The campus of Northern Illinois State Teachers College covers 207 acres and is located 35 miles west of the main campus near Oregon, Illinois. In addition, the college has a branch campus at Lorado Taft Field Campus located 35 miles west of Chicago. The campus of Northern Illinois State Teachers College covers 207 acres and is located in the western part of DeKalb, 60 miles west of Chicago.
STATE OF ILLINOIS
WILLIAM G. STRATTON, Governor

THE TEACHERS COLLEGE BOARD

Appointed Members

1953-1959

MR. LEWIS M. WALKER, Chairman............................................. Gilman
DR. LESTER O. SCHRIVER.......................................................... Peoria
MR. ROYAL A. STIPES, JR......................................................... Champaign

1953-1957

MR. CARL DUNBAR................................................................. Macomb
DR. WILLIAM C. REAVIS......................................................... Chicago
MR. CLARENCE R. ROPP.......................................................... Normal

1953-1955

MR. WALTER S. FREDENHAGEN............................................... Naperville
MR. ALEXANDER A. SUMMERS.................................................. Mattoon
MR. CHAUNCEY B. WATSON..................................................... DeKalb

Ex Officio Members

DR. VERNON L. NICKELL, Superintendent of Public Instruction........ Springfield
M. H. HOLLINGSWORTH, Director of Department of Finance.............. Springfield
DR. RICHARD G. BROWNE, Executive Officer and Educational
Co-ordinator................................................................. Springfield
MR. CHARLES G. LANPHIER, Financial Co-ordinator......................... Springfield
GRADUATE SCHOOL CALENDAR—1953-1954

SUMMER SESSION, 1953

Monday, May 4—Saturday, May 16 ........................................... Preregistration
Monday, June 15 ............................................................. Registration 8:00 A. M.
Tuesday, June 16 .................................................. Class work begins 8:00 A. M.
Thursday, June 18 ...................... Last day for filing petition for admission to candidacy for August degree candidates
Friday, June 19 ............ Last day for filing application to take comprehensive examination for August degree candidates
Monday, July 6 .................. First day of comprehensive examinations for August degree candidates
Friday, July 10 .................. Last day for filing qualifying paper for August degree candidates
Tuesday, July 28 ............... Last day of comprehensive examinations for August degree candidates
Thursday, August 6 .................. Commencement 3:00 P. M.
Friday, August 7 ......... Session closes at end of school day

AUTUMN QUARTER, 1953

Saturday, September 19 ........................................... Registration 8:00 A. M.
Saturday, September 19 ........................................... Class work begins 9:00 A. M.
Monday, September 21 ........................................... Registration 8:00 A. M. -7:00 P. M.
Friday, Saturday, Sunday, October 16, 17, 18 ......................... Homecoming
Friday, October 23 ....................... Meeting of Rock River Division of I.E.A.
Tuesday, November 24 ... Thanksgiving recess begins at end of school day
Monday, November 30 ........................................... Class work resumes 8:00 A. M.
Tuesday, Wednesday, Thursday, December 15, 16, 17 ............... Undergraduate examinations
Monday, December 14—Saturday, December 19 .... Graduate examinations
Saturday, December 19 ........................................... Quarter closes at end of school day

(8)
WINTER QUARTER. 1954

Monday, January 4 .............................................Registration 8:00 A. M. - 7:00 P. M.
Monday, January 4 .............................................Class work begins 5:00 P. M.
Friday, February 12 .............................................Holiday
Tuesday, Wednesday, Thursday, March 16, 17, 18 ......................Undergraduate examinations
Monday, March 15 - Saturday, March 20 .............Graduate examinations
Saturday, March 20 .............................................Quarter closes at end of school day

SPRING QUARTER. 1954

Monday, March 22 .............................................Registration 8:00 A. M. - 7:00 P. M.
Monday, March 22 .............................................Class work begins 5:00 P. M.
Monday, April 12 .............................................Last day for filing petition for admission to candidacy for June degree candidates
Monday, April 12 .............................................Last day for filing application to take comprehensive examination for June degree candidates
Wednesday, April 14 ....................................Easter recess begins at close of school day
Tuesday, April 20 .............................................Class work resumes 8:00 A. M.
Friday, April 30 .............................................First day of comprehensive examinations for June candidates
Friday, May 7 .............................................Last day for filing qualifying paper for June degree candidates
Wednesday, May 26 .....................................Last day of comprehensive examinations for June degree candidates
Sunday, June 6 .............................................Commencement 5:00 P. M.
Wednesday, Thursday, Friday, June 9, 10, 11 ...........Undergraduate examinations
Monday, June 7 - Saturday, June 12 .........................Graduate examinations
Saturday, June 12 .............................................Quarter closes at end of school day
ADMINISTRATIVE STAFF

Leslie A. Holmes, Ph.D. ............................................... President of the College
Romeo M. Zulauf, A.M. ................................................... Dean of the Faculty
J. R. Hainds, Ph.D. ..................................................... Director of the Graduate School
Edith Leifheit, B.E. ...................................................... Registrar
Constance Bax, M.S. .................................................... Secretary to the Director of the Graduate School

ADMINISTRATIVE COUNCIL

Leslie A. Holmes, Ph.D., Chairman ............................ President of the College
Romeo M. Zulauf, A.M ................................................... Dean of the Faculty
Florence Adolph, A.M ............................................. Associate Professor of Home Economics
Harold E. Aikins, Ph.D. ........................................ Professor of Social Sciences
Harvey A. Feyerherm, Ph.D. ................................ Assistant Professor of Biology
Ernest E. Hanson, Ph.D ........................................ Dean of Men
Esther William, Ed.D ............................................ Professor of Education
Margaret Wood, Ph.D. ............................................ Professor of Speech

GRADUATE COUNCIL

J. R. Hainds, Ph.D., Chairman ............................... Director of the Graduate School
Leslie A. Holmes, Ph.D. ........................................ President of the College
Romeo M. Zulauf, A.M ........................................ Dean of the Faculty
S. Orville Baker, Ph.D ........................................ Department of English
Otto J. Gabel, Ph.D ........................................... Department of Education
Earl W. Hayter, Ph.D .......................................... Department of Social Sciences
Eugene W. Hellmich, Ph.D ................................ Department of Mathematics
W. V. O'Connell, Ed.D ........................................ Department of Speech
Frederick W. Rolf, Ph.D .................................. Department of Physical Sciences
George L. Terwilliger, Ed.D ................................ Department of Biological Sciences

Departmental representatives are elected by their departments.

GRADUATE FACULTY

Leslie A. Holmes, Ph.D. ........................................ President
Romeo M. Zulauf, A.M ........................................ Dean of Faculty and Director of Summer Session
J. R. Hainds, Ph.D ................................................ Director of Graduate School
Harold E. Aikins, Ph.D ........................................ Professor of Social Science
S. Orville Baker, Ph.D ........................................ Associate Professor of English
Martin Bartels, Ph.D ........................................ Director of Placement
John Bower, Ph.D ............................................... Assistant Professor of Chemistry
Robert A. Bullington, Ph.D ................................ Associate Professor of Biological Sciences
George P. Clark, Ph.D ........................................ Assistant Professor of English
Joseph Clettenberg, Ph.D .................................. Director of Extension
J. Hal Connor, A.M ........................................... Professor and Head of Department of English
Paul Crawford, Ph.D ........................................... Professor of Speech
Irene Feltman, A.M. ........................................... Assistant Professor of Education
Harvey Feyerherm, Ph.D. .......... Assistant Professor of Biological Sciences
O. J. Gabel, Ph.D. .................. Professor of Education
Francis Geigle, Ed.D. ................ Professor and Head of Department of Business Education
Howard W. Gould, Ph.D. ............. Professor and Head of Department of Physical Sciences
Eugene Grant, Ed.D. .................. Assistant Professor of Education
Clarence Ethel Hardgrove, Ph.D. ... Associate Professor of Mathematics
M. C. Hayes, Ph.D. .................. Associate Professor of Education
Earl W. Hayter, Ph.D. ................ Professor of Social Sciences
Eugene W. Hellmich, Ph.D. .......... Professor and Head of Department of Mathematics
Charles E. Howell, Ph.D. .......... Professor of Social Sciences
Max S. Huebner, Ph.D. ............. Director of Student Teaching
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. ................. Associate Professor of Education
Frederick Kent, LL.D. .............. Assistant Professor of Social Sciences
Howard Leavitt, A.M. ............... Assistant Professor of Education
Norman Leavardsen, 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
Lewis McFarland, Ph.D. ............ Professor of Speech
Dorothy McGeoch, Ed.D. .......... Associate Professor of Education
James J. Martin, Ph.D. ............. Assistant Professor of Social Sciences
James Merritt, Ed.D. ............... Assistant Director of Student Teaching
Helen R. Messenger, Ph.D.* ......... Professor of Education
Wallace B. Miner, A.M. .......... Associate Professor of Physical Sciences
C. E. Montgomery, Ph.D.* .......... Professor of Biological Sciences
W. V. O'Connell, Ed.D. ........... Professor and Head of Department of Speech
Carl W. Proehl, A.M. ............... Assistant Director of Student Teaching
Carl Rigney, Ph.D. ................. Assistant Professor of Physical Sciences
T. A. Ringness, Ph.D. .............. Associate Professor of Education
Frederick W. Rolf, Ph.D. .......... Professor of Physical Sciences
John L. Rowe, Ed.D. ............... Associate Professor of Business Education
W. Paul Stret, Ph.D. .............. Director of Public Relations
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
John J. Twombly, A.M. .......... Assistant Professor of Social Sciences
Maude Uhlman, Ph.D. ............. Professor of English
Eleanor Volberding, Ph.D. .......... Associate Professor of Education
Frederick Weed, Ph.D. ............ Assistant Professor of Social Sciences
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 Teachers College has offered work leading to the degree of Master of Science in Education since 1951. Eight departments offer graduate study for properly qualified students: Biological Sciences, Business Education, Education, English, Mathematics, Physical Sciences, Social Sciences, and Speech. Each of these departments offers a full major; the Department of Education lists five sequences; and groups of departments collaborate to offer majors in related areas. Within the fields covered by these eight departments, therefore, wide variety in programs is a distinctive feature of the offerings. The course of study is intended to provide advanced education for public school teachers, supervisors, and administrators in this area. Realizing that all students do not have the same background, abilities, or aspirations, the Faculty of the Graduate School wishes to make it possible for each student to follow a program which will make him more effective in the public schools.

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 Teachers College or (2) be in the last quarter of work leading to that degree from Northern Illinois State Teachers 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 students must have a physical examination. This examination 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 quarter in which the student plans to enroll.
Areas of Specialization

The student may select a major field of study from any of the participating departments named above; or in some cases he may select an interdepartmental or "area" major. Such combined majors are offered in English-Speech, English-Social Sciences-Speech, English-Social Sciences, and Mathematics-Sciences. (See p. 26)

Application for Admission

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

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

Registration

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

Arrangements for registration and for assignments to advisors are made through the Office of the Director 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 chairman of the student's advisory committee, the instructor of the course, and the Director 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 $3.50 per quarter hour or $5.00 per semester hour, with the provision that the total amount of fees paid will not exceed $30.00 per quarter.
Expenses

The average total expense for room, board, books, and supplies is approximately $750 to $850 for the academic year. The fees for graduate students are as follows:

Full time students (per quarter)
- Registration fee .............................................. $20.00
- Activity fee .................................................... 10.00
- Additional fee for non-residents of Illinois ........... 30.00

Part-time students (eight quarter hours or less)
- Minimum fee ........................................ 7.00
- Per class hour ................................... 3.50
  (No activity privileges are extended.)

Special fees
- Matriculation fee (payable upon first admission only) .............................................. 5.00
- Graduation fee (payable at time of graduation only) ............................................ 12.50
- 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 to the College Loan Fund.

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

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

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

The incidental and activities fees cover the following services and privileges: registration, library, health service, gymnasium, admission to athletic events, concerts, dramatic productions, lectures, speech events, and subscriptions to the weekly college paper and the college annual.
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 $5.00 a week per person. In some cases, for a small additional charge, cooking facilities are provided.

The College maintains two residence halls for women—Williston Hall for freshman, sophomore, and junior women; and Adams Hall for junior, senior, and graduate women students. The rate for board and room at Adams Hall is $16.00 per week for those living in double rooms, and $16.50 per week for those living in single rooms. Draperies, bedspreads, and linens (except towels) are furnished. Application for rooms in Adams Hall and all inquiries regarding housing for women should be addressed to the Dean of Women.

Gilbert Hall, the residence hall for men, has rooms available for graduate students. The rate for board and room is $192.00 a quarter, payable in advance. Further information regarding housing for men may be obtained at the Office of the Dean of Men.

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 quarter. 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.
ADMINISTRATION BUILDING
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 twelve quarter hours of graduate work, and not later than the beginning of his final quarter, a student shall file application in the Office of the Director 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.

Graduates of other colleges who elect the sequence in education for secondary school teachers will be expected to regard as deficiencies those courses necessary to bring the amount of education up to the level of that required for the baccalaureate degree in secondary education from Northern Illinois State Teachers College. Students wishing to take a major in education for elementary school teachers will be expected to regard as deficiencies those courses necessary for certification as an elementary school teacher in the State of Illinois.

Credit Requirement and Grading System

A candidate for the master's degree must earn a minimum of forty-five quarter hours of graduate credit and a minimum grade average of B. The minimum required number of hours in residence is thirty-two. Graduate credit is given only in those courses in which a grade of C- or better is earned. Normally, not less than sixteen quarter hours are to be earned in courses outside of the candidate's major field. In exceptional cases, this requirement may be waived by the Graduate Council. 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 council, stating clearly his reasons for desiring waiver. Grades and their honor point values are as follows:
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 instructors, or from the Office of the Director of the Graduate School.

**Credits Transferable**

Subject to the approval of the Director of the Graduate School, a student will be allowed to transfer a maximum of nine quarter 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 nine quarter hours in extension work taken from this institution. A list of centers approved for graduation extension work may be secured from the Director of the Graduate School.

**Courses for Which Credit Is Allowed**

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

---

<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>
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 quarter of graduate work. Proper forms may be obtained from the Office of the Director of the Graduate School and must be completed before a student may be admitted to candidacy. (See p. 17)

Qualifying Paper

Before taking the final comprehensive examination, a candidate must submit a qualifying paper. 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. The original paper and two carbon copies must be submitted to the Office of the Director of the Graduate School. A record showing approval by the staff member involved must be filed in the Office of the Director of the Graduate School at least one week before the candidate appears for examination.

Examinations

Final comprehensive examinations, either oral or written or both, are required of all candidates for the master's degree at some time within the latter half of the quarter which marks completion of work for the degree, but in any case at least one week before such completion. 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 advisors 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.
GENERAL INFORMATION

Northern Illinois State Teachers College is located in DeKalb, a city of 12,000 people. It is sixty miles west of Chicago on United States Highway Alternate 30 and 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 Teachers College. This program was first offered in the summer of 1951.

BUILDING AND CAMPUS

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

The campus building group comprises the Administration Building, Science Building, Williston Hall, Adams Hall, 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 College Tea Room, the Book Exchange, and the barracks unit housing the Alumni-Public Relations offices.

A new library building, the Swen 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 78,000 books and more than 1,000 pamphlets are available for use. While the direct needs of the various departments are given first consideration, recreational reading has not been neglected. Reference and reserve books, as well as bound and current periodicals, are found in the reading rooms. The stack room contains books for general circulation and approximately 500 current magazines. A juvenile library is housed in the McMurry Laboratory School for the elementary grades. The library is staffed by eight librarians and from twenty-five to thirty student assistants.

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

The Science Building, dedicated on Commencement Day in 1943, contains over one hundred rooms, including well-equipped laboratories, class and lecture rooms, auxiliary rooms, and offices. 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 provide facilities for meteorology, astronomy and electronics, and classroom and office space for other areas as needed.

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 junior, senior, and graduate 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.

Newell D. Gilbert Hall, a newly completed residence hall, houses 374 men. 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 education offered in the field of home economics.
The McMurry Laboratory School is a campus elementary school which serves as an observation and demonstration center and as a laboratory for student teaching. The college recently completed the purchase of fifty-five acres of land located west of the main campus; some of this land is to be used in the future for a completely new laboratory school.

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

In the Men's Gymnasium are classrooms, locker and shower rooms, a handball court, an athletic training room, and a basketball floor of regulation size with modern 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 College Tea Room, 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.

The college also has a branch campus—the Lorado Taft Field Campus—located 35 miles west of the main campus. It is two miles north of Oregon on the east side of the Rock River. This field campus, comprising 66 acres of hilly wooded land adjacent to the river, has a number of buildings which are used in conjunction with the college teacher education program. The area affords practical laboratory classwork of a type not found on the main campus. It also offers an opportunity for college students to work with children on a twenty-four hour a day basis.
NORTHERN ILLINOIS STATE TEACHERS 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 member elected by the Alumni Association, and at last three 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, J. R. Hainds.

LOAN FUNDS

Northern Illinois State Teachers College Foundation. The Foundation administers two funds from which deserving students may borrow, at a low rate of interest, on personal notes: the Bertha Bennett Sawyer 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 Director 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. Applications may be made with the Business Manager and must receive the approval of the Director of the Graduate School.

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 Women or the Dean of Men.

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 thirty quarter hours of graduate study in this school.

**INTERNSHIP FOR GRADUATE STUDENTS**

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

**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 quarter.

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

**THE PLACEMENT BUREAU**

All available information shows that there will be continued critical need for teachers, especially in the elementary field. 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 quarter. 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 can be obtained at the office of the Director of the Graduate School.

ACCREDITATION

Northern Illinois State Teachers College is accredited by the North Central Association of Colleges and Secondary Schools and by the American Association of Colleges for Teacher Education as a baccalaureate and master's degree-granting institution.
DEPARTMENTAL REQUIREMENTS FOR GRADUATE MAJORS AND DESCRIPTION OF COURSES

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

- English-Social Sciences-Speech
- English-Speech
- English-Social Sciences
- Mathematics-Sciences

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

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

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

DEPARTMENT OF BIOLOGICAL SCIENCES

GRADUATE MAJOR IN BIOLOGY

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

(a) Courses 416, 500a or 500b, 540, 542, 561, and 570.
(b) Eight additional quarter hours credit from courses offered on the 400 or 500 levels.

Description of Courses

GENERAL BIOLOGY

401 Principles of School Health  
Principles of planning school health programs. Methods of promoting healthful school environment discussed.  
Prerequisite: 255 and 355.  
Four quarter 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: 255 and 355.  
Four quarter 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 and their use in teaching are emphasized.  
Prerequisite: 105 or permission of instructor.  
Two weeks. Two semester hours credit.

500a **Science Problems of Elementary Grades**  
(Winter)  
Development of constructive attitudes toward modern science in relation to problems in the elementary school. Techniques and materials used in project work included. (Satisfies requirement for Education 584.)  
Prerequisite: 105 or permission of instructor.  
Two quarter hours credit.

500b **Methods and Materials for High School Biology**  
(Winter)  
Survey of problems of teaching biology in high school. Current research in this area studied.  
Prerequisite: 300.  
Two quarter hours credit.

501 **Advanced School Health**  
(Spring)  
The school health program as it relates to the administrator and the teacher.  
Prerequisite: 401.  
Offered on demand.  
Four quarter hours credit.

513 **Epidemiology**  
(Winter)  
Causes, detection, and prevention of approximately forty common communicable diseases.  
Offered on demand.  
Prerequisite: 313.  
Four quarter hours credit.

540 **Experimental Genetics**  
(Winter)  
Fundamental principles of genetics and cytogenetics illustrated by laboratory work with fruit fly, mold, or other suitable organisms.  
Lab fee $3.00.  
Prerequisite: 340.  
Two quarter hours credit.

542 **Evolution**  
(Autumn)  
Theories of evolution; development of concept of evolution; factors in organic evolution.  
Prerequisite: Graduate standing.  
Two quarter hours credit.
543 **Cytology and Histology**  
*Autumn*  
Combination study of cell structure and tissue differentiation including both plants and animals.  
Offered on demand.  
Prerequisite: 212 and 252.  
Four quarter hours credit.

*561 **Seminar**  
*Every Quarter*  
Discussion of scientific literature and current problems in biology.  
Special topics assigned to students.  
Prerequisite: Thirty hours in biology.  
One quarter hour credit. (Maximum two quarter hours.)

*570 **Special Problems in Biology**  
*Every Quarter*  
Independent study of problems under supervision of adviser appointed by Departmental Head.  
Prerequisite: Permission of Departmental Head.  
One to four quarter hours credit. (Maximum 8 quarter hours.)

**BOTANY**

410 **Plant Anatomy**  
*Winter*  
Structure, development, and kinds of plant tissue. Various types of tissues in their different relations and adaptations considered.  
Prerequisite: One year of botany.  
Four quarter hours credit.

412 **Mycology**  
*Autumn*  
Structure and classification of fungi with emphasis on pathological relations. Diagnostic techniques are included.  
Prerequisite: 211.  
Four quarter hours credit.

414 **Taxonomy**  
*Spring*  
Fundamental principles of classification of higher plants. Ecological distribution.  
Prerequisite: One year of botany.  
Four quarter hours credit.

416 **General Ecology**  
*Spring*  
General ecological principles and the structure of various types of plant and animal communities. Includes field trips to representative areas.  
Prerequisite: 212, 252, or permission of the instructor.  
Four quarter hours credit.

510 **Advanced Plant Physiology**  
*Spring*  
Physico-chemical activities of plant growth and development.  
Offered on demand.  
Prerequisite: 310: Physical Science 105, 165, or equivalent.  
Four quarter hour credit.

---

*Course may be repeated for additional credit*
512 **Plant Pathology**  
*Winter*  
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: 412.  
Four quarter hours credit.

515 **Plant Histology and Microtechnique**  
*Autumn*  
Practical laboratory methods in botanical (histochemical) and microtechnique including tests for wall and protoplasmic substances.  
Offered on demand.  
Prerequisite: 310 and 410.  
Four quarter hours credit.

516 **Advanced Ecology**  
*Autumn*  
Continuation of 416. Influence of environmental factors upon distribution of organisms evaluated. Representative areas analyzed in detail.  
Offered on demand.  
Prerequisite: 416 or permission of instructor.  
Four quarter hours credit.

520 **Advanced Plant Morphology**  
*Winter*  
Vegetative and reproduction structures and their development. Emphasis on structural relationships between related groups.  
Offered on demand.  
Prerequisite: 212 and permission of instructor.  
Four quarter hours credit.

---

**ZOOOLOGY**

450 **Parasitology**  
*Autumn*  
Animal parasitism with emphasis on the external and internal parasites of man.  
Prerequisite: 251.  
Four quarter hours credit.

452 **Comparative Vertebrate Anatomy**  
*Winter*  
Relationships of vertebrate classes as demonstrated by embryological, morphological, and paleontological evidence.  
Prerequisite: 252.  
Four quarter hours credit.

454 **Embryology**  
*Winter*  
Principles and processes in the development of vertebrates. Detailed study of embryology of chick.  
Prerequisite: 252.  
Four quarter hours credit.
554 Advanced Embryology  
Spring  
Continuation of 454. Detailed study of mammalian development.  
Assigned experimental work.  
Offered on demand.  
Prerequisite: 454 or permission of instructor.  
Four quarter hours credit.

555 Advanced Physiology  
Autumn  
Functional interrelations of organ systems. Special topics in physiology. Laboratory consists of experimental techniques and practical demonstrations.  
Offered on demand.  
Prerequisite: 355.  
Four quarter hours credit.

560 Field Zoology  
Spring  
Collection, preservation and identification of lower vertebrates and terrestrial and aquatic invertebrates. Detailed study of habits and life histories of selected forms.  
Offered on demand.  
Prerequisites: Graduate standing.  
Four quarter 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) Courses 500 and 510.
(b) At least eight quarter hours credit in courses 520, 521, 522, and 523.
(c) Additional quarter hours of credit to make a total of twenty-eight to be selected from courses offered on the 400 and 500 levels.

Description of Courses

400 Methods of Teaching Business Subjects  
Spring  
A study of methods, materials, tests, programs, and other aspects of the teaching of the skill and non-skill business subjects in high schools.  
Four quarter hours credit.

411 Business Law I  
Winter  
A study of the law of contracts, agency, negotiable instruments, labor legislation, insurance, and suretyship. Some attention is given to court systems with special emphasis on the courts of Illinois. Case materials and problems are used.  
Four quarter hours credit.
412 Business Law II Spring
The law of bailments, common carriers, sales, partnerships, corporations, property, bankruptcy, torts, and business crimes are studied. Problems and case materials are used. Four quarter hours credit.

415 Consumer Economics Winter
A study of the economics of consumption with particular attention given to an analysis of the factors and forces underlying consumer demand. Four quarter hours credit.

416 Insurance Spring
A study of the basic principles of life insurance, fire insurance, casualty insurance, marine insurance, and surety and fidelity bonds. Four quarter hours credit.

420 Business English and Correspondence Spring
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. Four quarter hours credit.

430 Business Organization and Finance Winter
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. Four quarter hours credit.

431 Principles of Management Autumn
The fundamentals of management: phases of administrative, staff, and operative management; and application of principles and techniques. Four quarter hours credit.

432 Office Management Winter
Application of the principles of management to the planning, organizing, and controlling of office work; problems of the office standards, business forms, and office methods. Four quarter hours credit.

433 Personnel Management Spring
Basic principles and procedures relating to employment, industrial health and safety, labor relations and morale, employee education and training, and wage and salary administration. Four quarter hours credit.
440 **Principles of Salesmanship**  
Autumn  
Techniques of selling in modern business; the sales department; and the salesman's function in the selling process.  
Four quarter hours credit.

441 **Principles of Marketing**  
Winter  
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.  
Four quarter hours credit.

442 **Advertising**  
Spring  
The fundamental of advertising in relation to modern business activities; advertising media, campaigns, and systems are considered.  
Four quarter hours credit.

450 **Money and Banking**  
Winter  
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.  
Four quarter hours credit.

455 **Individual and Business Taxation**  
Spring  
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.  
Four quarter hours credit.

500 **Principles and Problems of Business Education**  
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.  
Four quarter hours credit.

510 **Administration and Supervision of Business Education**  
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 materials, student measurement and evaluation, classroom supervision and rating, physical layout, and administration of supplies, textbooks and equipment.  
Four quarter hours credit.

520 **Techniques for Improvement of Instruction in Stenography**  
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.  
Four quarter hours credit.
521 **Techniques for Improvement of Instruction in Typewriting**
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.
Four quarter hours credit.

522 **Teaching Procedures in Bookkeeping and Accounting**
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.
Four quarter hours credit.

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

530 **Seminar in Consumer Problems**
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.
Four quarter 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.
Four quarter 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.
Four quarter 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.
Four quarter hours credit.
Students who elect a graduate major in education must develop certain proficiencies in one of five special fields. These proficiencies will usually be developed by satisfying the following course requirements in education:


III. Teaching in Core Programs—Education 531, 532a, 532b, 534, and 561. (Not offered 1953-54)

IV. Supervision and Curriculum—Education 500, 501, 510, 541, 542, 543, 551, and 572.

V. School Administration—Education 500, 501, 510, 542, 551, 552, 553, and 554.

A student who can satisfactorily demonstrate that he has the required proficiencies may, with the approval of his advisor, be excused from one or more of the above courses. Field work under college supervision may be utilized to develop proficiencies and substituted for regular course work.

Departmental offerings will depend largely upon the needs of students. In general, courses listed in the special sequences will be offered during each summer session and once or twice during the school year in evening or Saturday morning classes.

### Description of Courses

**409 Personnel and Guidance**

*Spring*

Introduction to the study of personnel work in elementary and secondary schools. Emphasis upon recognizing needs for personnel work and planning orientation, vocational and educational guidance programs.

Four quarter hours credit.

**415 Treatment of Exceptional Children**

*Every Quarter*

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. Visits to schools and institutions for observation.

Prerequisite: 350 or 356.

Four quarter hours credit.
416 **Personality Maladjustments and Mental Hygiene**

*Every Quarter*

Personality adjustment from infancy through adulthood; healthful and unhealthful modes of adjustment; prevention of maladjustments. Treatment of personality problems in school, clinic, and mental hospital. Visits to institutions.

Prerequisite: 350 or 356.

Four quarter hours credit.

424 **Basic Procedures in Guidance of Learning (High School)**

*Every Quarter*

Review and justification of the theoretical foundations of modern teaching practices in the American high school; development of valid operational principles from psychological and philosophical evidence, and actual practice in creating functional teaching-learning course plans for selected areas in the typical high school curriculum.

Prerequisite: 356.

Four quarter hours credit.

430 **Audio-Visual Education**

*Every Quarter*

A study of the selection, evaluation, and utilization of various audio-visual materials and techniques in the instructional program. Provides opportunities to operate the various projectors used in such a program.

Prerequisite: 350 or 356.

Four quarter hours credit.

433 **Junior High School Organization and Problems**

*Spring*

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

Prerequisite: 350 or 356.

Four quarter hours credit.

435 **American Public Education**

*Every Quarter*

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: 350 or 356.

Four quarter hours credit.

466 **Diagnosis and Treatment of Reading Difficulties**

*Every Quarter*

A study of the causes of reading difficulties, their diagnosis and treatment.

Prerequisite: A course in Reading Methods.

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

490 Beginning Student Teaching  Every Quarter
(Elementary Grades)
The first experience in student teaching for elementary majors with
approximately three years of college or more. Includes experiences
in guiding learnings for both small and large groups of children.
One half day. Eight hours credit.

or

One-fourth day. Four hours credit.

491 Advanced Student Teaching  Every Quarter
(Elementary Grades)
Emphasis on preparation and presentation of large teaching units
and classroom responsibility.
Prerequisite: 490.
One fourth day. Four hours credit.

or

One half day. Eight hours credit.

492 Advanced Student Teaching  Every Quarter
(Elementary Grades, Elective)
Opportunity to earn additional credit in student teaching for students
needing or desiring it. Assignment made only if facilities permit.
Prerequisite: 491.
Four quarter hours credit.

493 Student Teaching  Every Quarter
(Elementary Grades, Special Subjects)
Analyzed experiences in teaching children in one of the following
fields: fine arts, home economics, industrial arts, music, physical
education, and speech correction.
Four quarter hours credit.

494 Student Teaching  Every Quarter
(Elementary Grades, 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 elementary
curriculum depending upon available facilities.
Four quarter hours credit.
495-a, b, c. Student Teaching (High School) Every Quarter

This course or 496 is required of all students in the curriculum for the education of high school teachers. It may be completed in one of the following ways:

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

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

c. A student majoring in one of the fields requiring Student Teaching 493 may, after completing that course, be assigned for his 495 teaching in an out-of-town high school. The student will live in the community to which he is assigned for six weeks and give his entire time to teaching. Eight quarter hours credit.

496 Student Teaching (Off-campus) Every Quarter

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

500 Social Foundations of Education Every Quarter

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. Four quarter hours credit.

501 Psychological Foundations of Education Every Quarter

Study of how psychological investigations change curriculum and teaching methods and of the techniques of problem solving used in such research. Each student makes a detailed study of one psychological problem of concern to him in his teaching situation. Four quarter hours credit.
502 The Teaching of Arithmetic in the Elementary School
(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.
Four quarter hours credit.

503 Independent Research in Education
With the approval of the major advisor, students will 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. Credit determined on the basis of twenty hours of work equaling one quarter hour.
Two to four quarter hours credit.

510 Methods of Evaluation
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.
Three quarter hours credit.

511 Understanding and Guiding the Elementary School Child
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.
Eight quarter hours credit.

512 The Elementary School Curriculum
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.
Three quarter hours credit.

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

521 Understanding and Guiding Youth in the Secondary School
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.
Eight quarter hours credit.
523 **Problems in Secondary Education**  
*Autumn, Spring*  
A seminar requiring individual investigation of problems in secondary education culminating in a research paper.  
Three quarter hours credit.

531 **The Core Curriculum**  
An introductory course for students interested in developing an understanding of the core curriculum in the junior and senior high school. Emphasis is placed upon the philosophy and the psychology underlying the core concept.  
Four quarter hours credit.

532-a and b. **The Selection, Organization, and Guidance of Laboratory Experiences in the Core Curriculum**  
A laboratory course for advanced study in core curriculum and teaching. Attention is given to effective teaching techniques applicable to the core: cooperative planning, fostering of creativity, group discussion techniques and teaching materials and aids.  
Prerequisite: 531 and permission of the instructor.  
Eight quarter hours credit.

534 **Evaluation of Pupil Progress in the Core Curriculum**  
A course designed to give students an understanding of newer evaluative practices. A study of techniques to evaluate personal-social adjustment, including cumulative records, behavior descriptions, cooperative evaluation, and reports to parents in the core curriculum.  
Two quarter hours credit.

541 **The Improvement of Instruction**  
*Autumn*  
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.  
Four quarter hours credit.

542 **Fundamentals of Curriculum Development**  
*Autumn, Spring*  
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 educational human relations.  
Three quarter hours credit.

543 **Problems in Curriculum and Supervision**  
*Spring*  
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 542.  
Three quarter hours credit.
551 School Organization and Administration Autumn, Spring
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.
Four quarter hours credit.

552 Duties of School Principals Winter
A study of the basic duties of elementary and secondary school principals in school organization and administration as well as the supervision of instruction.
Four quarter hours credit.

553 Problems in School Administration Spring
A seminar requiring individual investigation of fundamental problems in administration culminating in a research paper. Problems will be based largely on past or anticipated experience of the students.
Four quarter hours credit.

554 School Buildings and School Finance Winter
Problems dealing with educational finance and with planning school building programs. Field and laboratory work whenever possible.
Four quarter hours credit.

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

561 The Teacher's Role in Personnel Work Winter
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, of specialized services to which teachers may refer individuals needing help.
Three quarter hours credit.

562 Guidance and Counseling Techniques Spring
Study of types of guidance and counseling being used in schools and institutions, of techniques of individual interviewing, and of interpretation and use of data obtained from interviews, tests, and other methods of studying individuals.
Prerequisite: 561 or equivalent.
Four quarter hours credit.

566 Clinical Problems in Child Study Every Quarter
A course providing clinical experiences in diagnosis of reading difficulties and the application of remedial procedures.
Prerequisite: 300, 466, and Student Teaching.
Four quarter hours credit.
572 Community-School Relationships  
Winter
The roles played by various community agencies in the education of youth, their difficulties in coordination, and the school's responsibility as a leader and interpreter. Explores home-school relationships.
Two quarter hours credit.

573 Public Relations  
Summer
Consideration given to the task of interpreting the school to the community through use of newspapers, school reports, radio, and through the aid of professional and lay organizations. The proper relationship between the community, the board of education, the superintendent and his staff is emphasized.
Two quarter hours credit.

574 Parent Education  
Summer
Analysis of different methods of conducting study groups and programs for parent meetings. Attention given to parent-child and family problems as well as to parent-school relationships.
Three quarter hours credit.

581 The Teaching of Reading in the Elementary School  
Spring
A study of the developmental reading program in the elementary grades. Consideration is given to this program from the language arts point of view.
Four quarter 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.
Two quarter hours 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.
Two quarter hours credit.

586 Related Arts in the Elementary School  
On Demand
The function 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.
Three quarter 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.
Four quarter hours credit.

(41)
590 Group Process in Education

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.

Two quarter hours credit.

591 Techniques of Educational Measurements—Applied Statistics

Concepts of statistics and measurement as applied to practical school problems. Uses and misuses of measurement.

Three quarter hours credit.

592 Philosophy of Education

An evaluation of current philosophies in operation in the public schools.

Four quarter hours credit.

593 Supervision of Student Teaching

The organization, administration, and supervision of student teaching programs as seen by supervising teachers and other educational leaders (building principles and supervisors) who have responsibilities for student teaching.

Prerequisite: Permission of instructor.

Three quarter hours credit.

595 Internship

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. One of the following areas may be selected: elementary teaching, secondary teaching, core curriculum, supervision and curriculum, guidance, and administration. Includes direct experience and research. Assignments may be arranged for a minimum of eight quarter hours credit (one-half day for 12 weeks) or 12 to 16 quarter hours credit (a full day for 12 weeks). No credit will be given for internship in the same area in which the student may happen to be regularly employed as a member of a school’s staff at that time. Internees should have completed at least one half of their graduate course work prior to the assignment and should arrange to enroll in the respective problems course concurrently with the internship.

Assignment only by special arrangement with 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

400 Creative Writing  Winter
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 members of the class.
Prerequisite: 100 and 101.
Four quarter hours credit.

470 The English Novel  Autumn and Spring
Study and discussion of many novels of the eighteenth and nineteenth centuries. Emphasises upon the novel as a type of literature which has developed from simple early forms to highly finished later forms.
Four quarter hours credit.

471 English Prose of the Nineteen Century  Winter
A study of the main currents of nineteenth century thought as expressed in the writings of Carlyle, Mill, Ruskin, Macaulay, and others whose pronouncements exerted seminal influence.
Four quarter hours credit.

473 Romantic Poetry  Winter
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.
Four quarter hours credit.

474 English Poetry of the Victorian Period  Autumn
A survey of English poetry from Tennyson to Hardy, with special emphasis upon Tennyson, Browning, and the Pre-Raphaelites.
Four quarter hours credit.

475 Contemporary Poetry  Winter
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.
Four quarter hours credit.
476  **The Modern Novel**  
Spring  
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.  
Four quarter hours credit.

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

481  **Grammar for Teachers**  
Autumn  
A study of the structure of current usage.  
Two quarter hours credit.

482  **Reading in the High School**  
Autumn  
(Also listed as Education 482.)  
A study of the reading problems of high school students.  
Four quarter hours credit.

485  **English Drama to 1642**  
Spring  
Miracle and mystery plays, moralities, interludes, imitations of Latin tragedy and comedy, and the plays of such writers as Lyly, Green, Kyd, Marlowe, Jonson, and Beaumont and Fletcher.  
Four quarter hours credit.

486  **Modern Drama**  
Spring  
Trends in British, Continental, and American drama from Ibsen to the present day, as illustrated by representative plays.

505  **History of Literary Criticism**  
Spring  
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.

507  **Chaucer**  
Autumn  
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.

512a  **Studies in American Literature**  
Autumn  
The Puritan period and "The Age of Reason," with extensive reading in such authors as Cotton Mather, Edwards, Winthrop, Franklin, and Freneau.  
Four quarter hours credit.

512b  **Studies in American Literature**  
Winter  
"The Romantic Movement" with reading in such leading nineteenth century figures as Emerson, Poe, Hawthorne, Lowell, and Melville.  
Four quarter hours credit.
512c Studies in American Literature
Realism and Naturalism and their manifestations in the writings of
Whitman, Twain, Harte, James, Howells, and others.
Four quarter hours credit.

560 Elizabeth Non-Dramatic Literature
The development of Renaissance culture in England as reflected in
sonnet cycles, “courtesy books,” criticism, fiction, history, essays,
and translations. Emphasis on the non-dramatic works of the
Humanists, Sidney, Spenser, Shakespeare, and Bacon.
Four quarter hours credit.

561 Milton and His Contemporaries
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.
Four quarter hours credit.

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

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

571 Studies in Victorian Prose
Examination of the works of two or more important writers of non-
fictional prose of the period.
Four quarter hours credit.

573a Studies in Coleridge and Wordsworth
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.
Four quarter hours credit.

573b Studies in Shelley and Keats
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.
Four quarter 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.
Four quarter hours credit.

576  Trends in the Twentieth Century Novel  Winter
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.
Five quarter hours credit.

580  Studies in Shakespeare  Autumn
Shakespeare's development as a dramatist, studied through representative plays. Consideration of his debt to contemporaries, his use of stage conventions, his theatre. Attention given to representative source studies, theories of tragedy, Shakespearean criticism.
Four quarter hours credit.

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

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

585  English Drama of the Nineteenth Century  Spring
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.
Four quarter hours credit.

586  Trends in Twentieth Century Drama  Spring
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.
Four quarter hours credit.
DEPARTMENT OF MATHEMATICS
GRADUATE MAJOR IN MATHEMATICS

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

(a) 450 and 451 or equivalents if these courses were not included in the undergraduate program.

(b) At least two quarter hours credit in 550.

(c) At least six courses to be selected from courses 405, 410, 415, 420, 430, 505, 510, 515, 520, 530, and 540. At least three courses must be on the 500 level.

Description of Courses

400 Teaching Practices in Arithmetic Every Quarter
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: 200 or 201.
Four quarter hours credit.

405 Theory of Equations Autumn
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: 320 or equivalent.
Four quarter hours credit.

410 Mathematics of Statistics I Winter
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: 321 or equivalent.
Four quarter hours credit.

415 Advanced Synthetic Geometry Autumn
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: 130 or equivalent.
Four quarter hours credit.

420 Differential Equations I Winter
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.
Prerequisite: 322 or equivalent.
Four quarter hours credit.
430 Advanced Calculus I
Winter
Offered on demand.
Prerequisite: 322 or equivalent.
Four quarter hours credit.

440 History of Mathematics
Spring
Development of each of the several branches of mathematics through the first steps of the calculus; outstanding contributors in the field of mathematics.
Offered every other year.
Four quarter hours credit.

450 Teaching Practices in High School Mathematics I
Autumn
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 procedure, supplementary instructional equipment, and means of evaluating instruction.
Prerequisite: 320 or equivalent or consent of instructor.
Four quarter hours credit.

451 Teaching Practices in High School Mathematics II
Winter
Mathematics of the tenth, eleventh, and twelfth years. Topics similar to those listed in 450.
Prerequisite: 320 or equivalent or consent of instructor.
Four quarter hours credit.

502 The Teaching of Arithmetic in the Elementary School
Spring
(Also listed as Education 502)
Consideration of the implications of research for methods of teaching, and the selection and arrangement of concepts and materials.
Offered on demand.
Prerequisite: 400 or equivalent or teaching experience.
Four quarter hours credit.

505 Modern Algebra
Spring
Introduction to algebraic theories including polynomials, rectangular matrices, elementary transformations, equivalence of matrices and of forms, linear spaces, polynomials with matric coefficients and fundamental concepts.
Offered on demand.
Prerequisite: 405 or equivalent.
Three quarter hours credit.
510 Mathematics of Statistics II  Spring
Continuation of 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: 410 or equivalent.
Three quarter hours credit.

515 Advanced Analytic Geometry  Autumn
Coordinates and cosines, planes and lines, determinants and matrices, surfaces and curves, quadric surfaces, and transformations.
Offered on demand.
Prerequisite: 222 or equivalent.
Four quarter hours credit.

520 Differential Equations II  Spring
Continuation of 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: 420 or equivalent.
Three quarter hours credit.

530 Advanced Calculus II  Spring
Continuation of 430. Partial differentiation, vectors, power series, differential geometry, Stieltjes Integral, and Laplace transform.
Offered on demand.
Prerequisite: 430 or equivalent.
Three quarter hours credit.

540 Topics in Higher Mathematics for Teachers  Autumn
Selected topics from algebra, geometry, and analysis including the function concept, theory of numbers, non-euclidean geometry, topology, postulational approach to mathematics, and constructions with ruler and compasses.
Four quarter hours credit.

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

*Course may be repeated for additional credit
Description of Courses

CHEMISTRY

400 **Inorganic Preparations**  
Application of fundamental principles in inorganic chemistry. Preparation and purification of selected inorganic compounds. Offered every other year. 
Prerequisite: 301.  
Three quarter hours credit.

402 **Quantitative Analysis**  
Selected analyses of inorganic compounds. 
Prerequisite: 301.  
Three quarter hours credit.

410 **Organic Preparations**  
Synthesis of representative organic compounds by application of fundamental organic reactions. Offered every other year. 
Prerequisite: 312 or equivalent.  
Two to four quarter hours credit.

415 **Biological Chemistry**  
Chemistry of biological processes. 
Prerequisite: 311 or 315.  
Four quarter hours credit.

420 **Qualitative Organic Analysis**  
Organic group reactions. Identification of organic compounds and mixtures of characteristic reactions. 
Prerequisite: 312 or equivalent.  
Four quarter hours credit.

430-431-432 **Physical Chemistry**  
Behavior of gases, liquids, solids, and solutions. Phase rule, chemical reactions, colligative properties, electrometry, thermodynamics, and atomic structure. 
Prerequisite: Twenty-four hours chemistry. Math 320 or registration therein.  
Four quarter hours credit for each unit.

500 **Advanced Inorganic Chemistry**  
Thorough treatment of fundamentals of inorganic chemistry. 
Prerequisite: 301.  
Three quarter hours credit.

504 **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.  
Two quarter hours credit.
505 **Topics in Analytical Chemistry**
Lectures, discussions and reports on topics of special interest in analytical chemistry.
Prerequisite: 301.
Two quarter hours credit.

506 **Topics in Organic Chemistry**
Lectures, discussions and reports on topics of special interest in organic chemistry.
Prerequisite: 312.
Two quarter hours credit.

507 **Chemistry Seminar**
Discussion of selected topics in chemistry under staff supervision.
Prerequisite: A minor in chemistry or equivalent.
One to two quarter hours credit.

510 **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: 312.
Three quarter hours credit.

535 **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 four quarter hours credit.

### PHYSICS

449 **Science Teaching Procedure in Elementary School**
Spring
(For teachers and supervisors)
Procedure in elementary science teaching. Experiments and demonstrations suitable for elementary grades. Newer science books for children reviewed.
Prerequisite: Permission of instructor.
Four quarter hours credit.

460-461-462 **Advanced General Physics**
Topics selected to furnish thorough background in preparation for teaching and advanced study.
Prerequisite: One year of college physics or equivalent.
Four quarter hours credit for each unit.

*Course may be repeated for additional credit*
470 Atomic and Nuclear Physics I  Autumn
Study of discoveries and measurements of the fundamental particles; wave-particle dualism; Bohr Atom; basic postulates and results of relativity. Radioactivity and nuclear reactions.
Prerequisite: One year of college physics or equivalent.
Four quarter hours credit.

471 Atomic and Nuclear Physics II  On Demand
Continuation of 470. Quantum numbers and energy states. Optical, X-ray, gamma-ray, and beta-ray spectra.
Prerequisite: 470 and calculus.

475 Electronics I  On Demand
D.C. and A.C. circuit theory applied to simple circuits used in modern electronics equipment. Vacuum tubes and radio receivers included.
Prerequisite: 375 and permission of instructor.
Four quarter hours credit.

485 Acoustics  On Demand
Fundamentals of wave motion and their application to sound. Reflection, diffraction, and absorption of sound as related to acoustic properties of rooms.
Prerequisite: One year of college physics or equivalent.
Four quarter hours credit.

490 History of Science  On Demand
Development of physical science from the beginning of recorded history to the present time. Significant past stages and present trends emphasized.
Three quarter hours credit.

492 Biography of Famous Scientists  On Demand
Work and personal characteristics of famous scientists. Oral and written reports required.
Two quarter hours credit.

499 Teaching of Physical Sciences  Spring
Classroom and laboratory problems confronting the high school teacher. Requisitions for supplies and equipment, texts, reference materials included.
Prerequisite: Physical science major or permission of instructor.
Two quarter hours credit.

*560 Special Problems in Physics  On Demand
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.
One to four quarter hours credit.

*Course may be repeated for additional credit
564-565-566  Physical Science for Elementary Teachers

(For teachers and supervisors.)
Principles and application of physical science illustrated by simple apparatus constructed by members of class. Science texts and reference material considered. (Course 564 satisfies requirements for Education 584.)
Prerequisite: Permission of instructor.
Two to four quarter hours credit for each unit.

*537 Physics Seminar

Topics in physics discussed under guidance of staff.
Prerequisite: One year of college physics or equivalent.
One to two quarter hours credit.

575 Electronics II

Continuation of 475. Oscillators, amplifiers, transmitters and industrial controls. Network theory considered.
Prerequisite: 475 and permission of instructor.
Four quarter hours credit.

580 Thermodynamics

Laws of thermodynamics and their application to various thermal systems.
Prerequisite: One year of college physics, and differential and integral calculus.
Three quarter hours credit.

595 Orientation of College Science to Public School Teaching

Correlation of content of physical science courses to classroom teaching to primary and secondary schools.
Prerequisite: Major or minor in Physical Sciences.
Two quarter 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 twelve quarter hours credit in each of the fields comprising the general area; namely, history, economics, sociology, and political science. At least four quarter hours credit in each field must be at the graduate level.

*Course may be repeated for additional credit
Description of Courses
ECONOMICS

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

467 The Cooperative Movement
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: 260.
Two quarter hours credit.

468 World Economic Problems
Technology and cultural lag, nationalism, population trends, international trade, basic raw materials, cartels, unemployment, and contemporary world organizations to deal with these problems are discussed.
Prerequisite: 360 or equivalent.
Three quarter hours credit.

562 Business Cycles
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: 350 or equivalent.
Two quarter hours credit.

563 Modern Economic Systems
Capitalism, socialism, communism, fascism, and cooperatives are compared in detail regarding economic institutions, decisions, production, agriculture, the mechanism of exchange, investment, distribution of income, public finance, labor, and international trade.
Prerequisite: 360 or equivalent.
Four quarter hours credit.

564 Economic Well-Being and Education
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 quarter hours credit.

566 Independent Study in Economics
Individually arranged readings for graduate students to complete requirements in economics and to meet students' needs.
Prerequisite: 360.
Two quarter hours credit. To be arranged with instructor.
420 **American History, The Middle Period—1815-1850  Winter**
An intensive study of a shorter period of National history. Attention is centered on the greatest possible understanding of a few major developments.
Prerequisite: 220 and 221.
Four quarter hours credit.

421 **Twentieth Century United States  Autumn**
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: 220 and 221.
Four quarter 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.
Four quarter 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 changing tastes in literature, drama, and music as well as attitudes, interests, and patterns of thinking during this three-generation span.
Four quarter hours credit.

425 **History of Colonial Latin America  Winter**
The establishment, institutions, and life of the Spanish and Portuguese empires in the Western Hemisphere, the achievement of independence and the national histories of the Hispanic American states.
Prerequisite: A course in American History.
Four quarter hours credit.

426 **The Republican Period of Latin America  On Demand**
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: 425 or equivalent.
Four quarter hours credit.
430 Twentieth Century Europe  
Spring  
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: 332 or equivalent.  
Four quarter hours credit.

432 History of Ideas  
Every Quarter  
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 quarter hours credit.

434 English History to 1603  
On Demand  
Background for the study of Medieval and Renaissance English Literature, and for the historical understanding of the origins and development of the English nation and people through the Tudor period.  
Four quarter hours credit.

436 British History, 1815 to Present  
Winter  
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: 434 and 435 are desirable, but not required.  
Four quarter hours credit.

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

520 Historiography  
On Demand  
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 quarter hours credit.

522 Development of American Culture in the Eighteenth Century  
On Demand  
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 quarter hours credit.
523 Technology in American Culture On Demand
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: 280 or equivalent.
Two quarter hours credit.

524 Development of Urban Society in America On Demand
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: 280 or equivalent.
Two quarter hours credit.

530 Medieval Influences on Modern Ideas and Institutions On Demand
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 quarter hours credit.

531 Renaissance Origins of the "Modern" in History On Demand
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 quarter hours credit.

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 quarter 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 quarter 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.  
Four quarter hours credit.

*536  **Independent Study in History**  
Open to qualified students who wish to do individual advance work in history.  
Prerequisite: Consent of instructor.  
Two quarter hours. (Maximum 6 quarter hours.)

---

**POLITICAL SCIENCE**

445  **American Constitutional Development**  
**Autumn**  
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: 220, 221, and 240.  
Four quarter hours credit.

446  **The Far East**  
**On Demand**  
The impact of the Western nations on Eastern Asia since the opening 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.  
Three quarter hours credit.

449  **International Relations**  
**On Demand**  
Revolutions, war and peace, disarmament, choice of foreign policy, nationalism, balance of power, foreign policies of major nations, the United Nations, world government, trouble spots in contemporary world.  
Three quarter hours credit.

495  **Seminar in Current Problems of National Security**  
**Summer Session Only**  
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.  
Six quarter hours credit (may be taken for three quarter hours for either the first or second four-week period.)

*Course may be repeated for additional credit*
540 Public Administration On Demand
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: 240 or equivalent.
Four quarter hours credit.

545 American Parties and Pressure Groups On Demand
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: 240 or equivalent.
Three quarter hours credit.

546 Democratic Foreign Governments On Demand
The development and functioning of government and politics in Great Britain, France and the Dominions. Some attention will be given to Scandinavian countries or Czechoslovakia if student interest so warrants.
Prerequisite: 240 or equivalent.
Advisable prerequisite: A college course in European or World History.
Two quarter hours credit.

547 Non-Democratic Foreign Governments On Demand
The development and functioning of government and politics in the USSR, Germany, Italy, and Spain.
Prerequisite: 240 or equivalent.
Advisable prerequisite: A college course in European or World History.
Two quarter hours credit.

548 The United Nations On Demand
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.
Three quarter 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 quarter hours credit.
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.  
Four quarter 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 quarter 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 problem.  
Prerequisite: 280.  
Four quarter hours credit.

483  **Social Disorganization**  
A detailed study of some of the major social problems arising out of a failure in social integration—divorce, crime, prostitution, racial and religious tensions, and the like.  
Prerequisite: 280 or equivalent.  
Three quarter 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 quarter hours credit.

491  **Materials and Problems of Elementary School Instruction in the Social Sciences**  
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.  
Four quarter hours credit.
580 **Systematic Sociology**
An examination of the historic patterns of sociological thought as developed by Conte, Giddings, Coolidge, Sumner, Thomas and others, and an attempt to synthesize the current patterns of sociological thought into a coherent system.
Prerequisite: 280 or equivalent.
Two quarter hours credit.

581 **Social Dynamics**
A study of some of the constants of social change, the variability of rates of change, the factors involved from a sociological point of view in the various forms of revolution typified by the industrial revolution, the Protestant Reformation, and various political movements.
Prerequisite: 280 or equivalent.
Two quarter hours credit.

582 **Social Attitudes**
A study of the nature of social attitudes, their importance in a modern society, their growth and development, their measurement and their control. An advanced study of attitude-forming techniques in a special area will be required of the student.
Prerequisite: 280 or equivalent.
Two quarter hours credit.

583 **Community Analysis**
Techniques of community study from the special viewpoint of the teacher or school administration will be developed. The student will be required to use these techniques in the study of a specific aspect of a specific community as it relates to a specific school situation.
Three quarter hours credit.

584 **Independent Study in Sociology**
Open to qualified students who wish to do individual advanced work in sociology.
Prerequisite: Consent of instructor.
Two quarter hours credit.

**DEPARTMENT OF SPEECH**

**GRADUATE MAJOR IN SPEECH**

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

1. Approximately two-thirds, or twenty-nine hours, 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 advisory committee 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, Course 540, will be required; if the student's area of specialization is Public Address, the seminar in problems in this area, Course 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 advisory committee 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 the chairman of the advisory committee.

Description of Courses

DRAMA, ORAL INTERPRETATION OF LITERATURE, AND RADIO

410 Advanced Play Production On Demand
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.
Four quarter hours credit for either section.

430 Advanced Oral Interpretation of Literature On Demand
A continuation of Course 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.
Four quarter hours credit.
450 Radio Speaking
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.
Four quarter hours credit for either section.

510 History of the Theater
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.
Four quarter hours credit.

511 Acting and Directing
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.
Three quarter hours credit.

515 Advanced Technical Practice
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.
Three quarter hours credit.

530 Lecture-Recital
Intensive work in the preparation and presentation of lecture-recitals.
Prerequisite: Consent of instructor.
Three quarter hours credit.

PUBLIC ADDRESS

400 Introduction of Rhetorical Criticism
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.
Four quarter 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.
Three quarter 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.
Three quarter hours credit.

502 History and Criticism in 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.
Three quarter 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.
Three quarter 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.
Three quarter 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.
Three quarter hours credit.
520 **Introduction to Speech Pathology**  
On Demand  
Causes of speech problems and their diagnosis as related to therapy 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.  
Four quarter 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.  
Four quarter 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 quarter hour.  
Prerequisite: Consent of instructor.  
One to four quarter 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: 320 or consent of instructor.  
Three quarter 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: Bio. Sci. 255S and 320, or consent of instructor.  
Three quarter 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.  
Three quarter hours credit.

*Course may be repeated for additional 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.
Three quarter hours 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: 421, 520, 521, 523, 524.
Three quarter 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.
Three quarter hours credit.

*599 Directed Individual Study
On Demand
Individual study of problems in speech, hearing and related fields.
Prerequisite: Consent of instructor.
One to four quarter hours credit.

Note to Students Who Wish to Qualify as Speech Correctionists

The following 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. Thirty-two quarter 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.

---

*Course may be repeated for additional credit.

**This is to be interpreted as a minimum requirement. Students are urged to avail themselves of every opportunity to acquire additional clinical experience.
2. Eight quarter 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. Eight quarter 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 organization, content, and methods of teaching the foundational course in speech and other courses in a balanced speech curriculum.
Prerequisite: Consent of instructor.
Four quarter 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 conduction of his major graduate investigation.
Prerequisite: Consent of instructor.
Three quarter 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.
Three quarter hours credit.
INDUSTRIAL ARTS BUILDING
<table>
<thead>
<tr>
<th>INDEX</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accreditation</td>
<td>25</td>
</tr>
<tr>
<td>Administrative Council</td>
<td>10</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>10</td>
</tr>
<tr>
<td>Admission Requirements</td>
<td>12</td>
</tr>
<tr>
<td>Advisory System</td>
<td>19</td>
</tr>
<tr>
<td>Application for Admission</td>
<td>13</td>
</tr>
<tr>
<td>Area Majors</td>
<td>26</td>
</tr>
<tr>
<td>Assistantships</td>
<td>24</td>
</tr>
<tr>
<td>Auditors</td>
<td>13</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>26</td>
</tr>
<tr>
<td>Buildings and Campus</td>
<td>20</td>
</tr>
<tr>
<td>Business Education</td>
<td>30</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>15</td>
</tr>
<tr>
<td>Calendar</td>
<td>8</td>
</tr>
<tr>
<td>Candidacy for Degree</td>
<td>17</td>
</tr>
<tr>
<td>Completion of Graduate Work</td>
<td>19</td>
</tr>
<tr>
<td>Credit Requirement and Grading System</td>
<td>17</td>
</tr>
<tr>
<td>Credits Transferable</td>
<td>18</td>
</tr>
<tr>
<td>Deficiencies</td>
<td>17</td>
</tr>
<tr>
<td>Education</td>
<td>34</td>
</tr>
<tr>
<td>English</td>
<td>43</td>
</tr>
<tr>
<td>Examinations</td>
<td>19</td>
</tr>
<tr>
<td>Expenses</td>
<td>14</td>
</tr>
<tr>
<td>Extension Courses</td>
<td>18</td>
</tr>
<tr>
<td>Extracurricular Activities</td>
<td>25</td>
</tr>
<tr>
<td>Faculty</td>
<td>10</td>
</tr>
<tr>
<td>Fees</td>
<td>14</td>
</tr>
<tr>
<td>Field Campus</td>
<td>22</td>
</tr>
<tr>
<td>General Information</td>
<td>20</td>
</tr>
<tr>
<td>Graduate Council</td>
<td>10</td>
</tr>
<tr>
<td>Health Service</td>
<td>23</td>
</tr>
<tr>
<td>Living Accomodations</td>
<td>15</td>
</tr>
<tr>
<td>Loans</td>
<td>23</td>
</tr>
<tr>
<td>Major, Selection of</td>
<td>26</td>
</tr>
<tr>
<td>Master's Degree, Requirements for</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics</td>
<td>47</td>
</tr>
<tr>
<td>Northern Foundation</td>
<td>23</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>49</td>
</tr>
<tr>
<td>Placement Bureau</td>
<td>24</td>
</tr>
<tr>
<td>Qualifying Paper</td>
<td>19</td>
</tr>
<tr>
<td>Registration</td>
<td>13</td>
</tr>
<tr>
<td>Residence Requirement</td>
<td>17</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>53</td>
</tr>
<tr>
<td>Speech</td>
<td>61</td>
</tr>
<tr>
<td>Student Teaching</td>
<td>24</td>
</tr>
<tr>
<td>Veterans' Benefits</td>
<td>15</td>
</tr>
<tr>
<td>Veterans' Housing Project</td>
<td>22</td>
</tr>
</tbody>
</table>

( 70 )