaf. Detailed study of tests and measurements of hearing, and hearing aid evaluation. Prerequisite: Consent of instructor. Two semester hours credit.

528 Seminar in Hearing On Demand
The psychology of the hard of hearing and deaf, prevention of hearing disorders, techniques of lip reading, and auditory training. Prerequisite: Consent of instructor. Two semester hours credit.

Note to Students Who Wish to Qualify as Speech Correctionists
Listed below are the special requirements of the State of Illinois for speech correctionists. (These should not be confused with requirements for the major or minor in Speech which qualify one to teach speech in an Illinois high school.)

Within the general statement concerning qualifications of speech correction teachers in the Illinois Plan booklet, Circular Series E, No. 12, revised 1952, are the following specific requirements for a teacher of speech correction in the State of Illinois:

A. Valid teacher’s certificate.
B. Possession of personal speech habits which meet an acceptable standard in both voice and diction.
C. A background of courses which will insure an adequate preparation in subject matter and techniques of the field, including:
   1. Twenty-three semester hours in speech correction courses, including phonetics, anatomy and physiology of speech and hearing mechanism, speech correction, speech science, speech pathology, and student teaching in speech correction, 200 clock hours, at least half of which are in the school situation.
   2. Six semester hours in the field of the hard of hearing and deaf, including hearing testing techniques and interpretation, and communication problems of hearing (speech, speech reading, auditory training).
   3. Six semester hours of background area courses in pupil evaluation, including tests and measurements, a course in the field of guidance or clinical psychology (abnormal, personality), teaching of reading, and student teaching of academic subjects.

SPEECH PEDAGOGY

440 The Teaching of Speech On Demand
The problems confronting the teacher of speech, including the

**This is to be interpreted as a minimum requirement. Students are urged to avail themselves of every opportunity to acquire additional clinical experience.
organization, content, and methods of teaching the foundational course in speech and other courses in a balanced speech curriculum. Prerequisite: Consent of instructor.
Three semester hours credit.

540 Seminar in Problems in Radio, Interpretative Reading, and Dramatics On Demand
An exploration of the problems and the findings of research in this area of speech education, and, for the student with a special interest in this area, guidance in the selecting and conducting of his major graduate investigation.
Prerequisite: Consent of instructor.
Two semester hours credit.

541 Seminar in Problems in the Teaching of Public Speaking, Discussion, and Debate On Demand
An exploration of the problems and the findings of research in this area of speech education, and, for the student with a special interest in this area, guidance in the selecting and conducting of his major graduate investigation.
Prerequisite: Consent of instructor.
Two semester hours credit.

599 Directed Individual Study On Demand
Individual study of problems in any area of speech: speech pathology, drama, interpretation, radio, public address, speech pedagogy, hearing and related fields.
Prerequisite: Consent of instructor.
One to three semester hours credit.

* Course may be repeated for additional credit.
INDEX

Accreditation .................................................. 19
Administrative Staff ........................................ 7
Admission Requirements .................................. 11
Advisory System ............................................. 16
Application for Admission ............................ 12
Area Majors ..................................................... 12, 29
Assistantships ............................................... 23
Auditors ......................................................... 12
Biological Sciences ......................................... 33
Buildings and Campus ................................... 19
Business Education ....................................... 37
Calendar ....................................................... 6
Candidacy for Degree ...................................... 15
Completion of Graduate Work ....................... 16
Core Programs .............................................. 30
Credit Requirement and Grading System ......... 15
Credits Transferable ....................................... 16
Deficiencies .................................................... 15
Earth Sciences ............................................... 42
Education ..................................................... 45
English .......................................................... 57
Examinations ............................................... 17
Expenses ....................................................... 12
Extension Courses ......................................... 16
Faculty .......................................................... 8
Fees ............................................................... 12
Field Campus ............................................... 21
Foreign Languages ....................................... 62
General Information ........................................ 19
General Science ........................................... 30
Grading System ............................................ 15
Graduate Council .......................................... 7
Health Service ............................................. 23
Incomplete .................................................... 16
Industrial Arts .............................................. 64
Internships ..................................................... 23
Living Accommodations ............................... 13
Loans ........................................................... 22
Major, Selection of ........................................ 12, 29
Master's Degree, Requirements for .............. 15
Mathematics .................................................. 66
Northern Foundation ..................................... 22
Physical Education ........................................ 69
Physical Sciences ......................................... 71
Placement Bureau ......................................... 24
Purpose ......................................................... 11
Qualifying Paper ........................................... 17
Recreational Facilities ................................. 24
Registration .................................................. 12
Residence Requirement ............................... 15
Social Sciences ............................................ 76
Speech .......................................................... 85
Speech Rehabilitation Center ....................... 23
Student Teacher ........................................... 23
Veterans Benefits ......................................... 13