

2-1957

College Catalog 1957-1958

Iowa State Teachers College

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Catalog Issue
BULLETIN
of the
**IOWA STATE
TEACHERS**
College



FEBRUARY, 1957 - CEDAR FALLS, IOWA

Catalog Issue
BULLETIN
of the
**IOWA STATE
TEACHERS**
College

1957-58

INCLUDING ANNOUNCEMENTS FOR 1958-59



Issued Quarterly. Published by the Iowa State Teachers College. Entered as second-class mail matter, August 31, 1912, at the post office at Cedar Falls, Iowa, under the Act of August 24, 1912.

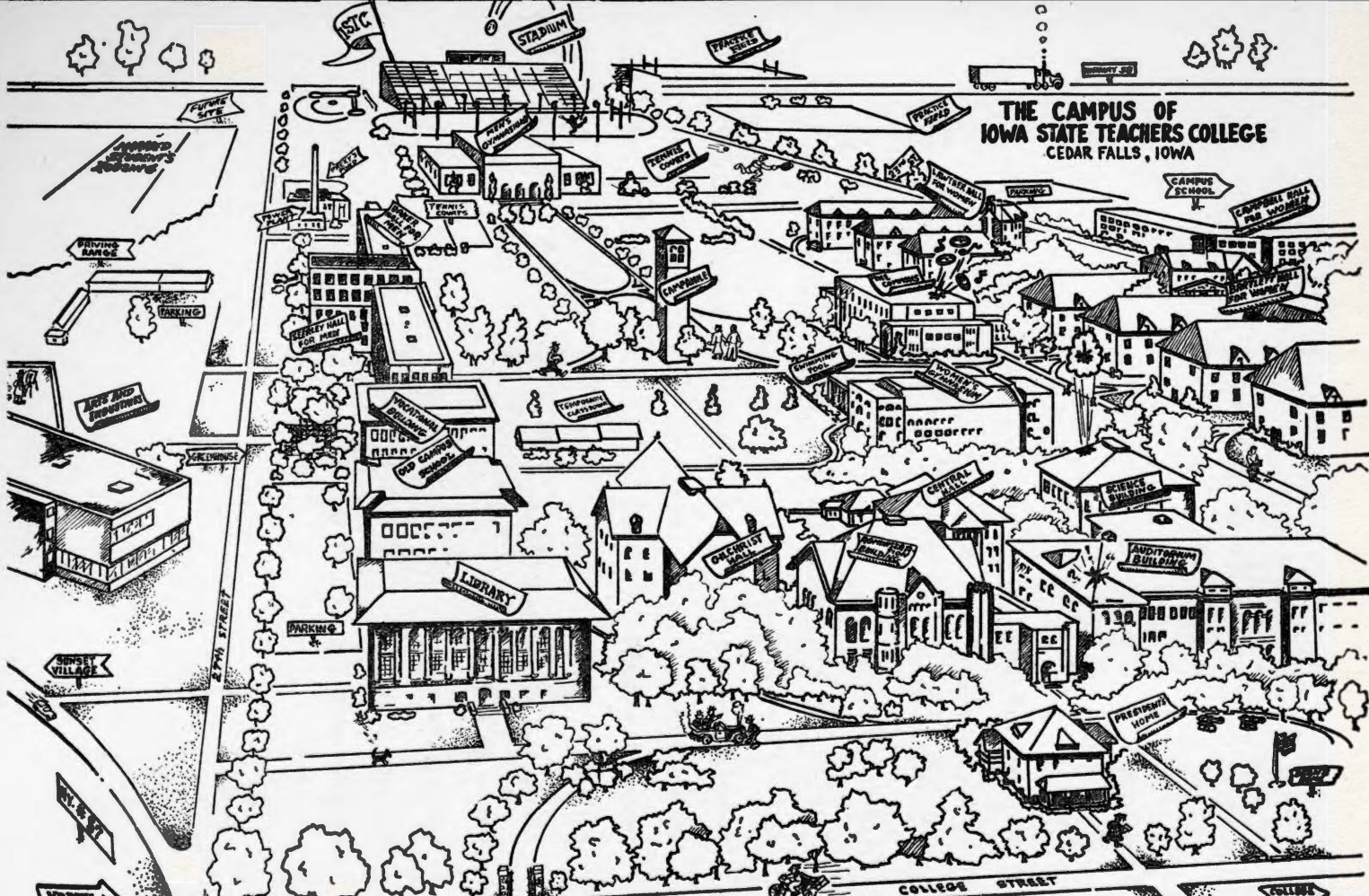
VOL. LVIII, No. 2

FEBRUARY, 1957

TO PREPARE ITS STUDENTS ADEQUATELY FOR RESPONSIBLE POSITIONS IN THE PUBLIC SCHOOLS; TO ASSIST ITS GRADUATES EFFECTIVELY IN SECURING SUCH POSITIONS; TO WORK WITH THE PUBLIC SCHOOLS ON PROFESSIONAL PROBLEMS; TO ADVANCE EDUCATIONAL METHODS BY RETAINING WHAT IS PROVEN WHILE TESTING WHAT IS NEW; TO STIMULATE ENTHUSIASM AND RESPECT FOR THE IMPORTANT PROFESSION WHICH IT SERVES; TO EDUCATE FOR EFFECTIVE CITIZENSHIP IN OUR REPUBLIC—THESE ARE THE OBJECTIVES TO WHICH THE IOWA STATE TEACHERS COLLEGE IS DEDICATED.

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THE CAMPUS OF
IOWA STATE TEACHERS COLLEGE
CEDAR FALLS, IOWA

ISTC
STADIUM

PRACTICE BUILDING

PRACTICE FLOOR

WINTER HALL FOR WOMEN

CAMPUS SCHOOL

CROSBY HALL FOR WOMEN

PHYSICIAN OFFICE

PHYSICIAN OFFICE

CAMPUS

BERNARD HALL FOR MEN

WINTER HALL FOR MEN

DRIVING RANGE

PARKING

ART AND INDUSTRIAL

SCREENING

WORTHMAN BUILDING

COMPUTER CENTER

PHYSICIAN OFFICE

PHYSICIAN OFFICE

PHYSICIAN OFFICE

CENTRAL BUILDING

PHYSICIAN OFFICE

AUDITORIUM BUILDING

LIBRARY

PRESIDENT HALL

PHYSICIAN OFFICE

HOUSE VILLAGE

5TH STREET

PARKING

PRESIDENT HALL

COLLEGE STREET

COLLEGE STREET

State Board of Regents

OFFICERS OF THE BOARD

DWIGHT G. RIDER, President

DAVID A. DANCER, Secretary

Members of the Board

MRS. WILLARD ARCHIE, Shenandoah	}	Terms expire July 1, 1957
HARRY H. HAGEMANN, Waverly		
C. L. FREDRICKSEN, Sioux City		
MRS. FRANK G. BROOKS, Mount Vernon (Resigned)	}	Terms expire July 1, 1959
ROY E. STEVENS, Ottumwa		
CLIFFORD M. STRAWMAN, Anamosa		
DWIGHT G. RIDER, Fort Dodge	}	Terms expire July 1, 1961
V. B. HAMILTON, Hampton		
RICHARD H. PLOCK, Burlington		

MEMBERS OF THE FINANCE COMMITTEE

Office, Des Moines

DAVID A. DANCER, Des Moines, Secretary

CARL GERNETZKY, Des Moines

A. W. WALSH, Des Moines

COMMITTEES OF THE BOARD

Faculty Committee

V. B. HAMILTON, Chairman

RICHARD H. PLOCK

ROY E. STEVENS

MRS. FRANK G. BROOKS

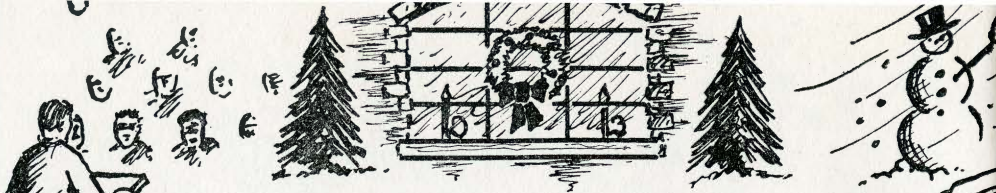
Building and Business Committee

HARRY H. HAGEMANN, Chairman

MRS. WILLARD ARCHIE

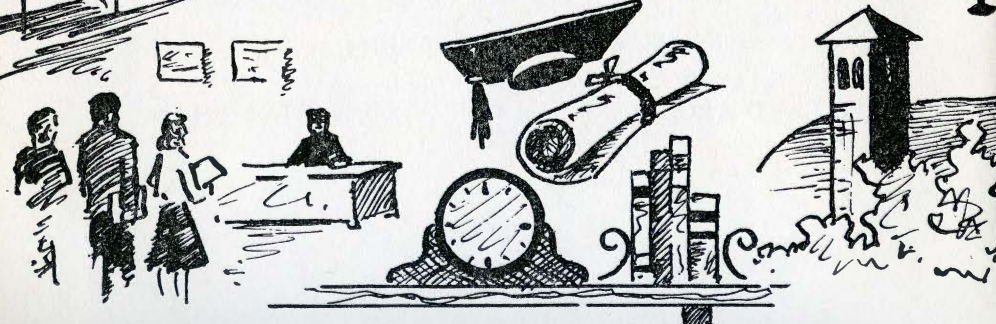
CLIFFORD M. STRAWMAN

C. L. FREDRICKSEN



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CALENDAR, 1957-58

Summer Session, 1957

- June 17, Monday —Registration, 8:00 a.m. to 4:00 p.m.
June 18, Tuesday —Instruction begins, 8:00 a.m.
July 4, Thursday —Legal holiday
Aug. 9, Friday —Session ends, 12:00 noon
Aug. 12-23 —Post-session

Fall Semester, 1957-58

- Sept. 9, 10, 11,
Monday, Tuesday,
Wednesday —Orientation and registration of new
students, 8:00 a.m.
Sept. 11, Wednesday —Registration of former students,
8:00 a.m. to 4:00 p.m.
Sept. 12, Thursday —Instruction begins, 8:00 a.m.
Nov. 27, Wednesday —Thanksgiving recess begins, 12:00 noon
Dec. 2, Monday —Instruction resumes, 8:00 a.m.
Dec. 20, Friday —Christmas recess begins, 5:00 p.m.
Jan. 6, Monday —Instruction resumes, 8:00 a.m.
Jan. 24, Friday —Semester ends, 5:00 p.m.

Spring Semester, 1958

- Jan. 27, Monday —Registration, 8:00 a.m. to 4:00 p.m.
Jan. 28, Tuesday —Instruction begins, 8:00 a.m.
April 2, Wednesday —Easter recess begins, 5:00 p.m.
April 8, Tuesday —Instruction resumes, 8:00 a.m.
May 30, Friday —Legal holiday
June 4, Wednesday —Semester ends, 12:00 noon
June 4, Wednesday —81st Annual Commencement

Summer Session, 1958

- June 16, Monday —Registration, 8:00 a.m. to 4:00 p.m.
June 17, Tuesday —Instruction begins, 8:00 a.m.
July 4, Friday —Legal holiday
Aug. 8, Friday —Session ends, 12:00 noon
Aug. 11-22 —Post-session

Fall Semester, 1958-59

- Sept. 8, 9, 10,
Monday, Tuesday,
Wednesday —Orientation and registration of new
students, 8:00 a.m.
Sept. 10, Wednesday —Registration of former students,
8:00 a.m. to 4:00 p.m.
Sept. 11, Thursday —Instruction begins, 8:00 a.m.

Officers of Administration, 1956-57

- J. W. MAUCKER, B.A., Augustana College; M.A., Ph. D., State University of Iowa
President of the College, 1950*
- MARTIN J. NELSON, B.A., Luther College; M.A., Ph.D., University of Wisconsin
Dean of the College, 1924 (1954)

Division of Student Personnel

- PAUL F. BENDER, B.A., State University of Iowa; M.A., Columbia University; Ed.D., New York University
Dean of Students, 1921 (1954)
- MARIAN McBRAIR, B.A., Carroll College; M.A., Northwestern University; Ed.D., Columbia University
Associate Dean of Students, 1953
- HAROLD E. BERNHARD, B.A., Carthage; B.D., Chicago Lutheran Theological Seminary; Ph.D., University of Chicago
Director of the Bureau of Religious Activities, 1949
- V. D. FRENCH, B.S., Drake University; M.D., Rush Medical College
Director of Health Service, 1952 (1955)
- PAUL C. KELSO, B.A., Northeast Missouri State Teachers College; M.Ed., D.Ed., Missouri University
Coordinator of Student Counseling, 1948 (1949)
- JACK HARRIS, B.S., University of Colorado; M.D., University of Colorado School of Medicine
Associate Director of Student Health Service, 1956
- THOMAS W. HANSMEIER, B.A., Iowa State Teachers College
Temporary Assistant, Men's Housing, 1955 (1956)

Division of Instruction and Research

- MARTIN J. NELSON, B.A., Luther College; M.A., Ph.D., University of Wisconsin
Dean of Instruction, 1924 (1954)
- MARSHALL R. BEARD, B.A., Marion College; M.A., Ph.D., University of Wisconsin
Registrar, 1930 (1942)
- TOM A. LAMKE, B.A., Iowa State Teachers College; M.A., University of Cincinnati; Ph.D., University of Wisconsin
Coordinator of Research; Assistant to Dean of Instruction, 1947 (1954)
- DONALD F. HOWARD, B.A., Iowa State Teachers College; M.A., Ph.D., State University of Iowa
Coordinator of Curriculum; Assistant to Dean of Instruction, 1947 (1955)

*A single date following the title indicates the beginning of service at this college. If two dates are given, the first indicates the incumbent's first appointment to a position and the second (in parenthesis) the beginning of service in present capacity.

DONALD O. ROD, B.A., Luther College; B.A. in Library Science, University of Michigan
Head Librarian, 1953

HERBERT M. SILVEY, B.S., Central Missouri State Teachers College; M.A., D.Ed., University of Missouri
Director of Research, 1947 (1954)

MERRILL F. FINK, B.A., Central Michigan State Teachers College; M.A., University of Michigan
Assistant Registrar, 1946 (1949)

Division of Field Services

DARYL PENDERGRAFT, B.A., Buena Vista College; M.A., Ph.D., State University of Iowa
Director of Field Services, 1946 (1954)

H. V. HAKE, B.A., Central Wesleyan College; M.A., State University of Iowa
Director of Radio and Television, 1938 (1947)

RAYMOND J. SCHLICHER, B.A., Iowa Wesleyan College; M.A., Ph.D., State University of Iowa
Director of the Placement Bureau, 1949 (1951)

MIL0 LAWTON, B.A., Iowa State Teachers College
Assistant in Charge of Alumni Affairs, 1953

NORBERT BAUMGART, B.A., Iowa State Teachers College
Public School Relations Counselor, 1956

ROBERT E. DAVIS, B.A., Iowa State Teachers College; M.A., State University of Iowa
Radio Assistant, 1954

Division of Business and Plant

PHILIP C. JENNINGS, B.S., M.S., Iowa State College
Business Manager and Secretary, 1942 (1945)

ELDON E. COLE, B.S., Iowa State College
Director of Department of Physical Plant, 1930 (1931)

JAMES L. BAILEY, B.B.A., M.A., University of Minnesota
Assistant Business Manager and Treasurer, 1950

Office of College Relations and Information Services

GEORGE H. HOLMES, B.A., M.A., University of Michigan
Director of College Relations, 1929 (1954)

JOHN H. BICKERS, B.S., Carthage College
Assistant in Publications, 1955

GEORGE J. WINE, Jr., B.A., State University of Iowa
Sports Information Assistant, 1956

BEVERLY DE LONG, B.J., University of Missouri
Information Assistant in College Relations, 1955

See pages 140 to 161 for other college personnel.

College Terminology

The meaning of terms frequently used at Iowa State Teachers College

- Adviser, advisee— Your adviser or counselor is the instructor assigned by the college to help you with your problems. You are called his "advisee."
- Certificate— A document, issued by the Iowa State Department of Public Instruction, Division of Teacher Education and Certification, which states that you are qualified to teach and what you may teach.
- Course— A particular subject being studied— thus, a "course" in English.
- Credit— The numerical reward you receive for completing a college course. It is described in semester hours. The freshman student will ordinarily register for sixteen or seventeen hours of class work. A total of 130 hours of credit is required for graduation from the four-year program.
- Curriculum— The whole body of courses required for a degree.
- Department— A division of the college which offers instruction in a particular branch of knowledge: the Department of Music.
- Elective— A subject or course which you may choose to study as distinguished from "required courses" which you are asked to take.
- Extracurricular— Those activities which are part of student life but are not part of the course of study. Debate, dramatics, and athletics are extracurricular activities.
- Fee— A charge which the college asks you to pay for certain services it offers you; for example, a music fee, paid for private lessons in music.

- General Education—** The knowledge, skills, appreciations, and attitudes that any well-educated person should possess. At the Iowa State Teachers College more than one-third of the work required for graduation consists of general education courses which are required of all students.
- Grade-Points** For reasons of simplicity in bookkeeping, grades are evaluated in terms of quality points. For every hour of A which you earn, you are credited with four grade-points; for every hour of B, three grade-points; for every hour of C, two grade-points; for every hour of D, one. To receive the bachelor of arts degree or to complete the two-year plan, you are required to have twice the number of grade-points that you have hours of credit. For example, a student on a four-year curriculum, who has earned the minimum 130 hours required for the bachelor's degree, must have at least 260 grade-points before he is permitted to graduate.
- Graduate Study—** Work beyond the bachelor's degree, usually toward a master's or doctor's degree.
- Matriculation—** The act of enrolling for the first time as a student at the college.
- Major—** The subject or field of study which you decide to emphasize. If, for example, you plan to specialize in mathematics, you will be said to "major" in that field. If you choose to specialize in two such subjects you will have a "double major."
- Minor—** The field of your secondary emphasis. The hours devoted to your minor field are somewhat less than those allotted to your major. You may choose one or more minors.

- Prerequisite— The preliminary requirement which must be met before a certain course can be taken. Thus, English I is a "prerequisite" to all other courses in English and must be successfully completed before other English courses are taken.
- Registration— The act of enrolling in classes, usually at the beginning of a semester. This involves choosing your classes with the help of your counselor.
- Required Subjects— Those subjects which are prescribed by the college for the completion of your program. You choose your electives; your required subjects are chosen for you.
- Schedule— A listing of the courses you are taking each semester. Your schedule is your program of studies.
- Undergraduate— A student who has not yet obtained the bachelor's degree.

"Perhaps you think there's no glamour in teaching. Perhaps there's not so much glamour as in the life of the explorer or the soldier or the Hollywood star. But neither is there so much drudgery or mud.

"Teaching isn't all fun, but it is exciting. There's never a dull moment in it, whether it's in the kindergarten or the college class. Life is dull only to dull people. Teaching is a constant challenge. The danger is never that we'll be too big for it, only that we won't be big enough."—JAMES M. SPINNING.

Questions Most Frequently Asked By Prospective Undergraduate Students

1. What does it cost to attend Iowa State Teachers College? The over-all cost for fees, room, board, and books is approximately \$800 for the academic year. The cost of each item is indicated below.
 - a. For the academic year, the college fee is \$80 per semester or \$160 per year. A student who wishes to take applied music (private lessons) is asked to pay a fee of \$15 per semester hour. All fees are subject to change by the State Board of Regents. Two semester hours of applied music are required each semester if the student's major is music.
 - b. For the academic year beginning September 1, 1957, the combined cost of board and room in the college residence halls will vary from \$263 to \$275 per semester, depending on the dormitory in which the student lives: Stadium Hall (freshman men)—\$263; Bartlett Hall (freshman women)—\$270; Lawther Hall (sophomore women)—\$270; Campbell Hall (junior and senior women)—\$275. All students living in college residence halls are required to eat in the college food service department. The charge for board and room is subject to change.
 - c. Ordinarily \$30 per semester should be ample for books and supplies.
2. What are the opportunities for self-support?

A number of part-time jobs are available both on the campus and in the Cedar Falls-Waterloo community. The majority of the on-campus jobs are in the food service. Approximately 35 per cent of the men students and 20 per cent of the women students earn money to defray part of their expenses. Students seeking part-time employment should address their inquiries to the Dean of Students or the Associate Dean of Students.
3. Must a student go to college for four years to be able to teach?

No. Four years of college and a bachelor's degree are required to teach in Iowa high schools, but a student may be certified to teach in an elementary school with only two years of college. The person with four years of college is not only better prepared and able to enter teaching with greater confidence but he finds that he has more job opportunities and ordinarily receives considerably more salary than the teacher with only two years of college.

4. Can a student enroll for the first time during the spring semester or summer session? Yes.

5. What is the difference between quarter and semester hours of credit?

Many colleges operate on the quarter plan, which means that courses continue for about twelve weeks. Nearly as many colleges operate on the semester plan, in which all courses run for about eighteen weeks. Under the quarter plan, a quarter hour of credit is based upon one hour per week for twelve weeks. Under the semester plan a semester hour of credit is based on one hour per week for eighteen weeks. Thus, a quarter hour is equal to two-thirds of a semester hour, or a semester hour is equal to one and one-half quarter hours; 3 quarter hours are equivalent to 2 semester hours; 5 quarter hours are equivalent to 3 1/3 semester hours; 6 quarter hours are equivalent to 4 semester hours; and 9 quarter hours are equivalent to 6 semester hours. Beginning with the summer of 1957, the Iowa State Teachers College will operate on the semester plan and all credits will be given in semester hours.

6. Where may textbooks be secured?

Students are required to provide their own textbooks. Ordinarily the cost of these books will be \$20 or \$25 a semester. The Latta School Supply House, 909 West 23rd Street, located just across from the campus, sells both new and used books.

A correspondence student may order his textbook by mail from the above firm.

7. How many hours of credit are needed to renew or reinstate a certificate?

Renewal and reinstatement requirements are established by the Iowa State Board of Public Instruction and are subject to change by this body at any time. The college assumes no responsibility in determining the amount of credit or the type of work needed for certificate renewal or reinstatement. The Division of Teacher Education and Certification distributes information concerning all changes in certification requirements to city and county superintendents and to the teacher-education institution. Information concerning the renewal or reinstatement requirements may be obtained from:

Department of Public Instruction
Division of Teacher Education and Certification
State Office Building
Des Moines 9, Iowa

8. Are scholarships available? Yes. See page 20.

To Our Future Students

The Iowa State Teachers College realizes that a college catalog is hard to understand and difficult to use. It hopes that this page and those immediately following will help you find the information that you seek.

Steps in Preparing for Admission

1. Application for Admission

Fill in form below and mail to the REGISTRAR.
See page 32.

2. Transcripts

Have your high school principal send a Certificate of High School Credits to the REGISTRAR. If you attended a high school outside of the State of Iowa, write to the REGISTRAR and ask for a certificate blank for your high school principal to use. If you have attended another college, have an official transcript of your college credits sent to the REGISTRAR.

3. Room Reservations

Send room contract and housing card with your application for admission.

1957

IOWA STATE TEACHERS COLLEGE

Cedar Falls, Iowa

Name

C H E C K	{	Mr. <input type="checkbox"/>	Date.....	195.....
		Mrs. <input type="checkbox"/>		
		Miss <input type="checkbox"/>		

Street and No. or RFD.....City.....

County..... State.....

I am considering entering Teachers College () FALL Semester

() SPRING Semester () Summer

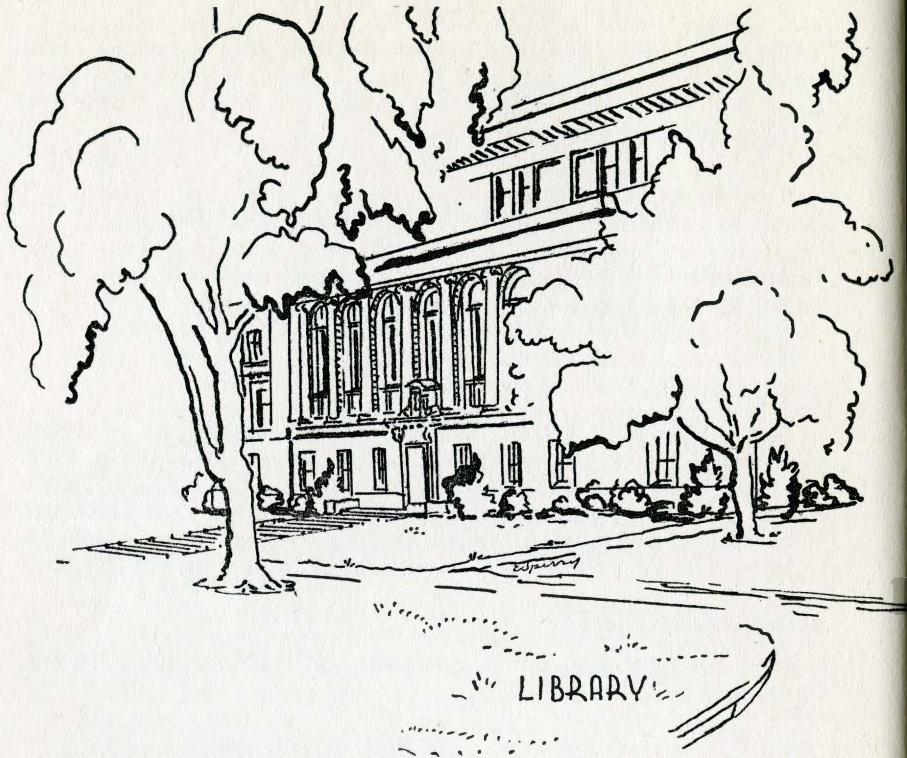
Please send me: An application for admission and Health Record Blank . . . ()

A housing contract ()

A Summer Bulletin ()

A Graduate Bulletin (issued only in even-numbered years) . . . ()

I would like additional information concerning.....



First Class
Permit No. 29
Cedar Falls, Iowa

BUSINESS REPLY CARD

No Postage Required If Mailed in United States

POSTAGE WILL BE PAID BY—
**IOWA STATE TEACHERS COLLEGE
CEDAR FALLS**

IOWA

Office of the Registrar

General Information

Foreword

A leading institution in the field of teacher education, the Iowa State Teachers College is accredited by the North Central Association of Colleges and Secondary Schools and by the National Council for Accreditation of Teacher Education.

Created by act of the Iowa General Assembly, the institution opened on September 6, 1876, in the building now known as Central Hall. This structure had previously housed the orphaned children of Civil War soldiers. From this single building and forty-acre campus, the college has grown until it now embraces more than twenty administrative, instructional, and residential buildings; a 279-acre campus; a faculty of approximately 300; and a student body in excess of 3,000. Originally named the Iowa State Normal School, the institution was renamed the Iowa State Teachers College in 1909.

It is a single-purpose institution for the education of teachers and is the only such college maintained by the State of Iowa. Together with the State University of Iowa and the Iowa State College of Agriculture and Mechanic Arts, the Iowa State Teachers College is governed by the State Board of Regents.

Student Residence

WOMEN—All undergraduate women students who do not live in their own homes with their parents or legal guardians or husbands must live in college residence halls. All special permissions to work for board and room in private homes or to live with relatives other than those named above must be secured from the Associate Dean of Students before registration day.

MEN—All undergraduate men students who do not live in their own homes with their parents or legal guardians or wives must live in one of the residence halls for men or in rooming houses approved by the Dean of Students. Exceptions to this regulation are made only rarely.

APPLICATIONS FOR ROOMS IN RESIDENCE HALLS—The application for a room reservation must be submitted with a contract for accommodations in one of the residence halls. A deposit fee of \$15 must accompany the application. If an applicant for whom a room has been reserved finds it necessary to cancel the contract, the deposit fee is refunded if the cancellation reaches the Office of Student Personnel on or before the dates stated in the contract.

Assignment of rooms is made in the order in which applications are received, except that former students in residence are given precedence in assignment for the following year. Definite assignments for new students are made only after they have been admitted to the college. Notices are mailed before the opening of a semester.

OCCUPANCY—Residence halls will be open for occupancy one day before enrollment day and must be vacated by noon of the day following the close of the semester or summer session. If a reserved room is not occupied on the opening day of classes and arrangements have not been made for later occupancy, the reservation may be cancelled.

RATES AND PAYMENT—Occupants of the residence halls pay a fee which includes both board and room, ranging from \$525 to \$549 for the academic year. The entire fee may be paid on registration day at the beginning of the fall semester or in proportional amounts at the beginning of each semester or summer session. These rates are subject to change.

If the contract is terminated before the expiration date, the plan of refunding as stated in the contract will be applied but the student will not be relieved of any financial liabilities incurred prior to the date of termination.

WOMEN'S RESIDENCE HALLS—The three women's residence halls have been extended beyond normal capacity to accommodate increased student enrollment. All are equipped with such facilities as study rooms, shampoo rooms, pressing rooms, and recreational rooms as well as attractive lounges, music rooms, and libraries. Individual student rooms are furnished with lavatory, comfortable beds and mattresses, pillow, one wool blanket, and draperies as well as dresser or chest, study desk, and chair.

Bartlett Hall—Beginning freshmen and their upperclass student counselors are housed in this hall. Students furnish their own bed linens, towels, and bedspreads.

Lawther Hall—This residence hall houses sophomore women, with one wing reserved for freshman women. Here, also, students furnish linens, towels, and bedspreads.

Campbell Hall—This residence hall, with its own dining facilities, accommodates junior, senior, and transfer women of all classifications. A few graduate women are permitted to live in this hall if there is space. Facilities furnished include telephones and bedspreads. Students furnish own linens and towels.

MEN'S RESIDENCE HALLS—**Seerley-Baker Hall**—The former Homer H. Seerley and the George T. Baker Halls for men have

been joined by the addition of a center wing and will henceforth be known as the Seerley-Baker Hall. This building is fire proof and is equipped with every facility for the comfort and convenience of its residents. Each student is required to furnish bed linens and towels. The hall is divided into nine governmental units known as Houses which are named after the first nine governors of the State of Iowa. The entire organization of 480 men is under the supervision of a director assisted by nine students.

Stadium Hall—This hall consists of 24 rooms constructed under the football stadium. It provides accommodations for 104 freshman men. The hall is divided into two Houses named after governors of the State of Iowa and is supervised by a director and six student assistants. The building is fire proof and is equipped with showers, lounge areas, and study room. Each student furnishes bed linens and towels.

Accredited Rooming Houses. A list of accredited rooming houses for men students will be furnished upon request, after the student has been admitted to the college. In all rooming houses students furnish their bedding and linens. The college is not a party to agreements made between students and landlords, although certain standards are enforced by the college.

Accommodations for Married Students. A limited number of housing facilities for married students are available. Veterans are given preference, but applications from non-veterans will be accepted and assignments will be made (in order of priority of application) to those housing units that remain after the veterans have been accommodated. If interested, write to the office of Student Personnel for details and application blank.

The Commons

The Commons houses recreational facilities as well as the central food service department. Included in these facilities are the ball room, student lounge, faculty lounges, and club rooms. These rooms are completely equipped to carry on the program of social education which is a distinctive part of campus life at Iowa State Teachers College.

Food Service

There is no food service on the campus other than that maintained for regular boarders. All students living in college residence halls are required to eat in the college food service department. The fee for board and room for each semester is payable in the college business office at the time of registration, subject to the conditions stated in the contract.

Employment

Many students earn a part of their expenses while attending college. The Office of Student Personnel will give all possible help to students who need to secure part-time employment. However, until the class schedule has been arranged on registration day and the hours which the student will have available for work are known, definite employment arrangements cannot be made. No fee is charged for this service, but the student is required to maintain the college standards as to health and scholarship. Appointments are made for one semester and must have the approval of the department supervisors for renewal.

A student is cautioned not to attempt much outside work during the first semester of residence. Full time is needed to make adjustment to the new environment, to engage in extracurricular activities, and to attain excellence in scholarship. Fifteen hours a week of outside work is considered the maximum. If outside work in excess of fifteen hours a week must be done, the number of credit hours carried should ordinarily be reduced accordingly. A student should inform his adviser of his outside work since this information will help in arranging a suitable schedule.

Student Loan Funds

Qualified students may secure loans from either the college fund or that provided by the Seerley Foundation. Students interested in the former fund may secure information at the Office of the Dean of Students; the latter is administered by the Director of Field Services, Gilchrist Hall.

Scholarships

Student Aid Scholarships are awarded each year to several hundred young people who desire to teach in the public schools of Iowa; who are legal residents of the state; who possess those qualities of character, personality, and academic ability essential for success in college and in teaching; and who need aid in financing their college education. These four-year scholarships reduce the amount a student pays for tuition and fees (excepting music fees) to \$34 a year.

Explanatory materials and application forms for these awards are mailed to school superintendents or principals in January and the student should file his application not later than March 15. Additional forms may be secured from the Director of Field Services, Iowa State Teachers College.

To aid in determining academic ability, scholarship examinations are sponsored cooperatively by the State University of Iowa, Iowa State College, and Iowa State Teachers College. Early in April these tests are administered in about forty centers in Iowa. Notices of the dates and places where these examinations will be given are mailed to the schools in February. A student who has applied prior to March 15 will ordinarily be notified by May 1 as to the success of his application.

The State Board of Regents has established the number of partial fee exemptions that may be granted in any one year. There is no limitation on the number of awards that may be made to graduates of a particular high school or to students from any county.

Alumni Scholarships are made possible through gifts from alumni of the Iowa State Teachers College to assist promising young people to become teachers; are primarily for entering freshman students; and are awarded for one academic year. Applicants need not be residents of Iowa.

There are two types of awards: the Merit Award and the General Award. The Merit Award is based upon scholarship and personal qualifications, amounts to \$50, and is made without reference to the financial need of the student. The General Award is based upon financial need, interest in teaching, probable success as a student and teacher, participation in extracurricular activities, and the character and personality of the applicant. There are two types of General Awards. One is for \$127; the other, \$180.

Applications for these grants should be made prior to March 15 on the form used for student aid scholarships. In addition, the student must secure the recommendation of an alumnus of Iowa State Teachers College.

Art Fair Scholarships are awarded annually to four high school seniors interested in becoming art teachers. These grants are made primarily on the basis of student work submitted during the Art Fair held each spring on this campus. Their value is the same as that of the Student Aid Scholarships.

Science Fair Scholarships are awarded the four high school seniors exhibiting the best science projects at the Science Fair held each spring on this campus providing that they are interested in becoming teachers. These grants provide partial fee exemptions for four years. The value of and regulations governing these awards are the same as for the Student Aid Scholarships.

The Bartlett-Freeland Debate Award, based on excellence in debate and on scholarship, is granted to a student of sophomore or junior standing who plans to continue actively in debate.

The Brindley Debate Scholarship is made annually to the winners of the Brindley debate tournament. It entitles the recipient to partial exemption from student fees for a period of four years, provided satisfactory scholarship is maintained.

The C. A. Boehmler and Katherine S. Boehmler Memorial Scholarship involves the income from a fund of approximately \$18,000 which is used to aid some needy student of Cedar Falls, Iowa, in pursuing an education.

The Fisher Foundation Scholarships result from a grant by the Fisher Foundation, established by the Fisher Governor Company of Marshalltown, and are awarded to six undergraduate students on the basis of excellence in scholarship, leadership, and promise of becoming superior teachers. Each scholarship provides a sum adequate to cover fees and books for one academic year.

The Alice O. Gordon Bequest is given to a deserving student who is majoring in kindergarten-primary education and who possesses stipulated scholastic excellence. The award is available for only one year for any one student.

The Furniss and Mary W. Lambert Scholarship Fund was established by the children of Furniss and Mary W. Lambert as a memorial to their parents. Its income approximates \$25 for each recipient and is available to a man or woman of the junior class who has shown the greatest all-around development during his college life.

The Latta Scholarships, joint awards offered by Latta's, Inc., and Latta's & Son, are given for two years to a boy or girl who has not been enrolled in any college and who is interested in elementary education. The recipients are selected from the outstanding applicants for Student Aid Scholarships. Beginning in 1956, there will be two Latta scholars on the campus, each receiving \$300 per year.

The Bertha Martin Memorial Scholarships are provided by the Bertha Martin Memorial Foundation which was created in 1930 for the purpose of "perpetuating the ideals and artistic endeavor exemplified by the life and work of Bertha Martin." Sufficient to cover student fees for one academic year, these grants are awarded for the use of two students in either the junior or senior year.

The Merchant Scholarships are made available through the bequest of Dr. Frank I. Merchant and Katherine Matilda Merchant to provide financial assistance to those graduates of Iowa State Teachers College who wish to pursue graduate studies. The award is secured through application to the Merchant Scholarship Com-

mittee, Dr. Henry Van Engen, Chairman, and the amount is ordinarily sufficient to enable the recipient to study at any institution either in this or a foreign country. Applications must be filed by March 1.

The Anna M. Nielsen Music Scholarship is made available through the bequest of Anna M. Nielsen which provides that the income from a \$5,000 fund is to be used "for scholarships to the Iowa State Teachers College for students of said college of Danish extraction and residing in the city of Cedar Falls."

The Ann Moline Organ Scholarship is a gift from Ann Moline to pay the costs of organ lessons for an organ major in the Department of Music at Iowa State Teachers College. The award is made upon recommendation of a special committee to a talented student in need of financial assistance and is for an academic year.

Aids by State or Local Organizations. The State Board for Vocational Education provides assistance to persons of employable age residing in Iowa who have disabilities preventing satisfactory employment without additional education. The college cooperates with the Rehabilitation Division in providing teacher-education for those who are potentially employable as teachers and who otherwise meet the standards of the college.

A considerable number of students at the Iowa State Teachers College have received assistance from such groups as the Farm Bureau, P. E. O., and other business, professional, educational, and social organizations.

The Kindergarten-Primary Award is made possible by contributions of Kindergarten-Primary alumnae of Iowa State Teachers College and is given at the spring commencement to a worthy student on the Lower Elementary Curriculum who has completed her junior year and who has demonstrated leadership in classes and activities.

The Sigma Alpha Iota Scholarship Award is given by the Sigma Alpha Iota Music Fraternity at each spring commencement to the graduating senior who is an active member and "whose average is the highest, based on all work taken in college."

The Theta Alpha Phi Alumni Award is made annually to a sophomore, junior, or senior student who shows marked ability in the field of dramatics and a genuine interest in encouraging dramatic excellence. It is sufficient to cover the cost of tuition and regular fees.

The Purple and Old Gold Awards are offered by the college each year for the purpose of stimulating scholarly attainment and

encouraging conspicuous achievement in certain other lines of student endeavor and are given to graduating seniors at the spring or summer commencement.

The Pi Gamma Mu Award is a gold medal, conferred at the spring commencement upon a social science major for distinction in social science, student activities, and character.

The Phi Mu Alpha Sinfonia Scholastic Award, made by the Beta Nu Chapter of Phi Mu Alpha Sinfonia Fraternity, is presented at the spring commencement to the active member of the chapter who during the previous academic year attained the highest grade-point average. The award consists of a certificate and ten dollars.

The Tau Sigma Delta Award of approximately \$75 per year is given a sophomore girl from funds of Tau Sigma Delta sorority on recommendation of a scholarship committee from the sorority and its sponsors.

Additional information about all scholarships may be secured from the Director of Field Services, Iowa State Teachers College.

Extracurricular Activities

At the Iowa State Teachers College extracurricular activities are planned and fostered because of the significant contribution they can make to the education of the student. Experience in extracurricular activities not only aids materially in achieving the objectives of general education but, since all teachers are expected to aid in the extracurricular program of the public schools, there is considerable professional value in participating in such activities. This college, therefore, maintains an extensive program of extracurricular activities including athletics, dramatics, forensics, music, social life, lecture-concert series, student organizations, and interest groups. Faculty advisers help the individual student to plan a program of extracurricular activities that will supplement the curricular program so that each student may make maximum use of the opportunities the college has to offer.

Athletics—A wide variety of intramural and intercollegiate sports is available at the Iowa State Teachers College. Women students do not compete in intercollegiate sports but for both men and women extensive programs of intramural sports are conducted.

This college engages in intercollegiate athletic competition in football, basketball, baseball, track, wrestling, tennis, and golf.

Intercollegiate athletics are under the control of the Athletic Board, an eight-member faculty committee appointed by the president. For the non-participant in intercollegiate sports, it provides recreational value. For the participant, it provides general educational value and constitutes a laboratory for the preparation of future high school athletic coaches.

Dramatics—At least three college plays, sponsored by the Department of Languages, Speech, and Literature, are produced each year. Any student is eligible to try out for a part in these productions.

Forensics—The forensics program includes debate, discussion, and extemporaneous speaking. Participants engage in several meets with representatives of other colleges. This program is sponsored by the Department of Languages, Speech, and Literature and it welcomes participation of all students.

Music—Musical activities include the marching band, the concert band, the symphony orchestra, various instrumental ensembles, the a cappella choir, the chorus, the women's chorus, the madrigal singers, and an annual opera. Although these activities are sponsored by the Department of Music, any student may be eligible for participation.

Social Life—The social life at Iowa State Teachers College is an everchanging, flexible program designed to meet the current interests and needs of the student body and the college community. Although there are some traditional events, each year new activities are added. The opportunities for social education are offered in many forms, including teas, dances, community service projects, a talent bureau, all-college play nights, student-faculty mixers, and fashion shows. Many of these activities take place in the Commons, which is the center of campus social life. The Social Life Committee, a sub-committee of the Student League Board, is responsible for the development of this program.

Student Government—Almost every student participates to some extent in student government. The student government associations include the Student League Board, the Associated Women Students, the Men's Union, and the various associations of housing units.

The Student League Board—This is an administrative group composed of representatives from the student governmental groups and approved chairmen of standing committees. The president and vice-president are elected from the student body at large. The Student League Board endeavors to promote cooperation between students and faculty, to seek solutions to student and college

problems, and to represent the entire student body in matters affecting student interest. It carries on a program of work which gives students an opportunity to participate in the life of the college in such a way as to make it an experience in democratic living. The Student League Board sponsors the selection of outstanding seniors for the Purple Key honor awards.

The Associated Women Students is an organization consisting of all women students enrolled at Iowa State Teachers College. It provides the self-governing structure for women students and makes provision for the social, recreational, and educational aspects of student life.

In order to provide greater representation and participation for its membership, AWS recently re-vamped its basic structure. The AWS Community Council, together with the Inter-Residence Council and the Housing Unit Governments, carry out the program for women. This association encourages scholarship and service through the three women's honorary societies: Torch and Tassel, local honorary for senior women; Chimes, national honorary for junior women; and Purple Arrow, local honorary for sophomore women. The Associated Women Students of Iowa State Teachers College is a member of the Intercollegiate Association of Women Students, national organization for college women.

There are five women's housing units which are organizations of all the students living in the women's residence halls and a combined unit for those living in Cedar Falls and Waterloo. Each unit is represented on the AWS Boards and on the Student League Board.

The Men's Union—An organization of all men regularly enrolled in college, the Men's Union tries to assist the students in a continuing adjustment to college responsibilities and to emphasize the importance of social development in the preparation of prospective teachers. The attainment of these objectives is sought through coordinated group participation in the solution of problems common to the men students of this college. Men's Union sponsors two programs for recognizing outstanding men students: the Hall of Recognition honor award to freshmen, sophomores, and juniors for achievement in extracurricular activities and scholarship, and the Hall of Scholarship for all men for superior achievement in scholastic endeavor.

There are four men's housing units in the student government structure. The men living in the residence halls are organized under the Association of Men's Residence Halls whereas the men living off campus are organized separately according to their living areas: Sunset Village, Cedar Falls, and Waterloo. Each unit has its own council and each strives to improve the welfare of

its membership in relation to the total college community. Representatives from the various councils are members of the Student League Board and of the executive committee of Men's Union.

Interest Organizations—Numerous organizations sponsored by departments and specialized interest groups provide students the opportunity to become better acquainted with other students and faculty as well as to explore and perpetuate interests outside the classroom. Many of the organizations have no membership requirements other than an active interest in the work for which the club exists and regular attendance at the meetings. Participation in such organizations broadens the individual and helps him to become acquainted with new ideas.

Religious Organizations—The on-campus organization is the Student Council of Religious Activities which provides a program and a fellowship that is open to every student in the college. The adviser to this organization is the Director of the Bureau of Religious Activities. The Council of Religious Activities is composed of a representative from each of the religious groups most of which maintain student centers near the campus.

Honor Organizations—Superior achievement in various lines of educational work is recognized by membership in the following honor organizations: Alpha Phi Gamma (Journalism), Beta Beta Beta (Biology), Delta Sigma Rho (Debate), Epsilon Pi Tau (Industrial Arts), Gamma Theta Upsilon (Geography), "T" Club (Men's Physical Education), Chimes (Junior Women), Kappa Pi (Art), Kappa Delta Pi (Education), Kappa Mu Epsilon (Mathematics), Lambda Delta Lambda (Chemistry and Physics), Phi Mu Alpha Sinfonia and Sigma Alpha Iota (Music fraternities for men and women respectively), Pi Gamma Mu (Social Science), Pi Omega Pi (Business Education), Purple Arrow (local scholastic honor group for first- and second-year women), Sigma Alpha Eta (Speech Correction), Social Science Honors Society, Theta Alpha Phi (Drama), Theta Theta Epsilon (Home Economics), Torch and Tassel (local honor group for senior women).

Social Organizations—There are nine local sororities and four fraternities on the campus, three of the latter having national affiliations. The purpose of these organizations is to create a desire in their members to become useful citizens of the college community and to strive for the social and personal development of their members.

Each organization is sponsored by a member of the faculty. The activities of the sororities are coordinated through the Intersorority Council; those of the fraternities, through the Interfraternity Council.

Station KYTC—A campus-carrier radio station which enables all students in the residence halls to hear college news, announcements, and student programs is located in the Annex north of the Vocational Building. Station KYTC ("Know Your Teachers College") is operated by students under the general supervision of the Board of Control of the Student Broadcasting Association.

The Station is on the air for a total of 75 hours per week, and the staff includes more than 100 students.

Student Publishing Association—The Student Publishing Association is governed by the Board of Control of Student Publications consisting of five students and four members of the faculty. The *College Eye*, weekly newspaper, and the *Old Gold*, student annual, are edited by students under the supervision of the Director of the Office of College Relations and the Board of Control of Student Publications.

Lecture-Concert—Each year the college brings a number of nationally famous musicians and lecturers to the campus to appear on the lecture-concert series. A student-faculty committee determines the program for each year and attempts to arrange a variety of performances. In planning the program this committee keeps in mind the interests of the students and their general education needs. Students obtain season tickets for the lecture-concert series at a greatly reduced price.

Special Services

Orientation and Counseling—Special orientation programs are provided for all new undergraduate students. In the days preceding the opening of the fall semester, upper-class students serve as guides for campus tours which are intended to help new students familiarize themselves with college procedures.

Entering students are administered a series of tests designed to measure ability in reading, mechanics of English, mathematics, and physical science. The test results are used to (1) excuse students from certain general education courses, (2) help advisers and counselors assist the student in planning his academic schedule and future vocational choice, and (3) assist instructors in meeting the individual needs of students.

In addition to their regular orientation tests, students may take a series of special aptitude and interest examinations to provide further assistance in selecting a suitable major or vocation. Counseling services, including specialized testing, are available to students who have problems of a personal nature.

Placement Bureau. Professional placement is an integral part of the teacher education program at Iowa State Teachers College. The primary function of the College Placement Bureau is to assist graduates and former resident students in obtaining an educational position. Consultative services are provided as an aid to students and former graduates who are seeking initial positions or opportunities for professional advancement.

Registration with the College Placement Bureau is a faculty requirement for graduation. There is no fee assessed either for initial or subsequent registration.

Student Health Service. The Student Health Service affords educational and preventive care to the student body and does not compete with private medical services. It usually administers to acute conditions only and students with chronic ailments or conditions for which expensive, prolonged, or special treatment is indicated will be referred to private physicians.

The Health Service maintains a well-qualified staff of physicians available to all students between 8:00 a.m. and 5:00 p.m. Monday through Friday, although emergency medical care is available 24 hours daily.

All students entering the college are required to present a health record prepared by their family physician; to be tested for immunity to smallpox; and to be given the Mantoux Tuberculin skin test once a year. Students entering the college for the first time may have the Mantoux test given by the home physician and have the results recorded on their required medical examination forms.

The Health Service does not undertake major surgery and offers no dental service of any kind.

Conferences, Workshops, and Exhibits. Throughout the year series of conferences and workshops are held. Nationally known leaders in the various fields of teacher education are brought to the campus for these events and many teachers and school administrators are invited to participate. College credit may be earned in some of the workshops that are conducted during the summer session.

Exhibits of art and instructional materials are held periodically. Certain departments of the college sponsor special days for high school students with particular interests.

The Curriculum Laboratory contains two major areas: printed curriculum materials and audio-visual materials. The Curriculum Materials Center has available courses of study, educational bulletins, textbooks, educational tests, and many other kinds of

instructional materials. The Audio-Visual Center contains films, film-strips, recordings, and all the types of audio-visual equipment that might be found in the typical school situation.

All instructional materials housed in the Curriculum Laboratory are available for study and use by the students, faculty, and teachers throughout the state. Facilities for study, group conferences, previewing of audio-visual materials, and practice in use of equipment are available during the entire day.

Iowa Teachers Conservation Camp. Iowa State Teachers College in collaboration with the State Department of Public Instruction and the State Conservation Commission conducts a field laboratory in conservation each summer for teachers at Springbrook State Park, Guthrie Center, Iowa.

Sessions are three weeks in length during each of which three hours of college credit can be earned. Field and laboratory work is given in conservation of soils, water, forests, and wild life. Emphasis is placed upon the adaptation of materials for teaching.

Students and instructors live in cabins in the park and meals are furnished at the Camp Dining Hall. Further information may be secured by writing to the Science Department, Iowa State Teachers College, Cedar Falls, Iowa.

Iowa Lakeside Laboratory. The three institutions, Iowa State Teachers College, State University of Iowa, and Iowa State College, jointly maintain a field laboratory station on Lake Okoboji. A scientific advisory board made up of a representative from each of the three state institutions has charge of the program. Unusual opportunities for field biological studies are available for students and teachers of biology, botany, and zoology. A variety of courses open to undergraduates and graduates is offered during the summer in two sessions of five weeks each. The Lakeside Laboratory Bulletin, available about March 1, lists the courses to be offered the following summer. Registration is made through the Registrar's office at the Iowa State Teachers College upon approval of the Head of the Department of Science.

Radio Education. Through a program of radio and television education the Iowa State Teachers College provides the schools of Iowa with significant services. Programs originating in the studios are carried by telephone lines to Ames and Iowa City for broadcast over stations WOI and WSUI and are heard in school-rooms throughout the state. Requests for manuals and study guides used in connection with the daily broadcasts indicate a weekly audience of approximately 30,000 children in rural and urban schools. This educational service has been maintained

without interruption since 1942. Through the cooperation of WOI-TV in Ames, weekly television programs have been prepared on sound film since 1950 and a series of regularly scheduled TV appearances by college personnel in the WOI-TV studios was inaugurated in 1952.

Saturday and Evening Classes. As a service to teachers in the vicinity of Cedar Falls, the college offers a program of Saturday and evening classes. While some of these classes are for graduate students, others are open to undergraduate students. Information concerning evening and Saturday classes may be secured by writing to the Registrar.

College Policies

I. Admission Procedures

A. Applying for Admission and Health Record

Every applicant must make formal application for admission and submit a health record signed by a physician. A card to be used in requesting blanks for application and health record appears on page 10 of this bulletin.

B. Submitting High School Record

Every applicant must have his high school principal or school superintendent send to the Registrar a certificate of high school credits. A certificate should be furnished from each high school attended unless the high school from which the student was graduated furnishes a complete listing of all high school credits. The date of graduation must be noted on the certificate. These certificates should be mailed several weeks before the time of enrollment. The high school principal or the superintendent will ordinarily have the blanks for this certification; but out-of-state students may need to secure the proper form by writing the Registrar of this college.

C. Submitting Transcripts of College Records

In addition to the above, a student who has attended other colleges must have sent to the Registrar a transcript of his record at each college attended. These should be mailed to the Registrar a month or more before the time of enrollment since all such records are required before an admission card can be issued.

College credit earned at other approved colleges is accepted and entered on record here. It is used in meeting the requirements for graduation **in so far as it applies to the curriculum selected by the student.** For an explanation of the college policy in regard to curriculum adjustment for transfer students, see pages 57 and 58.

D. Deadline for filing Applications for Admission

Applicants for admission must submit the required application for admission and the necessary official transcripts to the Registrar at least ten days prior to the beginning of orientation for the session for which the student is applying. Applications for admission from students who are required to take entrance examinations will not be considered unless the examinations can be completed at least

five days before the beginning of orientation. This regulation may be waived by the Registrar only for adequate reasons.

II. Admission Policies for Undergraduate Students

As a professional school for the education of teachers, the Iowa State Teachers College recognizes an obligation to prospective students, to the public schools, and to the state to consider carefully each applicant for admission. The college recognizes that scholarship, health, character, personality, and potential leadership qualities are all essential factors in the development of a good teacher and all these factors are considered by the Admissions Committee in determining an applicant's fitness for admission.

Students are, of course, encouraged to visit the campus prior to admission to discuss their prospective college program. If sufficient evidence is not available for the Admissions Committee to make a decision in a specific case, an applicant may be invited to come to the campus for an interview or additional information may be requested. It may be necessary for the college to deny admission to an individual who does not give reasonable promise as a college student and as a prospective teacher.

Each candidate for admission will fall into one of the following categories:

- A. **Graduate of approved high school**—A graduate of an approved high school who meets the requirements of health, personality, character, and potential leadership will be admitted if it appears from his certificate of high school credits, scores on standardized tests, and other pertinent information that he is competent to do college work.
- B. **Graduate of unapproved high school**—A graduate of an unapproved high school will be admitted if he meets the requirements of health, personality, character, and potential leadership qualities and if he demonstrates competence to do college work by satisfactory scores on standardized tests administered by the college and is recommended as a good prospective teacher by the appropriate school officials.
- C. **Applicants who are not high school graduates**—An applicant who is not a high school graduate may be admitted if he meets the requirements of health, personality, character, and potential leadership qualities and if he demonstrates, through standardized tests and statements of

school officials or faculty members of this college, his competence to do college work. This provision is made in recognition of the fact that the background which is essential to pursue satisfactory study at the college level may be acquired independently as well as by the usual and generally more satisfactory method of attending high school. Occasionally, a student with unusual ability, who is physically, mentally, and socially more mature than the typical high school student, may find that his educational needs will be more satisfactorily met in college than in high school. Such a student must be at least seventeen years of age.

- D. **Transfer students from other colleges**—An applicant who has taken work at another accredited college who meets the requirements of health, personality, character, and potential leadership qualities will be admitted if he has an average or better-than-average scholarship record in the college previously attended. In exceptional cases a student with a below-average record in another college may be admitted on probation if it is demonstrated that an improved quality of work may be expected in the future.
- E. **Special cases**—Under special circumstances students with interests and aptitudes which do not conform to the admission policies of the college may be admitted as special students at the discretion of the admissions officer. Evidence of adequate educational background must be presented.

III. Admission Policies for Graduate Students

A graduate of a college or university accredited by the National Council for Accreditation of Teacher Education or by the North Central Association of Colleges and Secondary Schools or a corresponding regional agency will be granted admission to graduate study if his application for admission has been approved by the Registrar. A graduate of a college or university that is not accredited may, in certain cases, be granted conditional admission. For a more detailed description of the policies and procedures of admission to graduate study see pages 122 and 123 of this bulletin.

Preparation for College

For admission to Iowa State Teachers College one does not need to have chosen a particular course in high school. However, it is expected that the student seeking admission should have:

1. Completed a balanced program of studies designed to insure a well-rounded background of knowledge in basic fields;
2. Developed proficiency in reading, writing and speaking English;
3. Acquired proficiency in basic mathematical skills;
4. Developed effective study skills and work habits;
5. Developed adequate intellectual, physical, and social maturity;
6. Developed a sincere interest in further formal education.

It is realized that a student may attain the above attributes in many different ways. However, the following suggestions may be helpful to a prospective college student in planning his high school program.

1. English. Since the ability to write clearly and to read with understanding and appreciation is essential, it is highly desirable that the student complete three or four units in English.*

2. Mathematics. Not only as a tool to further learning but as basic education, mathematics has much to offer. Two years of such study would be profitable. A student planning to specialize in the sciences should complete two and one-half or three units in mathematics in high school.

3. Social Studies. Social studies, such as history, civics, government, economics, sociology, and geography, are basic to the understanding and solution of contemporary problems in the community, in the nation, and in the world. From two to four units may well be devoted to this area by the prospective college student.

4. The Sciences. This field is rich in possibilities for understanding the world. Two units in science might well be completed. For one who plans to emphasize science in college, three units would be helpful.

5. Foreign Languages. Foreign languages, both modern and classical, will form a good background for college work.

6. The Fine Arts. This field offers opportunity for development which can contribute much toward individual growth.

7. Other Subjects. None of the foregoing statements should be interpreted as meaning that any other subjects, such as agriculture, business subjects, home economics, industrial arts, and speech should be avoided by the student who is planning to attend college. These subjects, when properly studied, contribute materially to the education of the individual and prepare him for continued study as well as for the activities of living.

Enrollment and Registration

Organization by Semesters—Beginning with the summer of 1957, the college will operate on the semester basis. This means that the work during the academic year will be divided into two semesters of approximately eighteen weeks each.

*A semester "credit" equals one-half "unit."

Summer Session—The summer session of 1957 will be eight weeks long with a post-session of two weeks.

College Office Hours—During June, July, and August the college administrative offices are open from 7:30 a.m. to 4:30 p.m. on Mondays to Fridays inclusive. During the other months the offices are open from 7:50 a.m. to 4:50 p.m. on Mondays through Fridays.

Students and their parents are invited to come to the campus to make arrangements for college entrance. Such visits should be made on **Mondays through Fridays only**, since all college offices are closed on Saturday and Sunday.

Enrollment Days—Dates of enrollment are given on page 7. A fee of \$5 is charged for late enrollment. The opening days of the fall semester are set aside for the orientation of students enrolling at this college for the first time. All such students, whether freshmen or upper classmen, should be present at 8:00 a.m. on Monday, September 9. Students who have previously been enrolled at this college will enroll and register on Wednesday, September 11. On the first day of the fall semester, the spring semester, and the summer session all students enroll and register if they have not registered during the advance registration period. A new student may enroll on the designated registration day at the start of any semester. An undergraduate who has not previously been enrolled in this college is not permitted to register at a time of advance registration.

Specific directions on the steps of enrollment and registration are furnished each student when he reports to the college. Each student is assigned to a faculty counselor who will advise him in the registration process and other matters throughout the freshman year. At the end of the freshman year, each student is assigned to a faculty adviser in the particular area in which he wishes to specialize.

Physical Examination—Each student enrolling for the first time or after an absence from school for two or more consecutive semesters is required to have a physical examination by a college physician. This examination is made by appointment during the first semester of enrollment at a time designated by the Health Director. Subsequent examinations are made as indicated by the student's health record or at the student's request. Health examination before graduation is recommended.

Undergraduate Student Fees—All fees are assessed by the office of the Registrar and paid at the office of the Business Manager. Student fees are \$80 per semester. Those who are permitted to enroll for less than 9 hours may pay at the rate of \$9 per semester hour, with a minimum fee of \$27.00. The fee for late enroll-

ment is \$5. The fee for persons enrolled as visitors is \$4 per week. Student fees, dormitory room rent, board, and music fees are payable at the time of enrollment. All fees are subject to change by the State Board of Regents. Other fees are indicated below.

If a student withdraws from the college the student fee is refunded as follows: If the student has been in attendance 1 to 3 days, 100 per cent of the fee is refunded; 4 to 7 days, 90 per cent; 8 to 15 days, 80 per cent; 16 to 22 days, 70 per cent; 23 to 30 days, 60 per cent; 31 to 37 days, 50 per cent; 38 to 45 days, 40 per cent. If a student is in attendance nine weeks or more there is no refund.

During the summer session, a student who has been in attendance 2 days or less is allowed a 100 per cent refund. If the student has been in attendance 3 or 4 days, the refund is 90 per cent; 5 to 8 days, 80 per cent; 9 or 10 days, 70 per cent; 11 to 14 days, 60 per cent; 15 to 17 days, 50 per cent; 18 to 20 days, 40 per cent. If a student is in attendance four weeks or more, there is no refund.

Music Fees—Students enrolled in the college pay a fee of \$15 per semester for one thirty-minute lesson each week. The fee for one thirty-minute lesson per week for one semester for sub-collegiate students is \$22.50. The fee for one thirty-minute lesson per week for one semester for adults who are not students in this college is \$30. Rent for auditorium organ or studio organ is \$4.50 a semester. No rental charge is made for other practice studios or instruments. Practice pianos are available for music students.

Miscellaneous Fees—A fee of \$3 per credit hour is charged in any case in which a student is permitted to earn credit by examination.

A fee of \$1 is charged for transcript of a student's record except that one transcript is furnished without cost upon graduation from a curriculum.

Locker Fees—Corridor lockers are rented to students at \$1 a year. Each student furnishes his own padlock.

Medical Service and Hospital Fees—Medical advice and treatment are provided students by the Health Director and his assistants without additional cost since a portion of the student fee is set aside for the purpose of defraying the expenses of this service. The Health Director or his assistant may be consulted in the offices of the Health Director at stated hours. In case of emergencies the services of the Health Director or of an assistant are available at other hours. Every case of illness should be reported

promptly to the Dean of Students or the Associate Dean of Students. If no physician is in charge of the case, the head nurse will visit the student and give advice.

The college maintains a hospital for the benefit of its students. No specific hospital charge is made to a student for the first seven days in the hospital in any semester. After seven days the charge is \$2 a day. The fee for a private nurse is paid by the patient. Any regularly authorized physician may be employed at the patient's expense.

Change of Registration Fee—A charge of \$1.00 is made for a change of registration unless such a change is requested by the appropriate college officials.

Academic Program—The registration of every student is subject to the approval of his counselor.

The regular work of an undergraduate student for the fall or spring semesters consists of 16 or 17 hours.

An undergraduate student may not register for less than 10 hours without special permission from the Dean of Instruction.

During the academic year an undergraduate student who has a cumulative grade index of at least 2.5 may register for a maximum of 18 hours. An undergraduate student who has a grade index of at least 3.0 may register for a maximum of 20 hours. No student may be enrolled for more than 20 hours. Teachers in service may not register for more than 3 hours of academic work during either semester.

The regular work of an undergraduate student for the eight-week summer session is 8 hours.

For each hour of credit for which a student is enrolled, he may expect to devote three hours a week in class or study.

Classification of Students—For purposes of classification, a student who has less than 32 semester hours of credit is considered to be a freshman, and one who has from 32 to 63 hours is classified as a sophomore. A student who has earned from 64 to 95 hours is classified as a junior, and one who has 96 or more hours is classified as a senior.

Veterans—Veterans may be excused from the required activity courses in physical education upon filing a copy of a DD214 form with the Registrar.

College credit may be assigned for certain types of specialized training. A maximum of 8 semester hours of credit for basic

military training may be assigned but not in addition to credit for specialized training.

Absences and the Making up of Work—Work lost by late enrollment may not be made up for credit except with the consent of the Dean of Instruction.

Work lost by change of registration after the first three days of classes in any semester may not be made up for credit without the consent of the Dean of Instruction unless the change was due to a notification of error in registration.

To receive credit for the work a student is required to be in attendance for the full semester. Exceptions to this rule are rarely made.

Courses dropped more than six weeks after the opening of a semester are indicated on the student's record by WF (withdrawn failing) or WP (withdrawn passing).

Work left incomplete at the end of a semester or summer session will be reported as a Failure unless permission is obtained from the Dean of Instruction to have it reported as Unfinished. If a course is reported as Unfinished, this does not prevent the student from registering for another course for which the unfinished course is prerequisite. Work reported as Unfinished may not be completed after the expiration of six months from the time at which the report was made. If the work reported as Unfinished is not made up within six months, it is automatically entered as a Failure on the student's record.

Undergraduate students are expected to attend all classes for which they are scheduled unless prevented by illness or other valid reason. Lost work amounting to more than one-fifth of the course may not be made up for credit.

Marks and Grade Points

The marks A, B, C, D, F (Failed), and U (Unfinished) are used in indicating quality of work. Courses dropped more than six weeks after the opening of a semester are indicated WF (withdrawn failing) or WP (withdrawn passing).

Grade points are awarded as follows: For each hour of credit work marked A, 4 grade points; B, 3 grade points; C, 2 grade points; D, 1 grade point; F, 0 grade points.

At the end of each semester or summer session the faculty Committee on Professional Screening examines the record of each student whose grade index is below 2.00. The committee also re-

views the records of those students admitted on probation and of those who have been referred to the committee by a member of the faculty. While each student's record is examined individually, the committee is usually governed by the following rules:

Freshmen whose grade-point average is less than 1.50 will ordinarily be placed on probation. Those with a grade-point average below 2.00 but above 1.50 are warned. Normally freshmen are not suspended during an academic year, but they may be if the situation seems to warrant such action.

Sophomores whose grade-point average falls below 1.75 at Iowa State Teachers College are usually placed on probation. Those whose grade-point average falls below 2.00 but above 1.75 are warned.

Juniors and seniors are usually placed on probation when the grade-point average falls below 2.00.

Students who due to failures or the dropping of courses have not reached the classification they should according to the length of time they have been enrolled may be considered for suspension on the basis of the classification they should have earned, had they passed normal schedules.

Any student is suspended at the end of a semester or summer session in which he does not pass at least half the work for which he originally enrolled.

Suspensions are for either definite or indefinite periods of time. Students who have been suspended for a definite period may return at the end of the period stated without further permission. Students who have been suspended for an indefinite period may be re-admitted only after appealing in writing to the Committee on Professional Screening. Readmissions are seldom granted before the end of a six-months period. The Committee will need assurance that a better quality of work can be expected. Students returning after suspension are on probation until satisfactory progress is shown. If there is no such progress, the suspension becomes permanent.

Transfer students who are admitted on probation must earn a 2.00 grade-point average for the period specified at the time of admission.

While scholarship gives the Committee on Professional Screening its greatest concern, it is specifically instructed by the faculty to consider the suitability of candidates for the teaching profession. Hence, the committee must also consider health, speech, hearing, morals, attitudes, and personality. The committee hopes by counseling and encouragement to help each student prepare

for a successful career in teaching. Yet it must be recognized that some students have neither the ability nor the characteristics essential for teaching. Others begin work in areas for which they are not suited. The committee seeks to help such students find the avenues most appropriate to their strengths.

Independent Study

Senior students of outstanding ability and achievement may be permitted to earn not more than six semester hours of credit by independent study.

This method of study follows the pattern of an investigation undertaken by a graduate student, although in miniature form. It involves independent thinking, the drawing of conclusions, the summarizing of evidence, or creative work. Whenever possible, the result of the investigation is summarized in a scholarly paper or report, prepared and documented in approved fashion.

Independent study should not involve work available through regular college courses; neither should it be confused with individual instruction, or the tutorial method. Individual instruction is provided on rare occasions for instruction in a college course not currently being offered.

Application for independent study should be made to the head of the department in which the student is pursuing a major during the last semester of the junior year and not later than the middle of the first semester of the student's senior year. The student's program of independent study will be under the immediate supervision of one or more faculty members and under the general supervision of the Dean of Instruction.

Workshops and Field Study

From time to time and especially during the summer session opportunities are offered for earning credit under the workshop plan. During the summer of 1956 there were five such workshops on the campus.

Occasionally departments of the college may arrange extensive field trips for credit. These trips are open to graduate and undergraduate students. Plans for this type of study and the number of hours of credit which may be earned are announced through college publications.

During recent summers, three field studies were conducted by departments of the college. The Social Science Department spon-

sored a study tour of Southwestern U. S. and a seminar at Ashridge College in England. The Department of Science directed a field study of part of western United States.

General Requirements

Listing of Candidates for graduation—A student may be listed as a candidate for graduation at the end of a semester if the completion of the work for which he is registered would meet all the requirements for graduation exclusive of grade points, and if the grade points to be earned do not exceed the number which could be earned for the hours for which he is registered.

Scholarship Requirements—To be recommended for graduation or to be certified as having completed the two-year plan a student must earn two times as many grade points as hours attempted in residence and by extension work at this institution. If part of the credits were earned at another college with an average scholarship mark which is below C, the scholastic average here must be sufficiently high to insure an average scholarship mark of not less than C in all college work attempted.

If a student has failed to be recommended for graduation or has failed to have been certified as having completed the two-year plan because of his scholastic average, the deficiency may be removed only by work taken in residence.

A student who expects to be graduated or to complete the two-year plan at the end of a semester should make written application at the opening of the semester. This application is filed in the office of the Registrar.

Other Specific Requirements for Graduation—See pages 58 to 61.

Teaching Certificates

Teaching certificates are issued by state departments of public instruction and are valid only in the state of issue. Recommendation that a certificate be issued is required.

To be graduated from the Iowa State Teachers College, one must meet requirements for an Iowa teaching certificate.

Graduates of this college can usually secure appropriate certificates in states other than Iowa by making proper application. Holders of Iowa certificates based upon less than four years of college preparation can secure certificates in some other states.

At present the following Iowa certificates are issued:

Type	Preparation	Duration	Kind of Service Authorized*
Permanent Professional	Bachelor's degree plus 30 semester hours post-baccalaureate credit 4 years experience	Life	As endorsed
Professional	Bachelor's degree	10 years	As endorsed
Professional-Commitment	Bachelor's degree 8 semester hours professional credit	1 year	As endorsed
	2 to 4 years 8 semester hours professional credit	1 year	Elementary teaching only
Pre-Professional**	2 years of specified credit	6 years	Elementary teaching only
Substitute	Certificate subject to renewal	6 years	As endorsed
Temporary (non-renewable)	Iowa certificate subject to renewal	1 year	As endorsed
Temporary (renewable)	50 semester hours including 8 in professional education	1 year	Elementary teaching only

*All certificates carry endorsements to indicate the kind of service licensed; e.g., elementary teaching, secondary teaching, special music teaching, elementary principal.

**It is assumed that this certificate will not long be available to new teachers.

In addition to holding a certificate valid for the level of teaching being done, the teachers must meet certain **approval standards** for teaching a subject, usually 15 or more semester hours of credit in the general area with some credit in the specific subject.

This college may recommend for certification those graduates of other colleges who have completed their professional work here, but this is a discretionary matter and the college will expect such students to demonstrate excellence of scholarship and meet standards of health, conduct and personality required of its own graduates. Such students must have been in residence at least 22 weeks and earned at least 20 hours of residence credit.

The Registrar will be pleased to answer specific questions concerning certification.

Curricula

The primary purpose of the Iowa State Teachers College is to prepare its students as thoroughly as time permits for teaching and for other positions of responsibility in the public schools of Iowa. At the center of the college program is the curriculum. The college believes that adequate teacher preparation requires a course of study which includes general education, professional education, and at least one area of specialization.

Through its program of general education the college helps the student understand himself and the society in which he lives so that he may participate more fully and effectively as a citizen in a democracy. He is led to an understanding of present day problems, he explores the world of his physical environment through the avenues of science, and he is confronted with great achievements in his cultural heritage. The student is encouraged to develop his ability to grasp the ideas of others, to express himself effectively, orally and in writing. Finally, instruction in the maintenance and improvement of his health completes the basic program.

The second major division of the college program in preparing teachers is professional education. This work seeks to enhance the student's interest in teaching, to instill loyalty as a profession, and to encourage the desire for continuous professional growth. He learns the skills, techniques, and understandings necessary to good teaching. He studies the recent knowledge concerning the growth of the child, physically and mentally, the ways children learn, and the guidance of that learning to its fullest potentialities in each child. The student explores the mutual relationships and responsibilities of the school, community and the teacher.

He spends a significant portion of his time in the area of learning in which he chooses to concentrate. His mastery of the subject matter of this area, its closely related fields, and the skills to present it effectively are essential aspects of successful teaching.

To give the student the training just described, the Iowa State Teachers College has the Graduate Curricula and the Undergraduate Curricula.

- I—**The Graduate Curricula.** These lead to the Master of Arts in Education degree, which has a minimum requirement of 30 semester hours of credit. On the master's de-

gree curricula, students are prepared for the following areas:

- 1—School Administration and Supervision, with emphasis in
 - a—Elementary Principalship
 - b—Elementary Supervision
 - c—Secondary Principalship
 - d—Superintendency
- 2—Elementary School Teachers
- 3—Guidance and Counseling
- 4—Secondary school and special teachers of art, business education, English, industrial arts, mathematics, music, science, social science, and speech.

For a description of the graduate curricula see pages 129 to 134. Those who are interested in graduate study should write to the Registrar for the **Graduate Study Bulletin** and the necessary blanks for application.

II—Undergraduate Curricula. These lead to the Bachelor of Arts degree, the minimum requirement for which is 130 semester hours of credit. On the degree curricula, students are prepared for the following areas:

- 1—Secondary teachers of art, business education, earth science, English, foreign languages, home economics and vocational home economics, industrial arts, mathematics, music, physical education, science, social science, speech, and school librarians.
- 2—Special teachers of art, industrial arts, music, physical education, speech correction; and school librarians.
- 3—Elementary teachers for nursery school, kindergarten, lower grades, and upper grades; and school librarians.
- 4—Junior high school education in all usual areas of instruction.

For a description of the undergraduate curricula see pages 63 to 121.

III—Two-Year Plan. A student interested in teaching after only two years of college enrolls on an undergraduate curriculum for either the **lower** grades or the **upper** grades of the elementary school and indicates his intentions of following the two-year plan.

IV—**Courses For Students Not Planning To Teach.** The primary obligation of the college is to prepare students for the teaching profession. However, it welcomes other students who are interested in completing one or more years of work before transferring to other colleges which offer the full professional or liberal arts program which they desire. In some pre-professional areas not more than one year of work is available at the Iowa State Teachers College.

While the college does not prescribe set patterns of courses for vocations other than teaching, it does make possible, through its counseling program, schedules of classes for students in other professions and occupations. To help students arrange their work, suggested programs have been prepared for those planning to transfer into Law, Medicine, Dentistry, and Engineering. These may be requested in advance from the Registrar.

A student who expects to transfer to another institution to prepare for some vocation other than teaching, declares his special interest at the time of admission. He is assigned to an adviser who is familiar with the type of program which he seeks. Before seeing his adviser for the first time, the student should secure a copy of the catalog of the college to which he wishes to transfer, and know its requirements thoroughly. If he remains more than one year at Teachers College, he must clear his program with the Coordinator of Counseling at the beginning of the sophomore year.

The General Education program at Iowa State Teachers College, combined with a foreign language, is an excellent beginning on a liberal arts program.

If a student decides to enter the teaching profession after attending Iowa State Teachers College, he will be expected to complete any required courses he may have omitted. This decision to enter teaching will usually cause no curriculum difficulty if it is not delayed past the beginning of the junior year.

The student who wishes to receive a degree from Iowa State Teachers College must take the professional courses required for a teaching certificate.

Undergraduate Curricula

All students will choose one of the following patterns not later than the beginning of the sophomore year.

I—Preparation for teaching in the secondary school or in special subjects.

	Semester Hours
General education.....	43
Common professional sequence.....	22
Physical education 1.....	4
Major, Minor, Electives.....	61
	130

II—Preparation for teaching in the junior high school (grades 7, 8, and 9).

	Semester Hours
General education.....	43
Common professional sequence.....	22
Physical education 1.....	4
Additional specified requirements.....	34
Subject-matter fields and electives.....	27
	130

III—Preparation for teaching in the upper grades of the elementary school (grades 4, 5, and 6).

	Semester Hours
General education.....	43
Common professional sequence.....	22
Physical education 1.....	2
Additional specified requirements.....	43
Subject-matter field.....	12
Electives	8
	130

IV—Preparation for teaching in the lower grades of the elementary school (kindergarten, and grades 1, 2, and 3).

	Semester Hours
General education.....	43
Common professional sequence.....	22
Physical education 1.....	2
Additional specified requirements.....	39
Subject-matter field.....	12
Electives	12
	130

The General Education Requirements

All candidates for a bachelor of arts degree on any curriculum are required to take the following courses unless competency has been demonstrated to the satisfaction of the department offering the course.

	Semester Hours
Communications	
62:21 English I.....	3
62:22 English II.....	2
50:26 Fundamentals of Speech.....	3
Mathematics	
80:20 Mathematics for General Education.....	3
Science	
82:20 The Physical Sciences.....	3
82:22 The Biological Sciences.....	4
82:24 World Resources.....	3
Social Science	
90:23 Man in Society I.....	4
90:24 Man in Society II.....	4
Humanities	
68:21 Ancient Times through the Reformation.....	4
68:22 From the Seventeenth Century to the Present.....	4
60:20 Man and Materials.....	2
52:20 Exploring Music.....	2
65:121 Introduction to Philosophy or 64:120 The Heritage of the Bible.....	2
General Education total	43

The Common Professional Sequence

Any candidate for a bachelor of arts degree on any curriculum is required to take the courses in the common professional sequence as outlined below and in addition one departmental methods course (190-199).

	Semester Hours
21:14 The Teacher and the Child.....	5
20:16 Psychology of Learning.....	5
21:118 Social Foundations of Education.....	4
28:1- - Student Teaching*.....	8
	<u>22</u>

*Course number in Teaching denotes area in which experience is gained: 28:132, 134, 136, 137, 138.

The Freshman Schedule

Each freshman is assigned a faculty adviser at the time of enrollment and this adviser helps the student plan his program of classes. Except for the students on the two-year plan, all prospective teachers take in their freshman year: English 62:21, 22, Speech 50:26, Humanities 68:21, 22, and Physical Education 1 or

6. Other courses that are commonly included in the typical freshman program are: Mathematics 80:20, Art 60:20, Music 52:20, Science 82:20, 22, 24, and Education 21:14. Most students during their first year in college take at least one or two foundational courses in the particular area in which they plan to specialize.

The program for the freshman on the two-year plan permits very little room for electives. The student follows prepared schedules which include half the courses required under this plan.

Undergraduate Majors and Minors

Each student preparing to teach in the secondary school or in a special subject will choose not later than the beginning of the sophomore year one major and at least one minor, or two majors. If the student has a single major, two or more minors are frequently recommended in order that the student may be prepared for teaching in several fields. The majors and minors will be chosen from the fields listed below. The specific requirements of each will be found at the beginning of the appropriate department's section in the chapter entitled Courses of Instruction.

Majors

Art
 Business Education
 Earth Science
 English
 Foreign Languages
 Home Economics
 Home Economics (Vocational)
 Industrial Arts
 Library Science
 Mathematics
 Music
 Physical Education (Men)
 Physical Education (Women)
 Science
 Social Science
 Speech

Minors

Art
 Biological Sciences
 Business Education
 Chemistry
 Earth Science
 Economics and Sociology
 English
 French
 German
 Government
 History
 Home Economics
 Industrial Arts
 Latin
 Library Science
 Mathematics
 Music
 Physical Education (Men)
 Physical Education (Women)
 Physics
 Safety Education
 Spanish
 Speech

Major in Junior High School Education

In addition to the work in general education, the common professional sequence, and physical education, the student who chooses a major in junior high school education completes the following:

	Semester Hours
I—Additional Requirements	
21:40 Reading and Language Arts I.....	4
21:146 Reading and Language Arts II.....	2
21:178 The Junior High School.....	5
20:116 Psychology of Adolescence.....	2
50:70 Speech Correction.....	2
62:31 Introduction to Literature.....	3
80:134 Teaching of Arithmetic II.....	2
82:118 Physical Science for Elementary Grades II.....	2*
84:115 Biological Science for Elementary Grades II....	2*
87:90 Anglo-America or an elective in earth science...	3
96:14 American History to 1877.....	4
96:114 American History since 1877.....	3
Total	34

*If 82:18 or 84:10 was taken on the two-year plan, substitute a 3- or 4-hour elective in science.

II. Subject-Matter Field

Complete two subject-matter fields selected from the list; one with a minimum of 30 semester hours and one with a minimum of 20 semester hours including the work required in the general education program and the specific course requirements of the curriculum in junior high school education. It is recommended that the minor specifications in the various departments be considered as the basis for choosing courses for the subject-matter field. Care should be exercised to choose material common to the junior high school. The special methods course in one of the two fields, preferably the one selected first for 30 semester hours, must be included as a part of the subject-matter field.

Major in the Upper Grades of the Elementary School

In addition to the work in general education, the common professional sequence, and physical education, students who choose a major in this area complete the following:

	Semester Hours
I—Additional Requirements	
21:40 Reading and Language Arts I.....	4
21:44 Children's Literature.....	2
21:62 Upper Elementary Curriculum I.....	4
21:162 Upper Elementary Curriculum II.....	2
21:146 Reading and Language Arts II.....	2
Elective in Education or Psychology.....	2
60:90 Arts for Elementary Grades I.....	2
60:190 Arts for Elementary Grades II.....	2
50:70 Speech Correction.....	2
80:31 Arithmetic: Principles and Teaching.....	3
80:134 Teaching of Arithmetic II.....	2
52:90 Elementary Grade Music.....	3
82:118 Physical Science for Elementary Grades II.....	2*
84:115 Biological Science for Elementary Grades II....	2*
87:90 Anglo-America or elective in geography.....	3
96:11 Social and Economic History of the United States or a course in American History.....	3 or 4
37:13 Physical Education for Elementary Grades.....	2
Total	42 or 43

*If 82:18 or 84:10 was taken on the two-year plan, substitute a 3- or 4-hour elective in science.

II—A Subject-Matter Field.

This will be chosen from the list.

Major in the Lower Grades of the Elementary School

In addition to the work in general education, the common professional sequence, and physical education, students who choose a major in this area will complete the following:

	Semester Hours
I—Additional Requirements	
21:40 Reading and Language Arts I.....	4
21:44 Children's Literature.....	2
21:52 Lower Elementary Curriculum I.....	4
21:152 Lower Elementary Curriculum II.....	3
21:146 Reading and Language Arts II.....	2
21:144 Literature for Lower Elementary Children.....	3
60:90 Arts for Elementary Grades I.....	2
60:190 Arts for Elementary Grades II.....	2
50:70 Speech Correction.....	2
80:31 Arithmetic: Principles and Teaching.....	3
52:90 Elementary Grade Music.....	3
82:118 Physical Science for Elementary Grades II.....	2*
84:115 Biological Science for Elementary Grades II....	2*
96:11 Social and Economic History of the United States or a course in American History.....	3 or 4
37:13 Physical Education for Elementary Grades.....	2
Total	39 or 40

*If 82:18 or 84:10 was taken on the two-year plan, substitute a 3- and 4-hour elective in science.

II—A Subject-Matter Field

This will be chosen from the list given below.

Subject-Matter Fields

Students choosing majors in the upper grades of the elementary school or the lower grades of the elementary school complete a subject-matter field in one of the following areas. A subject-matter field consists of at least 12 hours of credit in the designated field in addition to the work required in the general education program and the specific course requirement of the curricula in the upper grades of the elementary school, or the lower grades of the elementary school. In the four starred (*) fields indicated below, special patterns for the subject-matter field have been organized. For all the remaining subject-matter fields any elective work in the appropriate department may be used as part of the 12-hour requirement.

- | | |
|-------------------------|---------------------------------|
| Art and Industrial Arts | Biological and Physical Science |
| Business Education | Earth Science |
| English | Social Science |
| Speech | Nursery School* |
| Home Economics | Special Education* |
| Languages | Community Leadership* |
| Library Science | Recreation* |
| Mathematics | Physical Education and Health |
| Music | |

For an endorsement on the teaching certificate in art, industrial arts, music, physical education, library, and speech correction, 30 semester hours are required, including methods at both the elementary and secondary levels, 4 hours.

Nursery School. This subject-matter field consists of the following:

	Semester Hours
21:148 Parent Education.....	3
21:154 The Nursery School and Kindergarten.....	2
An advanced course in psychology.....	3
Electives in courses applicable to this area.....	5

Special Education. This subject-matter field has four subdivisions, each leading to an endorsement on the teaching certificate. These fields are longer than most subject-matter fields in order that they might meet specific certification requirements. The endorsement will be good only at the elementary level. If it is desired to make them good at all levels, an additional 10 semes-

ter hours in secondary school professional education will be necessary. All students selecting this area as their subject-matter field will take:

	Semester Hours
21:147 Remedial Reading.....	3
21:185 The Exceptional Child.....	2
21:181 Group Evaluation Techniques.....	3
20:194 Clinical Experience.....	1
20:108 Personality Growth of Children.....	2
20:112 Mental Hygiene.....	2

In addition, the students choosing special education as their subject-matter field will select one of the four following areas of emphasis in special education and complete the requirements in that particular area:

	Semester Hours
(a) Emphasis on Educational Retardation. Required:	
80:185. Clinical Practice in Arithmetic.....	3
50:70 Speech Correction.....	2
(b) Emphasis on Mental Retardation. Required: 80:185	
Clinical Practice in Arithmetic.....	3
50:70 Speech Correction.....	2
21:186 The Retarded Child.....	2
(c) Emphasis on the Physically Handicapped. Required:	
21:188 The Physically Handicapped.....	2
(d) Emphasis on the Gifted Child. Required: 21:187 The	
Gifted Child.....	2

Community Leadership. This subject-matter field consists of a minimum of 12 semester hours selected from the following courses:

	Semester Hours
20:112 Mental Hygiene.....	2
20:140 Social Psychology.....	3
21:148 Parent Education.....	3
50:30 Public Speaking.....	3
50:40 Discussion and Debate.....	3
50:51 Play Production.....	3
31:177 Consumer Problems.....	2
31:182 Adult Education.....	2
90:110 Contemporary Affairs B.....	1 or 2
92:116 Industrial Relations.....	2
*94:34 Parliamentary Law.....	1
94:131 State and Local Government.....	3
*98:58 Principles of Sociology.....	3
98:119 The Family.....	2
98:153 Crime and Delinquency.....	4
*Starred courses strongly recommended.	

Recreation. For this subject-matter field a minimum of 12 hours must be earned from the following courses. Selections should be made from at least three of the six areas listed.

	Semester Hours
60:15 Design and Materials.....	3
60:170 Metal Work and Enameling.....	2
*60:155 Crafts for Recreation.....	2
60:165 Weaving	2

60:160	Puppetry	2
21:145	Story Telling.....	2
20:108	Personality Growth of Children.....	2
33:1	Introduction to Industrial Arts.....	2
33:155	General Graphic Arts.....	3
*33:157	Photography	2
38:1 or 39:1	Swimming	0
38:1, 39:1	(Variety of sports and games).....	0
*37:10	First Aid to the Injured.....	2
*39:33	Camp Leadership.....	3
84:104	Iowa Conservation Problems B.....	3
84:105	Iowa Conservation Problems A.....	3
*50:130	Creative Dramatics for Children.....	2
50:51	Play Production.....	3
50:52	Stagecraft	2
*Starred courses strongly recommended.		

Family Life Education. The college does not offer a major, minor, or a subject-matter field in Family Life Education. However, a student may wish to have a notation on his placement papers to indicate that he is qualified to teach Family Life Education. Such a student should be certain his program includes the pattern of courses listed below. The notation that a student is qualified to teach Family Life Education will be made on the placement papers only with the approval of the head of the department in which the student has his major.

Semester Hours

20:140	Social Psychology.....	3
98:58	Principles of Sociology.....	3
31:51	Personal Relationships.....	2
31:158	Problems (1) Family Relationships.....	2
98:119	The Family.....	2
At least 5 hours selected from the following:		
20:100	Child Psychology.....	2
20:108	Personality Growth of Children.....	2
20:116	Psychology of Adolescence.....	2
20:112	Mental Hygiene.....	2
21:148	Parent Education.....	3
21:182	Introduction to Guidance and Counseling.....	3
31:176	Family Finance.....	2
31:150	Child and the Home.....	4
84:140	Genetics and Evolution.....	3

Two-Year Plan

A student interested in teaching after only two years of college will enroll on the undergraduate curriculum for teaching either in the upper grades of the elementary school or for teaching in the lower grades of the elementary school. He will indicate his intention of following the two-year plan.

Completion of the two-year plan and the recommendation of this college qualify a student to receive a certificate good in Iowa for a limited period of service.

GENERAL REQUIREMENTS

A minimum of 65 hours of college work is required for the completion of the two-year plan. The student must be in residence for at least 22 weeks, earning in such residence at least 21 hours of credit.

He must make application for teaching at least one semester in advance of the time when the work in teaching is to be taken.

In the schedule of classes, several of the courses required on the two-year plan are listed with sections labeled "Y" or "Z". Those labeled "Y" are designed primarily for those particularly interested in the lower grades; and those labeled "Z" are intended primarily for those who are chiefly interested in the upper grades.

During the first year, students are required to take a three-day-a-week activity course in physical education during each semester.

A student who satisfactorily completes the two-year plan will receive from the college a certificate of completion. In order to receive the certificate of completion a student must have earned at least a 2.00 grade index in all courses attempted and must have completed enrollment with the Placement Bureau. A student who completes the two-year plan must apply for the certificate of completion at least one semester in advance of the date of issuance. This certificate may be issued at the completion of two years or at the end of any subsequent semester.

The following courses are required of all students pursuing the two-year plan.

	Semester Hours
60:20 Man and Materials.....	2
60:90 Arts for Elementary Grades I.....	2
21:14 The Teacher and the Child.....	5
21:40 Reading and Language Arts I.....	4
21:44 Children's Literature.....	2
62:21 English I.....	3
62:22 English II.....	2
50:26 Fundamentals of Speech.....	3
80:31 Arithmetic: Principles and Teaching.....	3
52:90 Elementary School Music.....	3
39:1 Activity.....	2
37:13 Physical Education for Elementary Grades.....	2
82:18 Physical Science for Elementary Grades I.....	2
84:10 Biological Science for Elementary Grades II....	5
96:11 Social and Economic History of the United States	4
90:24 Man in Society II.....	4
Teaching.....	8

Additional requirements for a student on the curriculum for teaching in the lower grades of the elementary school.

21:52 Lower Elementary Curriculum I.....	4
	<hr/>
Electives*	5
	<hr/>
Total	65

Additional requirements for a student on the curriculum for teaching in the upper grades of the elementary school.

21:62 Upper Elementary Curriculum I.....	4
82:24 World Resources.....	3
	<hr/>
Electives*	2
	<hr/>
Total	65

*Electives to make a total of at least 65 hours may be chosen from any of the courses required on the degree curriculum for which the student is registered. 68:21 should be completed, if possible. In addition to required courses on the undergraduate curriculum, such courses as 90:10, 35:10, 21:31, and Applied Music will be acceptable. A student who tests out of one or more of the required courses on the two-year plan will choose an equivalent number of hours of work from among any other courses on his specified curriculum or in his chosen subject-field.

Curriculum Adjustments for Transfer Students

I—A student who transfers two or more full years of college work, who is a candidate for a bachelor's degree, and who has taken a General Education or liberal arts program, is assumed to have completed a program satisfying all of the requirements of the first two years at Iowa State Teachers College except 20:16, 21:14, 21:118. If the student has not taken a course in American Government in an Iowa college, he must take one at this college. It should be understood that piecemeal work in several different institutions or an irregular pattern in a single institution does not meet these requirements.

II—In determining the requirements for graduation, students transferring credit for two or more years of college work to a Bachelor of Arts curriculum, are required to have:

1—130 semester hours of work less the number of hours accepted by transfer.

2—All courses in education, psychology, and teaching.

- 3—All general education courses numbered 100 and above.
 - 4—All work of the majors and minors, excluding such specific requirements as may have been met by accepted transfer courses, and including specific courses of the first two years or prerequisites for advanced courses where no acceptable transfer courses are presented.
 - 5—If courses equivalent to one or more of the common professional sequence courses can be determined, these may be accepted in lieu of like courses at this college. However, in all cases, the transfer student is required to take 21:14 as a prerequisite to Student Teaching on this campus.
 - 6—The same plan is followed in accepting credit for students who have completed a two-year program for teaching in the elementary school before transferring, except that they are not held for the professional courses of the first two years, if this requirement has reasonably been met.
 - 7—Transfer students are required to take the speech check and if they cannot pass this test, they are required to take 50:26.
 - 8—Proficiency in swimming is required of all men students.
 - 9—Transfer students who do not meet certain standards on the English placement tests are held for certain work in the communications area.
 - 10—Proficiency in typing and in the use of duplicating machines is required on all degree curricula.
- III—Students transferring 60 or more semester hours, taken piecemeal in many institutions, may be held to all or part of the specific requirements of the first two years.
- IV—Students transferring less than 64 semester hours may be held for all specific course requirements of the first two years not met by specific transfer courses.

Additional Requirements for Graduation

In addition to the completion of one of the four patterns outlined above, the requirements for graduation from the Undergraduate Curricula include the following:

I—Residence

- A. At least 98 of the 130 hours required for graduation, earned here or elsewhere, as college residence credit.
- B. At least 36 weeks spent in residence **at this college** while earning in such residence at least 32 hours of credit, of which 20 hours must be earned in the junior and senior years.
- C. At least 32 hours of credit earned in the junior and senior years in courses at this college. This total may include non-residence credit.
- D. The last semester or full summer session before graduation spent in residence at this college.

II—Advanced Course

- A. At least 40 hours of credit in courses numbered 100 and above.
- B. At least 10 hours of work of a major in courses numbered 100 and above

III—Physical Education: 4 hours of credit in Physical Education 1 courses. Requirements for the two-year plan are listed on page 56.

- A. A student must enroll in Physical Education 1 each semester or summer session until this requirement is met.
- B. A temporary release from PE 1 for all or part of a semester does not release the student from any part of the total requirement.
- C. A student who is enrolled for marching band may defer PE 1 for that semester.
- D. A student may pursue two or more courses in PE 1 during any semester, but credit may be earned in only one such course. The registration card must indicate the course in which credit is desired.
- E. Not more than four hours of PE 1 credit will apply toward graduation requirements.
- F. The course, Physical Education 37:13 Physical Education for Elementary Grades, may be used to satisfy two hours of the PE 1 requirement. Credit may be earned in 37:13 in addition to four hours in PE 1 courses except that when 37:13 is taken in the same semester as a PE 1 course the latter course will carry no credit.

- G. No course in PE 1 may be repeated for credit more than once except with the approval of the head of the department offering the course.
- H. Two semesters of the required work in PE 1 must consist of courses requiring three periods a week and should be completed during the freshman year.
- I. The work in PE 1 for women students must include Activities for Social Recreation except that a student whose major is Art, Music, or Speech may take Beginning Modern Dance instead of Activities for Social Recreation.
- J. Men students must demonstrate competence in swimming or complete a course in swimming during the first year of enrollment at this college.

IV—**Typewriting:** All students must demonstrate competence in typing and the use of duplicating machines.

V—**Student Teaching:** See also page 120.

- A. For the completion of any undergraduate curriculum or the two-year plan, the student must earn 8 hours credit in student teaching at this college, except that an undergraduate student with 3 or more semester hours credit in student teaching earned at the same level in another college may be released from 4 hours of student teaching at this college.
- B. A student who has completed a two-year course of elementary teaching at this college will not be held for additional student teaching if he desires to complete a major in elementary education. However, credit in Teaching 28:138 will be required if the student majors in a field other than elementary teaching.
- C. A student must make application for student teaching at least one semester in advance of the time when the work in student teaching is to be taken. Transfer students must complete one full semester in residence before being approved for student teaching. Opportunity for student teaching in the summer session is limited to candidates for graduation at the end of the summer session. Secondary teaching is not offered during the summer.
- D. Not more than 10 hours of credit in student teaching may be used toward graduation.

VI—**Second Baccalaureate Degree:** to receive a second baccalaureate degree, a student must meet all the requirements for the second degree including at least 36 weeks in residence after receiving the first degree and not less than 32 hours of credit in addition to that required for the first baccalaureate degree.

VII—**Other**

- A. For scholarship requirements, see page 42, above.
- B. Placement Bureau Registration: registration with the Placement Bureau is required of all candidates for degrees or on the two-year plan and must be completed at the beginning of the last semester in residence.
- C. Application for Graduation. See page 42, above.

Courses of Instruction

In the following pages, courses are designated by two numbers, separated by a colon. The first number refers to the department or area of the course; the second number refers to the specific course. For example, in the designation 60:10, the "60" refers to the Department of Art while the "10" refers to the course. In registration always use the full number.

Courses 0-99 are primarily designed for freshman and sophomore students.

Courses 100-199 are primarily designed for junior, senior, and graduate students.

Courses 200-299 are open **only** to graduate students.

A student who has earned less than 32 semester hours credit is classified as a freshman and one who has earned 32 to 63 hours is classified as a sophomore. A student who has earned 64 to 95 hours is classified as a junior and an undergraduate who has earned 96 hours or more is classified as a senior. Graduate classification is earned by admission to Graduate study.

When Courses Are Offered

In the listing of courses the letter F after the hours of credit means the course is offered each Fall semester. S means Spring semester. F. even years means Fall semester 1960, etc. F-S. means the course is offered both semesters. Where no letter is given the courses will be offered as seems desirable. No indication is given as to Summer schedules of offerings.

Reference to Older Catalogs

At the end of most courses appear one or more course numbers in parenthesis, as (87:366). These course numbers will be found in catalogs dated 1956 or earlier and refer to courses offered under the quarter plan. They do **not** refer to any current semester course numbers. They mean that a student who has credit in the quarter course bearing this number will not receive additional credit for the new semester course. Thus, 87:90 was formerly (87:366) or is a course whose content is made up largely of (87:366).

If a semester course is made up of 2 or more quarter courses and a student has had one of the former courses, he can take and

receive credit in the new semester course only if he files in the office of the Registrar a statement of permission signed by the Head of the department offering the course.

Course Numbers Common to Many Departments

These common numbers may be used under named conditions by prefixing the department number:

133 Workshop—1 to 6 hours. Offered for special groups as announced in advance. Students may take work in one or more workshops but may not use more than 6 hours toward graduation. (533)

198 Independent Study. Hours to be arranged in advance. A provision for undergraduates to do work in a special area not offered in formal courses. Permission of the Dean of Instruction and Head of the department offering the work. Projects must be approved well before the beginning of the semester in which the work is to be done. (520)

298 Field Study. Open only to graduate students who have been admitted to candidacy for a graduate degree. Hours to be determined at time of registration. Designed for teachers in service and must be completed before registering in residence or the end of the current academic year. Credit limited to 3 hours. (610)

299 Research—1 to 3 hours. Credit to be determined at time of registration. Approval of Head of the department required. May be repeated but total amount of credit earned in Research may not exceed 3 hours. (620)

Art

Guillaume, Head. M. Campbell, Delafield, Finegan, C. Fowler, Ginstrom*, Gogel, Haskell, Herrold, Kurahara, Page, Shirley, P. Smith. Part-time: Kacere.

* On Leave—Fall Quarter 1956

An undergraduate major in art consists of at least 32 hours of credit in art which should include:

60:10, 15, 20, 40, 95.....	19 hours
Electives in art.....	8
Electives in art or related areas in home economics or industrial arts.....	5

32 hours

A minor in art consists of:

60:95, 195.....	6 hours
Electives in art.....	10
	16 hours

Three patterns exist by which a student who majors in art may secure an endorsement as an elementary teacher. Students interested in this endorsement on their certificate should consult the Head of this department.

60:10. Basic Art—5 hours. F-S. Drawing and design using a wide variety of media and subject matter. Ten periods a week. (60:104)

60:15. Design and Materials—3 hours. F. An understanding of design as determined by the characteristics and requirements of the materials used. An experienced approach to plastic materials, culminating in one or more finished visual or utilitarian objects, or models. Six periods a week. (60:323)

60:20. Man and Materials—2 hours. F-S. For general education in the field of art. Experimentation to foster an understanding of the interaction between man and various art media. Emphasis upon contemporary art forms. Four periods a week. (60:101)

60:40. History of Art—3 hours. F. Survey of visual and plastic art from pre-historic times to 1860 with emphasis on cultural relationships. Three periods a week. (60:381)

60:50. Ceramics—2 hours. F-S. Introduction to the creative use of clay and glazes for pottery and ceramic sculpture. Four periods a week. (60:117)

60:80. Painting—3 hours. F-S. Experience in water color, oil, tempera, encaustic, and mixed media. Six periods a week. (60:305)

60:90. Arts for the Elementary Grades I—2 hours. F-S. Individual and group activities using a variety of tools and art materials with specific emphasis on the physical, mental, and emotional growth of elementary school children. An attempt to develop a philosophy of creative art education appropriate for a classroom teacher. Four periods a week. (60:110)

60:95. Teaching of Art I—3 hours. F-S. Materials, methods, and problems of teaching art in the elementary school. An attempt to develop a personal philosophy of art education appropriate for teaching elementary school children. Six periods a week. (60:353)

60:100. Display Techniques—1 hour. F-S. Application of various techniques in poster design, advertising layout, and display methods. Two periods a week. (60:130)

60:111. Life Drawing—2 hours. S. Graphic interpretation of the human figure. Four periods a week. (60:408)

60:115. Contemporary Design—3 hours. S. Work with two- and three-dimensional design problems which deal with the organization of functional and congenial environments for contemporary living. Field trips. Six periods a week. (60:450)

60:130. Printmaking—3 hours. S. Designing and making block prints etchings, serigraphs, lithographs, and monotypes. Six periods a week. (60:361)

60:135. Sculpture—3 hours. F. Individual expression in various three-dimensional materials with emphasis on additive or modeling materials. Casting processes for plaster and concrete aggregates, and introduction to subtractive (carving) processes. Six periods a week. (60:319)

60:140. Contemporary Arts—2 hours. S. Investigation of changing concepts in the twentieth century with regard to the visual and plastic arts. Two periods a week. (60:403)

60:150. Advanced Ceramics—3 hours. F. Continued creative work with ceramic materials, emphasizing wheel-thrown pottery, ceramic sculpture problems, and the study of glazes and ceramic processes. Four periods a week. (60:417)

60:151. Pottery—2 hours. S. To familiarize the student with a wide variety of ceramic processes for teaching or as a creative outlet. Four periods a week. (60:416)

60:155. Crafts for Recreation—2 hours. F-S. Craft materials and processes with emphasis on creative design. Application to club, camp, and leisure time activities. Four periods a week. (60:401)

60:160. Puppetry—2 hours. S. Design, construction, manipulation, and staging of puppets and marionettes. Four periods a week. (60:461)

60:165. Weaving—2 hours. F. Problems in the design and execution of woven fabrics planned to acquaint the student with the nature of fibers and yarns, the structure of textiles, and the various elements and methods used in the creation of contemporary handwoven fabrics. (60:415)

60:166. Textile Printing—2 hours. S. odd years. Design and execution of printed textiles using various printing methods with an emphasis on silk-screen techniques.

60:170. Metal Work and Enameling—2 hours. F. Design and execution of functional and decorative metal objects by seaming, sinking, raising, forging, spinning, and enameling. Four periods a week. (60:440)

60:171. Jewelry—2 hours. F-S. Design and execution of jewelry with precious and semi-precious metals. Emphasis on methods of forming and joining metals, and of combining metals with other materials. Four periods a week. (60:463)

60:175. Art Problems—1 to 3 hours. Credit to be determined at time of registering. Each student will choose an area of concentration:

1. Painting
2. History of Art
3. Ceramics
4. Design and Materials
5. Basic Art

The course may be repeated but not in the same area. (60:570)

60:180. Advanced Painting—3 hours. F-S. Advanced work in any painting medium. Prerequisite: 60:80. Six periods a week. (60:407)

60:185. Advanced Technical Problems—1 to 3 hours. Credit to be determined at time of registration. Opportunity to do advanced work in any area offered by the department. May be repeated more than once for credit. (60:477)

60:190. Arts for Elementary Grades II—2 hours. F-S. Continued consideration of a unified arts program for the elementary curriculum. Prerequisite: 60:90. Four periods a week. (60:122)

60:191. Art and the Child—2 hours. S. Evaluation of the art of children at the elementary level. Laboratory experiences with art materials and discussion of problems relating to the teaching of art. It is recommended that 60:90 precede this course. Four periods a week. (60:309, 60:509)

60:195. Teaching of Art II—3 hours. F-S. Materials, methods, and problems of teaching art in the junior and senior high school. Special attention given to creative experiences related to the physical growth and mental development of the pre-adolescent child. Credit also as a course in Education for a student whose major is Art. Prerequisite: 60:95. (60:454, 60:490)

60:198. Independent Study. See pages 41 and 63.

60:240. Art Forms—3 hours. Art forms and cultural patterns from the period of cave drawings to Impressionism. Six periods a week. (60:684)

60:241. Contemporary Art Forms—3 hours. Major movements of contemporary art from Impressionism to the present day. Six periods a week. (60:685)

60:275 Art Projects—2 to 5 hours. Credit to be determined at time of registering. Opportunity for creative work at the graduate level in any area offered by the department. May be repeated more than once for credit. (60:670)

60:295. Seminar in Teaching Art—3 hours. Specific art education relating to public schools with emphasis upon continuity of art activity. Satisfies the special methods elective for the professional core. Six periods a week. (60:691)

60:296. The Supervision of Art—3 hours. Analysis of teaching problems and prevailing teaching practices relating to the curriculum and the supervision of art. Emphasis upon the supervisor as an aid to the teaching and administrative staff. Observation and participation in the art programs of the public schools. Six periods a week. (60:634)

60:298. Field Study. See pages 41 and 63.

60:299. Research. See pages 63 and 128.

Business Education

Douglas, Head. J. Blanford, M. Blanford, Humphrey, Jones, Lebeda, Samson. Temporary part-time: Barron, Fontana, Jepsen, Roenigk.

The curriculum in business education is designed to prepare teachers of business subjects for two areas of the secondary schools; (1) the area of general business understandings for all secondary pupils, and (2) the area of vocational education for the office and distributive occupations.

Since many beginning business teachers find initial placement in the smaller secondary schools, every undergraduate major in business education must complete a prescribed core which enables him to teach adequately such commonly taught subjects as basic or general business, typewriting, bookkeeping, consumer problems, and business law.

An undergraduate major in business education consists of at least 30 semester hours in business education which shall include the following core group of courses:

15:10, 11	6 hours
14:50, 51	4
12:30, 31	6
15:101	3
15:12	2
15:190	3
Total core requirements.....	24 hours
Electives required (minimum).....	6
Total major requirement (minimum).....	30 hours

A student who has completed one of the following special area recommendations in addition to the basic 24-hour requirement, and who has at least a B average in his specialization or satisfactorily passes a comprehensive examination over it, may have a statement added to his student record indicating completion of the specialization.

A. Basic Business. At least 15 semester hours of work from the following areas, of which at least 10 must be from Business Education: General Business, Accounting, Economics, Retailing, or related Home Economics. Recommended courses include: Elements of Distribution; Business Law II; Salesmanship; Income Tax; Family Finance; Consumer Problems; Money and Banking; Corporation Finance and Investments.

B. Accounting. At least 15 semester hours from Business Education and Economics of which not less than 10 must be in Accounting.

C. Retailing. At least 15 semester hours from Business Education and Economics, of which not less than 10 must be in Retailing.

D. Secretarial. At least 15 semester hours in Business Education and Economics, of which not less than 10 must be in Secretarial.

E. Distributive Education Teacher-Coordinators. (See approval requirements in Note 1 below.) (1) At least 14 hours in technical courses, including : Elements of Distribution, Salesmanship, Retailing, Textiles, and Sales Promotion. Recommended are Retail Merchandising, Industrial Relations, and Display Techniques. Also, (2) 8 hours of professional courses, including Philosophy of Vocational Education, Distributive Education Programs, and Cooperative Part-time Business Education. Recommended are Adult Business Education Programs, Individual Instruction Techniques, Introduction to Guidance and Counseling, and Educational and Occupational Information. And also, (3) 4 hours of Directed Work Experiences or documented proof of work experience.

F. Office Education Teacher-Coordinators. (See approval requirements in Note 1 below.) (1) At least 14 hours of technical courses to include Shorthand Skill Development, Office Practice, and Secretarial Practice. Recommended are Business Writing, Office Management, and Business Law II. Also, (2) at least 6 semester hours of professional courses to include Philosophy of Vocational Education, and Cooperative Part-Time Business Education. Recommended are Adult Business Education Programs, Individual Instruction Techniques, Introduction to Guidance and Counseling, and Education and Occupational Information. And also, (3) 4 hours of Directed Work Experience or documented proof of work experience.

Note 1. Teacher-Coordinators of vocational distributive and office occupations programs in larger high schools teach both secondary and adult classes and supervise students in the on-the-job work-experience program. They are required to have additional preparation in technical and professional courses as well as successful work experience to be approved as teacher-coordinators. In addition to the core required of all business education majors, approval requires at least the minimum preparation indicated for the above specialized vocational sequences. Students completing either of these prescribed sequences may be released from declaring a minor.

A minor in General Business consists of 15 hours in business education selected from the required core courses for majors, listed above. (See Note 2.)

A minor in Business-Accounting consists of 15 hours in business education of which at least 10 hours must be in accounting. (See Note 2.)

A minor in Business-Retailing consists of 15 hours in business education of which at least 10 hours must be in retailing. (See Note 2.)

A minor in Business-Secretarial consists of 15 hours in business education of which at least 10 hours must be in secretarial. (See Note 2.)

Note 2. Students desiring to teach business subjects need to include 15:190. In addition, 14:51 is required for teaching typewriting; and 14:54 is required for teaching shorthand.

General Business

15:10. Introduction to Business I (Business Organizations)—3 hours. F. Integrated introductory view of meaning and organization of the business enterprise. (15:40)

15:11. Introduction to Business II (Business Operations)—3 hours. S. The internal organization and operation of the business enterprise for carrying out the interrelated functions and responsibilities between business and consumers, government, labor, owners, and society. (15:355, 556)

15:12. Office Techniques—2 hours. F-S. Instruction and practice in operation and care of adding and calculating machines; elementary alphabetic and numeric filing; use of direct process and stencil duplicators; procedures for duplicating. Prerequisite: Ability to type. Three laboratory periods each week arranged. (15:146)

15:101. Business Law I—3 hours. F. Basic law relating to contracts, agency, employment, negotiable instruments, personal property, bailments, and transportation. (15:354)

15:102. Business Law II—3 hours. S. Basic law relating to insurance, surety, partnerships, corporations, real estate, trusts, and bankruptcy. Prerequisite: 15:101. (15:557)

15:111. Directed Work Experience I—2 hours. F. Job analysis, job descriptions, weekly work-experience reports and analyses coordinated with problems related to a students' work. Students hold employment at a qualified training agency approved by the college. Corequisite: Employment in an approved office or distributive occupation. (15:571)

15:112. Directed Work Experience II—2 hours. S. Human relations problems, directed study from prepared job study guides, job training techniques, weekly work-experience reports coordinated with problems related to students' work. Students hold employment at a qualified training agency approved by the college. Corequisite: Employment in an approved office or distributive occupation. (15:571)

15:114. Philosophy of Vocational Education—2 hours. F. Development and status of vocational education. Emphasis on types of work experience programs, adult, and junior college offerings. (15:572)

15:115. Cooperative Part-time Business Education—2 hours. S. Organization and operation of cooperative part-time business occupations programs and other types of work experience. Emphasis on coordination techniques. (15:574, 15:673)

15:116. Business Writing—3 hours. F. Preparation and use of business letters, press releases, business reports, and advertising copy. Prerequisite: Ability to type. (15:452)

15:117. Office Management—3 hours. S. Organization, procedures, and problems in managing accounting, retailing, or secretarial offices; office layout; flow of work; time and motion study; personnel supervision; and supplies and equipment management. Prerequisite: Ability to type. (15:527)

15:118. Adult Business Education Programs—2 hours. S. Organization and administration of evening and extension classes for adults and employed workers. (15:576)

15:119. Individual Instruction Techniques—2 hours. S. Methods of correlating classroom instruction with on-the-job training in office and distributive cooperative part-time programs. Prerequisite: 15:115 or consent of instructor.

15:170. Problems in Business Education—1 to 3 hours. F-S. Credit to be determined at time of registration. Student will choose one of the following areas:

- | | |
|--------------------------------|------------------------------------|
| 1. Accounting. | 5. Typewriting and Office Practice |
| 2. Basic and Consumer Business | 6. Shorthand and Secretarial |
| 3. Distribution | |
| 4. Business Law | |

May be repeated with concentration in a different area. Prerequisite: Permission of the Head of this department. (15:561)

15:180. Senior Seminar in Business Education—2 hours. F-S. To accompany student teaching. Individual professional projects and research of direct value to the student as a teacher. Open to majors and minors in Business Education; others should consult the Head of this department.

15:190. Methods in Business Subjects—3 hours. F-S. Credit also as a course in Education for a student whose major is Business Education. Methods for teaching all business subjects. (15:495, 15:496)

15:198. Independent Study. See pages 41 and 63.

15:203. Foundations in Business Education—2 hours. Trends, objectives, curricula, principles, and philosophy of business education. (15:603)

15:280. Seminar in Business Education—2 hours. Special problems in business education. May be repeated for a maximum of 6 hours credit. (15:680)

15:290. Improvement of Basic Business Instruction—2 hours. (15:690)

15:298. Field Study. See pages 41 and 63.

15:299. Research. See pages 63 and 128.

Accounting

12:30. Principles of Accounting I—3 hours. F. Introductory course in accounting emphasizing the preparation of financial statements, effects of merchandising operations, accounting procedures, voucher system, payroll and tax accounting. Primarily for sophomores. (15:360)

12:31. Principles of Accounting II—3 hours. S. Continuation of 12:30. Partnership, corporation, departmental, branch, and manufacturing accounting. Special problems in statement analysis and supplementary statements. Primarily for sophomores. (15:361)

12:130. Intermediate Accounting—5 hours. F. Analysis of balance sheet items; statements from incomplete data; errors and their correction; and statement of application of funds. (15:581, 15:582)

12:131. Cost Accounting—3 hours. F. Introduction to the principles of cost accounting with emphasis on job-order costs. (15:506)

12:132. Income Tax—3 hours. S. Accounting problems relating to individual and corporation income taxes (state and federal). (15:508)

12:134. Auditing—2 hours. S. Procedures and analyses used by accountants in determining accuracy and reliability of financial records. (15:510)

12:230. Accounting Systems—2 hours. Acquainting business teachers with the practical recording work in small establishments. Field work and opportunity to become familiar with actual accounting systems in use in Iowa businesses. (15:663)

12:291. Improvement of Bookkeeping Instruction—2 hours. (15:691)

Retailing

13:40. Elements of Distribution—3 hours. F-S. Facets in the distribution of goods and services. The basic course in the area of distribution. Primarily for sophomores. (15:355)

13:41. Salesmanship—2 hours. F-S. Effective selling techniques and methods used in selling. Covers selling problems of the manufacturers, the wholesalers, and the retailers. Retail sales demonstrations by students. Primarily for sophomores. (15:454)

13:141. Retailing—5 hours. F. Organization and management of retail and service establishments. (15:369)

13:142. Sales Promotion—3 hours. S. Considers four areas: functions of advertising display and visual merchandising, techniques and media of advertising, and sales promotion techniques in the sale of goods and services. Practice advertisements and displays by students. (15:523)

13:143. Retail Merchandising—2 hours. S. Merchandising techniques for improving and controlling retailing operations. (15:553)

13:144. Distributive Education Programs—2 hours. F. Objectives, developments, and status of adult and secondary vocational training programs for the distributive occupations.

13:245. Problems in Distributive Education—2 hours. Advanced study for graduate students on individual problems relating to distributive education, office occupations, cooperative part-time programs, and adult classes. Prerequisite: Experience as teacher-coordinator of supervised work experience program or consent of instructor.

Secretarial

14:50. Beginning Typewriting—2 hours. F. Development of correct technique, touch keyboard control, basic techniques for typewriting letters, manuscripts, tabulations, and centering problems. Emphasis on development of speed and control. Elective for students lacking minimum skill for Advanced Typewriting. (15:154)

14:51. Advanced Typewriting—2 hours. F-S. Refinement of technique, speed level, and control; performance of practical office jobs. Successful completion of this course required for state certification as typewriting teacher. 14:52 may be substituted for certification only if officially excused from 14:51 on the basis of performance. Student should type at a minimum rate of 35 words a minute upon entering the course. Students lacking minimum skill may elect to take 14:50. Daily. Prerequisite: 14:50, or one or more semesters of high school typewriting. (15:155)

14:52. Typewriting Skill Development—2 hours. F-S. For students who desire expert-level skill. Student should type at a minimum rate of 50 words a minute at beginning of course. Meets four days. Prerequisite: 14:51, or official excuse from it on basis of performance. (15:156)

14:53. Beginning Gregg Shorthand—4 hours. F. Development of skill in taking and transcribing dictation. For students with no previous training in Gregg shorthand. Corequisite: Must be registered for a typewriting course unless already a good typist. Daily. (15:50 and part of 51)

14:54. Advanced Gregg Shorthand—4 hours. S. To build skill in taking and transcribing dictation and to perfect knowledge of shorthand theory. Successful completion of this course required for state certification as shorthand teacher. 14:150 may be substituted for certification only if officially excused from 14:54 on the basis of performance. Students should take dictation at a minimum rate of 60 words a minute at the beginning of the course. Students lacking minimum ability may elect 14:53. Daily. Prerequisite: 14:53, or one year of high school shorthand. (15:51 and part of 15:150)

14:150. Shorthand Skill Development—4 hours. F. Development of high-level skill in taking and transcribing dictation. Students should write at a minimum rate of 80 words a minute. Prerequisite: 14:54, or official excuse on basis of performance. (15:358, 359)

14:151. Office Practice—3 hours. S. Advanced office duties, techniques, and procedures. No shorthand required. Prerequisite: 15:12. (15:525)

14:152. Secretarial Practice—2 hours. S. Duties and responsibilities of the secretary. Office Practice should accompany this course. Prerequisite: 14:54 or graduate status. (15:526)

14:282. Comparative Shorthand Theory—2 hours. Principles underlying shorthand systems as related to the problems of learning and teaching. Student must consult the instructor before registering for this course. (15:682)

14:292. Improvement of Typewriting Instruction—2 hours. (15:692)

14:293. Improvement of Shorthand Instruction—2 hours. (15:693)

Education and Psychology

Bishop, Head. Adrain, Barnes, Boehlje, Buswell, DeKock, Dreier, Hampton, F. Hanson, Henze, Hult, Jacobson, Knutson, Looby, Martindale, Price, Rhum, Riebe, Roth, W. Silvey, Sparrow, O. Thompson, Wilcox, Woodcock, Zintz. Part-time: Arey, A. Brown, Denny, M. Smith.

Undergraduate majors in elementary education are described elsewhere. An undergraduate major in education may have a notation on his placement papers that he is qualified to teach Family Life Education.

Psychology

20:8. General Psychology—3 hours. F. To provide fundamental knowledge of psychology and a foundation for work in psychology and education. Includes the study of emotion, sensation, feeling, memory, will, reasoning, perception, attention, and instinct.

20:16. Psychology of Learning—5 hours. F-S. The psychology of learning and its applications through instruction, evaluation, and pupil management. Attention to the descriptive statistics underlying test utilization. Prerequisite: 21:14. (21:212, and part of 21:503)

20:100. Child Psychology—2 hours. F. Developmental processes of pre-adolescent children. Physical growth, intellectual growth, language development, and social development considered from the empirical point of view. Prerequisite: 21:14 or equivalent. (20:515)

20:108. Personality Growth of Children—2 hours. S. Normal personality development from infancy through adolescence as it is influenced by physiological, cultural, and psychological determinants. (20:508)

20:112. Mental Hygiene—2 hours. F. Nature and status of mental health and the roles of education, psychology, psychiatry, and social work in the development of healthy personalities. (20:512)

20:116. Psychology of Adolescence—2 hours. S. Changing attitudes and concepts from age eleven to maturity. Mental and physical influences affecting mental growth. Individual differences and their significance. Prerequisite: 21:14 or equivalent. (20:516)

20:118. Systems of Psychology—3 hours. S. To acquaint the student with the leading theories in the field of psychology and to give him some understanding of research methodology as it applies to psychology.

Analysis of the schools of psychology. Current trends in psychological theory. Prerequisite: 21:14 or equivalent or one course in psychology. (20:519)

20:140. Social Psychology—3 hours. F. Thinking and behavior of people as affected by their association with one another. Devices and agencies for prediction and control of behavior. Prerequisite: one course in psychology or 21:14 or equivalent. (20:520)

20:194. Clinical Experience—1 to 4 hours. F-S. Practice in educational testing, mental testing, interviewing, guidance and counseling; and formulation of follow-up procedures. Prerequisite: Approval of the Head of this department. (21:556)

20:214. Advanced Educational Psychology—2 hours. S. Application of psychological principles and experimental findings to the problems involved in teaching and learning. (20:613)

20:285. Individual Intelligence Testing—2 hours. F. Standardization and cross-validation of the Stanford-Binet Scale and the Wechsler-Bellevue Scale. Instruction and supervised practice in the administration, interpretation, and application of test data. Prerequisite: 21:181. A laboratory course meeting no more than five periods a week. (20:658)

20:286. Analysis of the Individual—3 hours. F. Techniques in understanding of children and youth in their personal, educational, and vocational planning and adjustment. Prerequisite: 21:180, and 21:182 or 21:183. (21:617)

Education

21:14. The Teacher and the Child—5 hours. F-S. An appraisal of the teaching profession; the work and certification of teachers; the psychology of development of children emotionally, socially, intellectually, morally, and physically. (21:105, 21:211)

21:31. Audio-Visual Materials in Education—1 hour. F-S. Techniques for the preparation of both projected and non-projected materials in teaching. Two periods per week. (21:121)

21:40. Reading and Language Arts I—4 hours. F-S. The language arts of reading, speaking, listening, and writing as taught specifically and in relation to the total program in the elementary school. (21:136)

21:44. Children's Literature—2 hours. F-S. Reading of children's books and acquaintance with outstanding authors and illustrators. Selection of materials for children of various ages, abilities, and interests. (21:30)

21:52. Lower Elementary Curriculum I—4 hours. F-S. Educational needs of kindergarten-primary children; examination of curriculum handbooks. Unit instruction and an acquaintance with teaching methods, activities, and materials appropriate to grades k-3. (21:310, 21:363)

21:62. Upper Elementary Curriculum I—4 hours. F-S. Educational needs of children in grades 4-8; examination of curriculum handbooks. Unit instruction and an acquaintance with teaching methods and materials appropriate to these grade levels. (21:332)

21:118. Social Foundations of Education—4 hours. F-S. The school as a social institution; organized and informal community controls; cur-

rent philosophies of education; teacher responsibilities for the curriculum and professional ethics. Prerequisite: 21:14. Offered each nine weeks opposite student teaching. (21:213)

21:131. Audio-Visual Education—2 hours. F-S. Principles and techniques of audio-visual education; preparation, use, and care of materials; use and maintenance of equipment; program planning and direction. Three periods per week. Laboratory periods to be arranged. (21:580)

21:132. Materials of Instruction—3 hours. S. Laboratory work in the Curriculum Laboratory to acquaint the student with all types of materials in his field. Especially designed for majors in supervision; others should consult the Head of this department before registering for this course. (21:574)

21:134. History of Education—3 hours. F. Chronological study of world famous western educators and their ideas. (21:588)

21:141. Elementary School Supervision I—3 hours. S. Principles and techniques used to help teachers improve instruction in the elementary school. Before enrolling in this course it is highly desirable that the student have had teaching experience. (21:570)

21:142. Methods in Elementary Science—2 hours. F. Examination of newer courses of study and trends in teaching of science in the elementary school. (21:534)

21:143. Social Studies in the Elementary School—2 hours. S. Current trends, methods, and emphasis in the teaching of social studies in the elementary school. (21:541)

21:144. Literature for Lower Elementary Children—3 hours. F. Designed to deepen appreciation of children's literature, to familiarize the student with the style and techniques of authors and illustrators, and to develop criteria for selection and evaluation of children's books. (21:542)

21:145. Story Telling—2 hours. F. Principles underlying successful story telling and practice in the application of these principles. 21:144 or 35:112 should accompany or precede this course. (21:543)

21:146. Reading and Language Arts II—2 hours. F-S. Teaching the language arts with attention to research and recent literature in the area. Emphasis on problems of class members. Prerequisite: 21:40 or equivalent. (21:536)

21:147. Remedial Reading—3 hours. F-S. Causal factors, diagnosis, treatment of reading disabilities. Laboratory experience with children. Prerequisite: a methods course in the teaching of reading. (21:538)

21:148. Parent Education—3 hours. S. Techniques for maintaining proper home-school relations and for interpretation of the modern school to parents. (21:550)

21:152. Lower Elementary Curriculum II—3 hours. F-S. Emphasis on newer teaching techniques and curricular materials. Trends in the reorganization of the kindergarten-primary curriculum and in the management and control of classroom activities. Prerequisite: 21:52 or equivalent. (21:464)

21:154. Nursery School and Kindergarten—2 hours. S. History and status of the nursery school and the kindergarten. Philosophy and principles underlying the teaching of young children. (21:582)

21:162. Upper Elementary Curriculum II—2 hours. F-S. Emphasis on newer teaching techniques and curricular materials. Trends in re-organization of the upper elementary curriculum and in management and control of classroom activities. Prerequisite: 21:62 or equivalent. (21:439)

21:171. Secondary School Supervision—3 hours. S. Principles underlying the improvement of instruction in the high school. Procedures for identifying and working with teaching problems. Before enrolling in this course it is highly desirable that the student have had teaching experience. (21:572)

21:172. Problems in Reading in Secondary Schools—2 hours. S. Nature of the developmental reading program, development of vocabulary skills and interest, reading in the content subjects, and appraisal of reading ability. (21:562)

21:178. The Junior High School—5 hours. S. The junior high school movement; philosophy and current practices. (21:568)

21:180. Statistical Methods in Education and Psychology—2 hours. F. Use and interpretation of elementary statistical techniques by school personnel. No credit for a student who has credit in 80:172. (21:525)

21:181. Group Evaluation Techniques—3 hours. S. Measurement and evaluation in the instructional programs of elementary and secondary schools. Utilization of standardized group instruments in measuring aptitude, intelligence, achievement, interest, and personality. Construction of classroom tests by the teacher. Prerequisite: 21:180 or 20:16 or equivalent. (21:555)

21:182. Introduction to Guidance and Counseling—3 hours. F. Phases of guidance. Basic principles and techniques of guidance practices; methods of counseling. (21:583)

21:183. Educational and Occupational Information—2 hours. S. Consideration of the orientation needed by junior and senior high school students in investigating educational and occupational possibilities. (21:584)

21:185. The Exceptional Child—2 hours. F. An introduction to the education of the exceptional child. (21:544)

21:186. The Retarded Child—2 hours. S. Consideration of the mentally retarded, the slow learner, and the seriously retarded. It is recommended that 21:185 be taken before registering for this course. (21:505)

21:187. The Gifted Child—2 hours. F. Identifying the gifted child and adapting instruction to his needs. It is recommended that 21:185 be taken before registering for this course. (21:507)

21:188. The Physically Handicapped—2 hours. S. Including orthopedic, cardiopathic, and epileptic handicapping conditions. Finding and helping the handicapped. It is recommended that 21:185 be taken before registering for this course. (21:509)

21:198. Independent Study. See pages 41 and 63.

21:233. School and Community Relations—3 hours. F. Principles of school public relations; responsibility of teaching and non-teaching staff for relations with lay people; methods, techniques and programs for bringing school and community together. (21:624)

21:234. Philosophy of Education—2 hours. F. Consideration of philosophies of education to formulate an educational program consistent with present-day civilization. (21:684)

21:235. Principles of School Administration—3 hours. F. Organization of public education and nature of the administrative function. Before enrolling in this course it is highly desirable that the student have had teaching experience. (21:675)

21:237. Materiel Management—4 hours. S. Financial support for public education, business administration, budgeting, and problems of school building planning, operation, and maintenance. Prerequisite: 21:235. (21:679)

21:239. Personnel Administration—4 hours. S. Teacher selection and placement, promotion, tenure, and retirement; administration of pupil personnel facilitating services. Prerequisite: 21:235. (21:585)

21:241. Elementary School Supervision II—2 hours. The role of the supervisor in improving the learning of pupils. The supervisor as a coordinator, a resource person for the room teacher, an aid to the principal, a public relations person. Prerequisite: at least one year of teaching experience, and approval of the Head of this department. (21:614)

21:243. Curriculum Development in the Elementary School—3 hours. Evolution of the elementary curriculum in relation to various philosophies of education, changing social problems, research in psychology of learning, and studies in child development. Current approaches and trends in curriculum planning. (21:632)

21:245. Administration of the Elementary School—2 hours. S. Responsibilities and activities of the elementary school principal and his role in the total school organization. Prerequisite: at least one year of teaching experience, and approval of the Head of this department. (21:677)

21:249. Seminar in Elementary Education—2 hours. S. Consideration of practical approaches to existing problems. Course content determined largely by needs of students. Attention to research and materials of elementary education. May be repeated once for credit. (21:681)

21:272. Curriculum Development in the Secondary School—3 hours. Origins of the secondary school curriculum and modern trends in curriculum development. (21:631)

21:275. Administration of the Secondary School—2 hours. F. Duties of the principal in administering junior and senior high school; the principal's role in the total school organization and community. Prerequisite: one year of teaching experience and approval of the Head of this department. (21:676)

21:279. Seminar in Secondary Education—2 hours. F. Course content will depend on needs and interests of students enrolled. Emphasis on practical application of research to specific problems of the secondary school. May be repeated once for credit. (21:680)

21:287. Techniques of Counseling—3 hours. S. Preliminaries to effective counseling; interpreting inventory data; interviewing techniques; ways of maintaining continuity in counseling. Recent developments in the field. Prerequisite: 21:182 or 21:183. (21:619)

21:288. Organization and Administration of the Guidance Program—2 hours. S. Function and planning of the guidance program in relation-

ship to the objectives of the school. Prerequisite: one year of teaching experience and approval of the Head of this department. (21:618)

21:289. **Seminar in Special Education**—2 hours. Evaluation of research in areas of special education. Scope of course will depend on the purposes of students enrolled. Recommended for those interested in special education or guidance. May be repeated once for credit. (21:682)

21:294. **Educational Research**—3 hours. Major methods of educational research. Evaluation of research. Individual exploration of a possible thesis project in cooperation with student's adviser. (21:604)

21:298. **Field Study**. See pages 41 and 63.

21:299. **Research**. See pages 63 and 128.

Credit in the following courses, though counted but once toward graduation, is used in meeting the requirements in education for a student whose major is in the line indicated and is used also in meeting the requirements of the major.

12:291. **Improvement of Bookkeeping Instruction**—2 hours.

14:292. **Improvement of Typewriting Instruction**—2 hours.

14:293. **Improvement of Shorthand Instruction**—2 hours.

15:190. **Methods in Business Subjects**—3 hours.

15:290. **Improvement of Basic Business Instruction**—2 hours.

31:190. **Methods in Home Economics**—3 hours.

33:190. **The Teaching of Industrial Arts**—3 hours.

33:214. **Problems in Teaching Industrial Arts**—3 hours.

35:190. **Teaching the Use of Libraries**—2 hours.

37:174. **Tests and Measurements in Physical Education**—2 hours.

37:190. **Methods and Principles in Physical Education**—3 hours.

50:193. **Teaching of Speech**—2 hours.

50:194. **Methods of Directing Forensics**—2 hours.

50:195. **Methods in Speech Correction**—2 hours.

50:283. **Seminar in Teaching Speech**—2 hours.

57:292. **Psychology of Music**—2 hours.

60:195. **Teaching of Art II**—3 hours.

60:295. **Seminar in Teaching Art**—3 hours.

62:190. **The Teaching of Literature**—2 hours.

62:191. **The Teaching of Communications**—2 hours.

62:291. **Seminar in Teaching English**—2 hours.

70:190. **The Teaching of Foreign Languages**—2 hours.

80:190. **The Teaching of Secondary Mathematics**—3 hours.

80:235. **Problems in Teaching Arithmetic**—2 hours.

80:290. **Problems in Teaching Junior High School Mathematics**—2 hours.

80:291. **Problems in Teaching High School Mathematics**—2 hours.

82:190. **The Teaching of Science**—3 hours.

- 82:280. Seminar in Science Teaching—2 hours.
 87:191. The Teaching of Geography—2 hours.
 90:190. The Teaching of Social Studies—2 hours.
 90:291. Problems in Teaching the Social Studies—2 hours.

Safety Education

A minor in safety education consists of: 82:20; 21:131; 20:16 or 5 hours of psychology; 30:30, 30:130, 30:132; and 37:10.

30:30. General School Safety—4 hours. F-S. Methods of teaching safety education in elementary and secondary schools. (30:413, 30:415)

30:130. Driver Education and Highway Safety—4 hours. F-S. Classroom and practice driving units; safety education as a social problem; development of safety skills, habits, attitudes, and ideals; accident causes; study of research. (30:313, 30:411)

30:132. Directing the Safety Program—2 hours. F-S. Organization and administration of safety programs through the entire school system. (30:518)

Home Economics

Sutherland, Head. Buckingham, Hall, Holliday, Shores, Yeager.

A major in home economics consists of the following:

Home Economics (must include 31:190).....	30	hours
Art—a course in addition to 60:20, or 31:160 or 31:165.....	2	
Science—Biological and Physical Science in addition to General Education courses, may include 37:50.....	6	
		<hr/>
		38 hours

A student completing this major must complete a minor of 20 hours in another area. Recommended minors are: Art, biological science, English, and history.

A major in home economics—vocational consists of the following:

Home Economics (must include 31:150, 170, 172, 182, 190)...	37	hours
Art—a course in addition to 60:20, or 31:160 or 31:165.....	2	
Science—86:101, 103; 84:150, in addition to General Education courses.....	11	
Social Science—satisfied by General Education.....	0	
		<hr/>
		50 hours

A student who completes this major is not required to complete a minor, and is eligible for certification to teach vocational home economics, science, and social science.

A minor in home economics consists of 20 hours of work in home economics, the courses to be selected from at least three areas. The following distribution in four areas is recommended: Textiles and Clothing—31:10, 15, and a choice of 16, 110, or 111; Foods and Nutrition—31:35 and 36; Family Relationships and Child Development—31:51, and either 31:150 or 31:158 (1); Housing, Home Furnishing, and Equipment—31:62 or 65.

A double major in home economics and art may be planned by consultation with the heads of the two departments.

Courses 31:30, 105, 135 are elective courses not open to majors. All major courses are open as electives to students who have the recommended prerequisites.

Students who wish a notation on their placement papers that they are qualified to teach Family Life Education should consult the pattern of courses listed to see whether they have fulfilled the requirements.

Textiles and Clothing

31:10. Clothing Selection—2 hours. F-S. Individual problems in wardrobe planning. Discussion, two periods a week. (31:15)

31:15. Clothing I—2 hours. F-S. Techniques of clothing construction using commercial patterns. Must accompany or follow 31:10. Students with a satisfactory degree of proficiency may proceed directly to 31:11 upon the completion of this course and 31:10. Discussion and laboratory, four periods a week. (31:15)

31:16. Clothing II—2 hours. S. Additional clothing construction according to individual needs of students. Prerequisite: 31:10 and 31:15. Laboratory four periods a week. (31:116)

31:105. Textiles and Clothing—3 hours. S. No credit for a student who has credit in 31:10 and 31:15. Designed for students who do not major in home economics. Selection and construction of clothing. Six periods a week. (31:470, 475)

31:110. Textiles—2 hours. F. The effect of fiber content, construction, and finish on the serviceability and cost of fabrics. Identification tests. Discussion and laboratory, three periods a week. (31:410)

31:111. Costume Design—3 hours. S. Flat pattern making and draping. Prerequisite: 31:10, 31:15 and permission of instructor, or 31:16. Non-majors may use 31:105 with permission of instructor. Discussion and laboratory, six periods a week. (31:411)

31:112. Advanced Clothing—2 hours. F. Techniques of tailoring suits and coats. Discussion and laboratory, four periods a week. Prerequisite: 31:10, 31:15 and permission of instructor, or 31; 16; 31:111 recommended; non-majors may use 31:105 with permission of the instructor. (31:402)

31:118. Problems—2 hours. Clothing.

Foods and Nutrition

31:30. Nutrition of Children—2 hours. S. Designed especially for elementary majors. Two periods a week. (31:60)

31:35. Foods and Nutrition I—3 hours. F-S. Basic food preparation. Designed for majors and minors; also open as an elective. Six periods a week. (31:21)

31:36. Foods and Nutrition II—3 hours. F-S. Factors affecting family nutrition. Meal planning, preparation, and serving for family and larger groups. It is recommended that 31:35 precede this course. Six periods a week. (31:125)

31:135. Food for the Family—4 hours. F. No credit for students having credit in 31:35, 31:36, or 31:142. Designed for students who do not plan a major in home economics. Food preparation and meal planning for the average family. Eight periods a week. (31:471, 31:472)

31:142. Principles of Food Preparation—2 hours. S. It is recommended that 31:36 and 86:103 or equivalent precede this course. Discussion and laboratory, four periods a week. (31:522)

31:143. Special Food Problems—2 hours. S. Influence of food on cultural and social relationships of the family, the community, and the world. Planning and preparing meals based on racial and national food patterns. Four periods a week.

31:148. Problems—2 hours. (1) Foods; (2) Nutrition.

Family Relationships and Child Development

31:51. Personal Relationships—2 hours. F-S. Understanding our relationships with one another in life situations; recognizing and accepting our immediate problems as normal through use of group discussion. (31:61)

31:150. Child and the Home—4 hours. F-S. The infant through pre-school age, providing actual experience with children through a play-school situation. It is recommended that 21:14 precede this course. Discussion and laboratory, eight periods a week. (31:300, 31:400, 31:500)

31:158. Problems—2 hours. (1) Family relationships; (2) Experiences with children.

Housing, Home Furnishings, and Equipment

31:62. Household Equipment—2 hours. F. It is recommended that 82:20 precede this course. Four periods a week. (31:112)

31:65. Home Planning and Furnishing—3 hours. F-S. Design, materials, and costs in the building and furnishing of a home. Discussion and laboratory, six periods a week. (31:115, 31:568 Housing)

31:160. Decorative Textiles—2 hours. S. even years. Designed to build an appreciation of various cultures of the past and present through a study of their decorative textiles. Discussion and laboratory, four periods a week. (31:460)

31:165. Interior Decoration—2 hours. F. odd years. Advanced study in interior decoration with special emphasis on accessories and decorative materials. Individual student projects in laboratory. It is recommended that 31:65 precede this course. Discussion and laboratory, four periods a week. (31:416)

31:168. Problems—2 hours. Housing.

Family Economics and Home Management

31:170. Home Management—2 hours. F. The significance of the management process in achieving family goals. Special consideration of management problems unique to the various phases in the family life cycle. (31:450)

31:172. Home Management House—2 hours. F-S. Actual experience in applying the principles of management to family resources such as money, time, and energy. Residence in the house integrates the understandings, knowledge, and skills gained from the various phases of home economics. 31:170 should precede this course. Blocked with student teaching. (31:466)

31:176. Family Finance—2 hours. S. even years. Planning and management of family finance to provide a well-rounded and satisfying life for its members. It is recommended that 90:23 precede this course. (31:461)

31:177. Consumer Problems—2 hours. F. even years. The consumer's role in marketing. Regulations, standards, sources of information and a detailed study of a few products. (31:551)

Home Economics Education

31:182. Adult Education—2 hours. S. Survey of the scope and need for adult education. Selection and use of teaching materials and techniques suited to group work with adults. Observation and participation in organizing and teaching an adult class. It is recommended that 31:190 precede this course. (31:568 Adult Education)

31:188. Problems—2 hours. (1) Home Economics Education; (2) Curriculum Planning.

31:190. Methods in Home Economics—3 hours. F. Credit also as a course in Education for a student whose major is Home Economics. Includes planning and organizing programs; teaching techniques; problems of equipping and managing a department; selection and use of teaching aids and evaluation procedures. (31:490)

31:198. Independent Study. See pages 41 and 63.

Humanities

The courses in the humanities which are required in the general education program are not offered by a separate department. Instead, several departments join in offering them. Except for courses 68:21, 22, and 123 they will be found listed elsewhere as well as here. Courses 68:21 and 22 are offered jointly by the departments of Social Science, and Languages, Speech, and Literature.

The following courses are required to meet the general education requirements of the undergraduate curriculum: 60:20, 52:20, 68:21, 68:22, and either 65:121 or 64:120.

Art 60:20. Man and Materials—2 hours. F-S. For general education in the field of art. Experimentation to foster an understanding of the interaction between man and various art media. Emphasis on contemporary art forms. Four periods a week. (60:101)

Music 52:20. Exploring Music—2 hours. F-S. To introduce the art of music to non-performers. (52:130)

Humanities 68:21. Ancient Times through the Reformation—4 hours. F-S.

Humanities 68:22. From the Seventeenth Century to the Present—4 hours. F-S.

An integrated approach to the study of history, philosophy, religion, literature, and the fine arts with the history of Western civilization as a framework for study of philosophic essays, scriptures, plays, novels, sculptures, and paintings. Each semester of the course carries two hours credit in history and two hours credit in English. (68:111, 68:112, 68:113)

Philosophy 65:121. Introduction to Philosophy—2 hours. F-S. Basic problems of philosophy presented through reading and discussion. Designed to clarify and deepen the student's thinking about basic issues of life. (65:406)

Religious Literature 64:120. The Heritage of the Bible—2 hours. F-S. Consideration of the primary document of our heritage without imposing any sectarian or particular point of view upon the student. (64:426)

Humanities 68:123. Oriental Civilization—3 hours. Religion, philosophy, art, literature, and social organization of India, China, and Japan. Effect of the intercultural exchanges between East and West. May count toward a social science major or a history minor. (68:509)

Industrial Arts

Reed, Head. LaRue, R. Matala, Palmer, Plummer, W. Wagner, Wright.

An undergraduate major in industrial arts includes not less than 37 semester hours of credit in industrial arts, including 88:52, 33:190 and 33:195. The remaining courses will be selected by the student and his adviser. It is recommended that at least one course be taken in each of the areas of drawing, metalwork, woodwork, and electrical work; and not less than 7 hours in each of three of these four areas. 88:56 and 60:50 may be counted toward the industrial arts major.

A minor in industrial arts consists of not less than 17 semester hours including 33:190. It is recommended that at least 10 hours be chosen from the areas of drawing, electrical work, metalwork, and woodwork.

Students on pre-engineering programs may take the courses in drawing in the freshman year.

33:1. Introduction to Industrial Arts—2 hours. F-S. Introduction to materials, tools, and processes of a modern industrial arts program. Laboratory, three or four periods a week. (33:130)

33:10. General Drawing—3 hours. F-S. Basic information and techniques in technical sketching and instrumental drawing. It is recommended that a student have previously completed one unit in industrial arts in high school or two hours of shopwork credit. Laboratory, four to six periods a week. (33:110, 33:310)

33:15. General Woodwork—3 hours. F-S. Basic information, processes, and project planning to include the use of common woodworking tools and machines. Laboratory, four to six periods a week. (33:120, 33:320)

33:30 General Metalwork—3 hours. F-S. Basic information, processes, and project planning in metalwork. Laboratory, four to six periods a week. (33:40, 33:140)

33:111. Advanced Drawing—3 hours. S. Detail and assembly drawing of machine parts and the development of shapes by projection and triangulation. Prerequisite: 33:10. Laboratory, four to six periods a week. (33:311, 33:411, 33:412)

33:115. Architectural Drawing—3 hours. F. Principles of architectural drawing involving details of buildings. Prerequisite: 33:10, or consent of the Head of this department. Laboratory, four to six periods a week (33:515)

33:121. Advanced Woodwork—5 hours. F-S. Advanced problems in design and construction in woodworking. Prerequisite: 33:15 or consent of the Head of this department. Laboratory, seven to ten periods a week. (33:425, 33:473)

33:131. Sheetmetal and Welding—2 hours. F. Information and practice of an advanced nature in welding and sheetmetal. Prerequisite: 33:30, or consent of the Head of this department. Laboratory, three or four periods a week. (33:441)

33:141. Machine Tools—5 hours. S. Basic information, processes, and project planning in the machine shop. Laboratory, seven to ten periods a week. (33:431, 33:531, 33:532)

33:150. General Electricity—3 hours. F-S. Basic information, processes, and project planning in wiring, testing, and maintenance of electrical devices. Laboratory, four to six periods a week. (33:350, 33:450)

33:152. General Electronics—2 hours. S. Basic information, processes, and project information on radio receivers and transmitters. It is recommended that 33:150 or 88:56 precede this course. Laboratory, three or four periods a week. (33:552)

33:155. General Graphic Arts—3 hours. F. Basic information, processes, and project planning in printing and bookbinding. Laboratory, four to six periods a week. (33:257, 33:455)

33:157. Photography—2 hours. F-S. Basic information and techniques in photography. Laboratory, three or four periods a week. (33:357, 33:457)

33:158. Advanced Graphic Arts—2 hours. Advanced practice in graphic arts. Prerequisite: 33:155 or consent of the Head of this department. Laboratory, four to six periods a week. (33:558)

33:160. Auto Mechanics—4 hours. F. Inspection, lubrication, testing, care, and minor adjustments of the automobile and small internal combustion engines. Laboratory, six to eight periods a week. (33:460, 33:563)

33:165. General Farm Mechanics—3 hours. S. Design and construction of projects for farm use. Laboratory, four to six periods a week. (33:465)

33:175. Plastics and Leatherwork—2 hours. F. Basic information, processes, and project planning in plastics and leather work. Laboratory, three or four periods a week. (33:475)

33:183. Industrial Arts for the Elementary School—2 hours. Basic information, processes, and project planning in industrial arts for junior high and elementary schools. Laboratory, three or four periods a week. (33:483).

33:190. The Teaching of Industrial Arts—3 hours. F-S. Problems in organizing and teaching industrial arts. Credit also as a course in education for a student whose major is industrial arts. Prerequisite: Eleven hours in industrial arts. (33:490)

33:195. School Shop Planning—2 hours. F-S. General school planning; selecting, purchasing, and organizing industrial arts facilities. It is recommended that 33:10 and 33:190 precede this course. Laboratory, three or four periods a week. Offered with student teaching. (33:580)

33:198. Independent Study. See pages 41 and 63.

33:203. Foundations of Industrial Education—2 hours. Leaders, organizations, movements, legislation, and other factors affecting industrial arts and vocational industrial education. (33:603)

33:214. Problems in Teaching Industrial Arts—3 hours. Methods, devices, and content in teaching of industrial arts. This course will satisfy the special methods requirement in the professional core. Prerequisite: Consent of the Head of this department. (33:614)

33:223. Administration and Supervision of Industrial Arts—2 hours. Problems and duties of the industrial arts supervisor and administrator. Prior teaching experience is desirable before enrolling for this course. Prerequisite: Consent of the Head of this department. (33:623)

33:226. Industrial Arts Curriculum—2 hours. Principles, techniques, and trends with respect to the industrial arts curriculum. Prerequisite: Consent of the Head of this department. (33:626)

33:270. Projects in Industrial Arts—1 to 3 hours. Students choose an area of concentration from the following: 1. Automobile Mechanics; 2. Drawing; 3. Electrical Work; 4. Industrial Arts Design; 5. Machine Shop; 6. Metalwork; 7. Woodwork; 8. Plastics. This course provides for concentration and may be repeated with enrollment in different areas. Prerequisite: Consent of the Head of this department. Laboratory four to six periods a week. (33:670)

33:282. Industrial Arts Seminar—1 hour. Selected problems dealing with the school shop and its operation will be studied. Prerequisite: Consent of the Head of this department. (33:682)

33:298. Field Study. See pages 41 and 63.

33:299. Research. See pages 63 and 128.

Languages, Speech, and Literature

Reninger, Head. W. Anderson, Bernhard, Bluhm, Clay, Cowley, Dankleff, DeHoff, Flowers, Forest, Fossum, Fox, Goggin, Hanawalt, A. Hanson, Hearst, Jewell, Katter, Langemo, Maurer, McDavitt, Miller, Schaefer, F. Smith, M. B. Smith, Stageberg, Stuart, Taylor, T. Thompson, Thorne, L. Wagner, Williams, Wood. Part-time: Fagan.

English

An undergraduate major in English consists of at least 37 hours in English which should include:

68:21, 22 (credit as English)	4 hours
62:21, 22, 31, 141, 142, 148, 151, 163, 190, 191.....	33
	<hr/>
	37 hours

In addition, at least one semester before the degree will be conferred, a student whose major is English must demonstrate basic competence, confirmed by examination, in French, German, or Latin. In French or German, a reading knowledge of simple material employing a vocabulary of about 2,000 words is necessary. In Latin, a working knowledge of the foundational structure and a vocabulary of about 1,500 words are required.

A minor in English consists of at least 20 hours in English which must be distributed as follows:

68:21, 22 (credit as English)	4 hours
62:21, 22, 40, 50, 162, 191	16
	20 hours

English I is a prerequisite to all other courses in English.

62:21. **English I**—3 hours. F-S. Development of skills in expository writing. Emphasis upon organization, and the development of language habits appropriate to teachers and college graduates. (62:1)

62:22. **English II**—2 hours. F-S. More advanced skills in writing and organization, with attention to elementary semantics. Training in gathering and organizing source material. Continued attention to the development of appropriate language habits. (62:100, 62:102)

62:23. **Mass Communication**—3 hours. S. Communication processes in the mass communication media. Analysis of the techniques of creating mass opinion. (62:114)

62:31. **Introduction to Literature**—3 hours. F-S. Training in understanding the forms of imaginative literature. Analysis of the short story, novel, drama, and poetry. Not to be taken by English minors. (62:110)

62:32. **Contemporary Short Story**—2 hours. Structure and meaning of the short story, 1900 to the present. (62:303)

62:40. **Major British Writers**—3 hours. F-S. Representative British writers. Designed to furnish literary perspective; special attention to poetry and drama as literary forms. Not to be taken by English majors. (62:317)

62:41. **Contemporary British and American Poetry**—2 hours. S. Examination of the works of the most significant British and American poets since 1914, and of how their poetry arises out of the social and psychological cross currents of the time. (62:341)

62:50. **Major American Writers**—3 hours. F-S. Representative American writers of the nineteenth and twentieth centuries. Designed to furnish literary perspective; special attention to the novel and short story as literary forms. Not to be taken by English majors. (62:448)

62:140. **The Development of the Novel**—3 hours. Historical-critical study of the novel to about 1870. Includes continental, English, and American authors. (62:330, 62:335)

62:141. **British Literature I**—5 hours. F. Development of English Literature from 1500 to about 1740, with emphasis on major figures and works. (62:518, 62:523)

62:142. **British Literature II**—3 hours. S. Development of English Literature from about 1740 to recent times, with emphasis on major figures and works. (62:522, 62:525)

62:143. The Modern Novel—3 hours. The continental, English, and American novel since about 1870, considered chiefly as an expression of Western culture. Emphasis on critical evaluation. (62:511)

62:144. Chaucer—3 hours. Reading of the most representative parts of the *Canterbury Tales*. Studied primarily as literature, with emphasis on human values. (62:514)

62:145. World Drama—3 hours. Representative continental, English, and American dramas, with emphasis since Ibsen. (62:530)

62:146. Readings in British Literature—3 hours. A flexible course with varying subject matter. Designed to develop original critical thinking through intensive investigation of an English writer, a literary form, or a literary idea. May be repeated for a total of 6 hours credit.

62:147. Milton—3 hours. Milton's major English poetry and prose. (62:554)

62:148. Shakespeare—3 hours. Concentration on selected plays; reading of and reports on other works. (62:325)

62:151. American Literature—5 hours. American culture as revealed in American literature from the Revolution to the present. Not to be taken by English minors. (62:543, 62:545)

62:152. Readings in American Literature—3 hours. A flexible course with varying subject matter. Designed to develop original critical thinking through intensive investigation of an American writer, a literary form, or a literary idea. May be repeated for a total of 6 hours credit.

62:160. World Literature—3 hours. The world's most representative authors. Emphasis on twentieth century writing. (62:312)

62:161. Theory and Practice of Criticism—2 hours. Major problems in creative literature, and the solution offered by the great critics. (62:650)

62:162. The American-English Language of Today—3 hours. F-S. Descriptive American-English grammar and a survey of contemporary usage. Not to be taken by English majors. (62:462)

62:163. The English Language—5 hours. F. Development of the English language with emphasis on the effects of historical changes and a descriptive account of present-day grammar and usage. Not to be taken by English minors. (62:560)

62:164. Semantics—2 hours. F-S. Language as a symbolic process; functions of language; relations of reality and language; practice in the close analysis and control of meanings, with attention to types of writing and speaking vital to the citizen and teacher. Offered to accompany student teaching.

62:170. Creative Writing: Prose and Poetry—2 hours. F-S. Designed for students who desire individual criticism of their creative prose or poetry. May be repeated for a total of 4 hours of credit. (62:452)

62:171. Creative Writing: Playwriting—2 hours. Experience in creative dramatic writing with individual criticisms and suggestions. May be repeated for a total of 4 hours of credit. (62:350)

62:190. The Teaching of Literature—2 hours. F. Credit also as a course in education for a student whose major is English. Methods of teaching literature and the study of books for adolescents. (62:490, 62:505)

62:191. The Teaching of Communications—2 hours. F-S. Credit also as a course in education for a student whose major is English. Methods of integrating the teaching of writing, reading, speaking, and listening in a modern language arts program.

62:198. Independent Study. See pages 41 and 63.

62:201. Bibliography and Methods of Research—1 hour. F. Kinds, methods, and standard practices of scholarly research in the fields of language and literature. (62:606)

62:202. Teaching of Literary Forms—3 hours. F. Advanced literary analysis and evaluation of the short story, novel, drama, and poetry. Principles applied to literature taught in the high schools; designed as a preparation for the teaching of creative literature. (62:615)

62:203. Language Problems in the High School—2 hours. An advanced course in language. Latest investigations in the theory of signs and meaning and their application to practical language teaching. (62:664)

62:280. Seminar in English Literature—2 hours. Directed, independent investigations by students; synthesizing lectures by the instructor. Approximately one section offered each semester, selected from (A) Seventeenth Century, (B) Eighteenth Century, or (C) Nineteenth Century, according to the students' needs. May be repeated for a maximum of 6 hours credit. (62:680)

62:281. Seminar in American Literature—2 hours. Directed, independent investigations by students; synthesizing lectures by the instructor. Section offered will be devoted either to (A) romanticism, or (B) realism, according to the students' needs. May be repeated for a maximum of 4 hours credit. (62:681)

62:282. Seminar in Twentieth Century—2 hours. Directed, independent investigations by students; synthesizing lectures by the instructor. (62:682)

62:283. Seminar in Writing—2 hours. An opportunity for the student to pursue critical or creative writing and to participate in the solution of problems involved in such writing. May be repeated for a maximum of 4 hours credit. (62:683)

62:291. Seminar in Teaching English—2 hours. Readings, discussions, and experiments on field problems in the light of modern research, techniques, and materials. Relation of problems to their philosophical bases. A student must consult the instructor before registering for this course. (62:691)

62:298. Field Study. See pages 41 and 63.

62:299. Research. See pages 63 and 128.

Foreign Languages

A major in foreign languages consists of 36 hours which must include 70:190 and at least 17 hours in each of two languages in courses which are more advanced than those numbered 1: French, German, Latin, or Spanish.

Minors are offered in French, German, Latin, and Spanish.

70:190. The Teaching of Foreign Languages—2 hours. Credit also as a course in education for a student whose major is foreign languages. Prerequisite: 13 hours in foreign languages. This course ordinarily should precede student teaching. (70:490)

70:198. Independent Study. See pages 41 and 63.

French

A minor in French must include 14 hours of work in French courses which are more advanced than 72:1.

72:1. French I—5 hours. F. A course for beginners. Practice in hearing, speaking, reading, and writing simple French, with study of essential grammatical principles. (72:101 and part of 72:102)

72:2. French II—5 hours. S. Continuation of 72:1. Prerequisite: 72:1 or one year of high school French or equivalent preparation. (72:103 and part of 72:102)

72:111. Intermediate French—3 hours. Selection from French prose. Prerequisite: 72:2 or two years of high school French or equivalent preparation. (72:301)

72:112. Short French Plays—3 hours. Prerequisite: 72:111 or two years of high school French or equivalent preparation. (72:302)

72:113. Rostand's Cyrano—2 hours. Prerequisite: 72:111 or equivalent preparation. (72:305)

72:114. Nineteenth Century French Literature—3 hours. Works of de Vigny, Loti, Daudet, and others. Prerequisite: 72:111 or equivalent preparation. (72:401)

72:115. Contemporary French Literature—3 hours. Works of A. France, Maurois, Gide, and others. Prerequisite: 72:112 or equivalent preparation. (72:402)

72:116. French Classical Period—3 hours. Works of Corneille, Racine, Moliere, and La Fontaine. Prerequisite: 72:112 or equivalent preparation. (72:505)

72:117. Victor Hugo—2 hours. Prerequisite: 72:113 or equivalent preparation. (72:507)

German

A minor in German must include 14 hours of work in German courses which are more advanced than 74:1.

74:1. German I—5 hours. F. A course for beginners. Practice in hearing, speaking, and writing simple German, with study of essential grammatical principles. (74:101 and part of 74:102)

74:2. German II—5 hours. S. Continuation of 74:1. Prerequisite: 74:1 or one year of high school German, or equivalent preparation. (74:103 and part of 74:102)

74:111. Intermediate German—3 hours. German life. Prerequisite: 74:2 or two years of high school German or equivalent preparation. (74:301)

74:112. Introduction to German Classics—3 hours. Works of Schiller, Goethe, or Lessing. Prerequisite: 74:111 or equivalent preparation. (74:303)

74:113. Advanced Conversation and Composition—3 hours. Prerequisite: 74:111 or equivalent preparation. (74:305)

74:114. German Lyrics and Ballads—3 hours. Poetry of the Eighteenth, Nineteenth, and Twentieth Centuries. Prerequisite: 74:111 or equivalent preparation.

74:115. Nineteenth Century German Literature—3 hours. Works of H. von Kleist, Hebbel, Grillparzer, Hauff, G. Keller, and others. Prerequisite: 74:111 or equivalent preparation. (74:408)

74:116. Contemporary German Literature—3 hours. Selections from Thomas Mann, H. Hesse, and others. Prerequisite: 74:112 or equivalent preparation. (74:505)

Latin

A minor in Latin consists of at least 14 hours of work in Latin courses which are more advanced than 76:1.

76:1.—Latin I—5 hours. F. A course for beginners. Study of grammatical principles and vocabulary needed for reading simple Latin. Emphasis upon relationship of Latin and English. (76:101 and part of 76:102)

76:2. Latin II—5 hours. S. Continuation of 76:1. Prerequisite: 76:1 or one year of high school Latin or equivalent preparation. (76:103 and part of 76:102)

76:111. Literature of Golden Age—5 hours. Especially for students whose previous work in Latin was taken a year or more before. Reading from Cicero, Vergil, Catullus, Tibullus, and others. May be repeated for additional credit since the literature covered is not always the same. Consult the instructor before re-enrolling. Prerequisite: 76:2 or two years of high school Latin or equivalent preparation. (76:307)

76:112. Literature of Silver Age—5 hours. Selections from Pliny, Tacitus, Suetonius, and others. May be repeated for additional credit since the literature covered is not always the same. Consult the instructor before re-enrolling. Prerequisite: 76:111 or four years of high school Latin or equivalent preparation. (76:410)

Spanish

A minor in Spanish consists of at least 14 hours of work in Spanish courses which are more advanced than 78:1.

78:1. Spanish I—5 hours. F. A course for beginners. Practice in hearing, speaking, reading, and writing simple Spanish with study of essential grammatical principles. (78:101 and part of 78:102)

78:2. Spanish II—5 hours. S. Continuation of 78:1. Prerequisite: 78:1 or 1 year of high school Spanish or equivalent preparation. (78:103 and part of 78:102)

78:111. **Intermediate Spanish**—3 hours. Reading of Spanish short stories and selections from essays and novels. Practice in conversation. Prerequisite: 78:2 or two years of high school Spanish or equivalent preparation. (78:301)

78:112. **Spanish-American Literature**—3 hours. Selections from Gallegos, Lopez y Fuentes, Gabriela Mistral, Ruben Dario, Constancio Vigil, and others. Prerequisite: 78:111 or equivalent preparation. (78:306)

78:113. **Contemporary Spanish**—3 hours. Selected readings from representative novels, short stories, and essays. Prerequisite: 78:111 or equivalent preparation. (78:307)

78:114. **Don Quixote**—3 hours. Prerequisite: 78:111 or equivalent preparation. (78:401)

78:115. **Advanced Conversation and Composition**—2 hours. Prerequisite: 78:111 or equivalent preparation. (78:417)

78:116. **Spanish Drama**—3 hours. Selections from Galdos, Benavente, and others. Prerequisite: 78:111 or equivalent preparation. (78:405)

School Journalism

66:30. **Journalism I**—3 hours. F. News values, methods of obtaining, verifying, and presenting news; preparation of newspaper copy for publication; newspaper style and make-up. (66:310)

66:102. **Journalism II**—3 hours. S. Writing of editorials and feature articles for publication. (66:410)

66:103. **School Publication Advisement**—3 hours. Supervised experience as adviser of school publications and teacher of journalism or as a staff member of the *College Eye*, or *Old Gold*. Prerequisite: instructor's approval. Conference, one period a week; laboratory, four periods a week. (66:513)

Speech

An undergraduate major in speech consists of at least 30 hours of speech distributed as follows:

50:26, 30, 31, 32, 40, 51, 52, 193.....	21 hours
Either 50:143 or 152.....	3
Electives (excepting 50:61 and 130).....	6
	<hr/>
	30 hours

An undergraduate major in speech correction consists of at least 30 hours of work distributed as follows:

50:26, 32, 70, 171, 172, 173, 174, 175, 176, 195.....	28 hours
Either 20:112 or 50:176 (repeated).....	2
	<hr/>
	30 hours

A minor in speech consists of at least 16 hours of speech distributed as follows: 50:26, 30, 31, 51, 52, 193.

50:26 is a prerequisite to all other courses in speech except 50:70.

50:26. Fundamentals of Speech—3 hours. F-S. Development of effective communication through the presentation of original speeches and discussion of speech principles with emphasis on voice and articulation. (50:20, 50:21)

50:30. Public Speaking—3 hours. F-S. Application of the principles of psychology and composition to situations most frequently confronting the public speaker. Opportunities to speak before civic groups, professional associations, and radio audiences. (50:110)

50:31. Oral Interpretation—3 hours. F-S. Theory of and practice in the oral reading of prose and poetry. Prerequisite: 50:26 or equivalent preparation. (50:120)

50:32. Voice and Phonetics—2 hours. The phonetic alphabet, formation and classification of speech sounds, phonetic transcription. Introduction to anatomy and physics of speech. (50:307)

50:40. Discussion and Debate—3 hours. An examination of principles, methods, and types of logical inquiry and discussion. Practical experience in dealing with contemporary problems through the methods of discussion and debate. (50:335, 50:336)

50:50. Acting—3 hours. Basic principles and techniques of acting, class performance of group scenes. Prerequisite: 50:31. (50:340)

50:51. Play Production—3 hours. F-S. Fundamental play production procedures. (50:375)

50:52. Stagecraft—2 hours. F-S. Theory and practice of scenery construction and elementary stage lighting. Practical experience on current productions. Class discussion, two periods a week; laboratory, two periods a week. (50:578)

50:60. Fundamentals of Broadcasting—3 hours. Techniques of programming in radio and television. Training in educational broadcasting. (50:367)

50:61. Broadcasting Practice—3 hours. Staff assignments in the preparation and presentation of radio programs on the broadcasting schedule of station KYTC. (50:368)

50:70. Speech Correction—2 hours. Especially designed for classroom teachers. Nature, causes, and treatment of speech problems. Utilizing resources of the state speech correction program. (50:385)

50:130. Creative Dramatics for Children—2 hours. Methods of teaching creative dramatics and choral speaking to children. Planning of programs suitable for home rooms, school assemblies, and special occasions. (50:321)

50:131. Speech Composition—3 hours. An advanced course in the construction and presentation of speeches of considerable length. Prerequisite: 50:30.

50:132. Advanced Interpretation—2 hours. Application of the principles studied in Oral Interpretation to more advanced material. Prerequisite: 50:31 or equivalent. (50:523)

50:140. Persuasion—3 hours. Nature of belief and response; methods of intensifying belief and winning response through speech and writing. The particular role of persuasion in teaching and education. Prerequisite: 50:30. (50:504)

- 50:141 History of the Theatre**—3 hours. Changing forms and arts of the theatre from the beginning of civilization to the present day. (50:541)
- 50:143. Advanced Discussion and Debate**—3 hours. Specialized examination of the principles and methods involved in debate and discussion. Prerequisite: 50:40. (50:537, 50:538)
- 50:150. Costume and Make-up**—3 hours. Design and application of theatrical costume and make-up to the actor's characterization. Class discussion, three periods a week; laboratory, one period a week. (50:453, 50:458)
- 50:151. Stage Design and Lighting**—3 hours. Problems of design in scenery and use of lighting equipment. Class discussion, 3 hours; laboratory, 1 hour. (50:572, 50:573)
- 50:152. Directing**—3 hours. The function of the director in the modern theatre. Each student will stage a one-act play. Prerequisite: 50:51. (50:570)
- 50:171. Speech Science**—4 hours. Physical and psychological aspects of sound, anatomy of the ear and vocal mechanism, semantic and psychological factors in speech as a symbolic process. Prerequisite: 50:32. (50:307)
- 50:172. Voice and Articulation Disorders**—4 hours. Causal factors, diagnosis, and treatment of voice and articulatory problems.
- 50:173. Stuttering: Theory and Therapy**—3 hours. Lectures, readings, and projects covering research, theory, and principles of the therapy. Prerequisite: Approval of the instructor.
- 50:174. Organic Speech Disorders**—3 hours. Speech disorders associated with cleft palate, cerebral palsy, aphasia, post-laryngectomy, congenital language disabilities, and miscellaneous voice disorders. Prerequisite: 50:171 and 50:172. (50:508 and 50:509)
- 50:175. Introduction to Audiology**—3 hours. Types, causes, and measurement of hearing loss. Communication problems caused by hearing loss, and the use of speech reading, auditory training, and hearing aids. Prerequisite: 50:171 and 50:172. (50:511 and 50:513)
- 50:176. Clinical Practice**—2 hours. Clinical experience in diagnosis and treatment of speech problems. Prerequisite: Approval of the instructor. May be repeated once for credit. (50:586)
- 50:193. Teaching of Speech**—2 hours. F-S. Credit also as a course in Education for a student whose major is Speech. Prerequisite: 12 hours of Speech. Strongly recommended that this course precede student teaching. (50:491)
- 50:194. Methods of Directing Forensics**—2 hours. Credit also as a course in Education for a student whose major is Speech. Theory and methods involved in the direction of forensics programs. (50:552)
- 50:195. Methods in Speech Correction**—2 hours. Credit also as a course in Education for a student whose major is Speech. Organization and operation of a public school speech correction program. Prerequisite: Approval of the instructor. (50:587)
- 50:198. Independent Study.** See pages 41 and 63.
- 50:225. Bibliography and Methods of Research**—1 hour. Kinds, methods, and standard practices of scholarly research in the field of speech. (50:606)

50:230. Psychology of Speech—3 hours. Origin and development of speech and psychological factors in speech. (50:608)

50:240. Classical Rhetoric—2 hours. Survey of rhetorical theory from 500 B.C. to about 100 A.D. Special emphasis on the rhetorical theory of Aristotle, Cicero, and Quintilian. Modern theories examined in the light of the classical period. (50:551)

50:241. British and American Rhetoric and Oratory—3 hours. Survey of the more important British and American rhetoricians and orators from the eighteenth century to the twentieth. (50:653, 50:654)

50:250. Theatre Administration—2 hours. Problems in the organization and leadership of a theatre program in the school.

50:282. Seminar in Educational Theatre—2 hours. Problems of theatre production in the secondary schools. Subject matter chosen from the areas of direction, design, and technical problems, or theatre literature. May be repeated for a maximum of 4 hours credit. (50:682)

50:283. Seminar in Teaching Speech—2 hours. Emphasis on (1) problems related to organizing and teaching speech courses in the public schools and (2) directing of extracurricular speech activities. (50:692)

50:284. Speech Correction and the Curriculum—2 hours. Survey of the basic speech processes and the principles of speech correction; resources of speech correction programs; problems in utilizing and integrating speech correction services. Course content partly determined by needs and interests of class members. (50:681)

50:285. Seminar in Public Address—2 hours. Problems involved in public address. Class interest determines whether the emphasis during any given semester will be upon (1) persuasion, (2) rhetoric, or (3) debate and discussion. (50:680)

50:298. Field Study. See pages 41 and 63.

50:299. Research. See pages 63 and 128.

Religious Literature

64:51. Introduction to the Bible—3 hours. Consideration of the books of the Bible with respect to authorship, chronology, content, and meaning. (64:125)

64:112. History of Christianity—3 hours. Survey of the origin of the Christian religion and its penetration into all parts of the world. (64:360)

64:113. Problems of Religion—2 hours. Specific religious problems of those enrolled in the course. A substantial introduction to the field of religious thought. (64:362)

64:114. Religious Ideas in America—3 hours. Religious beliefs and practices of the American people; the common and distinguishing characteristics of the various religious bodies in American life. (64:404)

64:115. The History of Christianity in America—3 hours. Significance of Christianity in the development of the American nation. (64:405)

64:116. Religions of the World—3 hours. Study of the great religions of the world. Credit in this course may be counted as a part of a major in social science. (64:502)

64:120. The Heritage of the Bible—2 hours. F-S. Consideration of the primary documents of our religious heritage without imposing any sectarian or particular point of view upon the student. Offered to accompany student teaching. (64:426)

64:190. Teaching of Religion—2 hours. Skills and methods in religious education in the local church; also materials for use in small as well as large Sunday Schools. (64:490)

Philosophy

65:121. Introduction to Philosophy—2 hours. F-S. Basic problems of philosophy presented through reading and discussion. Designed to clarify and deepen the student's thinking about basic issues of life. To accompany student teaching. (65:406)

65:141. Western Philosophy—2 hours. Introduction to the major philosophical ideas relevant to problems of present-day western man. Special attention given to philosophers who have influenced modern education. Credit in this course may be counted as a part of a major in social science. (65:408)

65:142. Ethics—2 hours. Analysis of the question "What is Good?" along with the study of various answers which have been, or can be, given to that question. (65:565)

65:143. Esthetics—3 hours. Analysis and discussion of the chief theories of artistic meaning through selected source readings.

Library Science

Rod, Head. McCusker, McLeod, Noonan.

A major in library science consists of at least 24 hours which must include 35:12, 14, 115, 120, and 190. Students primarily interested in the elementary school field will take also 35:112; those whose interests are chiefly in the secondary school will take 35:114. The remaining work may be chosen from other courses in library science or from the following: 21:131, 21:145, 21:172, 60:100.

A minor in library science consists of 16 hours which must include 35:12, 14, 115, 190, and either 35:112, or 114.

35:10. Library Orientation—1 hour. F-S. Practical working knowledge of the library and its resources. (35:110)

35:12. The School Library—3 hours. F. Problems and methods of effective library service on all levels of the school program. (35:320)

35:14. Book Selection—2 hours. S. General principles of selection. Examination of standard aids. (35:332)

35:112. Library Materials for Children—3 hours. F-S. Survey of children's literature with attention to principles of selection and standards of evaluation of book and non-book materials for the elementary school program. (35:440)

35:114. High School Library Materials—4 hours. F. Selection and evaluation of materials for junior and senior high school students. Reading interests, habits, and needs of young people. (35:450, 35:452)

35:115. Cataloguing and Classification—3 hours. F. Principles of cataloguing and Dewey Decimal classification. (35:323, 35:330)

35:120. Reference—3 hours. S. Examination, evaluation, and use of basic reference sources. (35:435)

35:130. History of Books—2 hours. S. Historical development of books and libraries. (35:462)

35:135. Library Organization—2 hours. S. Various types of libraries, with relationship of the school library to each. (35:521)

35:190. Teaching the Use of Libraries—2 hours. S. Methods of teaching library skills. Credit also as a course in education for a student whose major is library science. (35:490)

Mathematics

Van Engen, Head. Adkins, Brune, Crumley, Gibb, Hamilton, Lott, Schurrer, I. Silvey, Trimble.

An undergraduate major in mathematics consists of at least 28 hours of work in mathematics which should include 80:146, 190, and 172 or 160.

A minor in mathematics consists of at least 15 hours of work in mathematics including 80:46.

Students who have had one year of algebra and one year of geometry in high school, or its equivalent, and who have met the course prerequisites may take 80:145 and 80:146 in the sophomore year.

General Courses in Mathematics

80:20. Mathematics for General Education—3 hours. F-S. The language of mathematics as an aid to modern living. (80:94)

80:108. Mathematics Laboratory—2 hours. Design, construction, and use of instructional materials for teaching elementary, junior high, and senior high mathematics. Four periods a week. (80:553)

80:109. Reading in Mathematical Literature—2 hours. Topics selected from mathematical literature not considered in course work. May be repeated for credit. Prerequisite: Consent of the department. (80:581)

80:198. Independent Study. See pages 41 and 63.

80:298. Field Study. See pages 41 and 63.

80:299. Research. See pages 63 and 128.

Courses Designed for Elementary Teachers

80:31. Arithmetic: Principles and Teaching—3 hours. F-S. Arithmetic for teachers of elementary grades. (80:11, 80:111, 80:322)

80:132. Teaching of Arithmetic I—2 hours. F. Basic principles, place and nature of arithmetic in the lower elementary grades. Prerequisite: 80:31. (80:522)

80:134. Teaching of Arithmetic II—2 hours. S. Basic principles, place and nature of arithmetic in the upper elementary grades. Prerequisite: 80:31, or 80:46 except in the case of Junior High majors. (80:408, 80:523)

80:138. Evaluation in Elementary Arithmetic—2 hours. Standardized and teacher-made instruments for diagnosis and measurement. Prerequisite: 80:132 or 80:134. (80:534)

80:183. History of Arithmetic—2 hours. Development of the Hindu-Arabic and other number systems. Origins of the algorithms of arithmetic. (80:583)

80:185. Clinical Practice in Arithmetic—3 hours. Opportunity for students to work with clinical cases under guidance. Prerequisite: 80:132 or 80:134. (80:585)

80:235. Problems in Teaching Arithmetic—2 hours. Seminar. Students work on individual problems and share findings. Prerequisite: Consent of the department. (80:691)

Courses Designed for Secondary Teachers

80:45. Elementary Analysis I—5 hours. F-S. Properties of algebraic, exponential, logarithmic, and circular functions; derivatives of polynomials. Mathematical structures. (80:105 and part of 80:106)

80:46. Elementary Analysis II—5 hours. F-S. Continuation of Elementary Analysis I. (80:107 and part of 80:106)

80:54. Mathematics of Measurement—3 hours. S. Laboratory approach to the applied problems of elementary analysis. Prerequisite: 80:46. Four periods a week. (80:304, 80:323)

80:55. College Geometry—3 hours. Consideration of the postulational approach applied to plane geometry and algebra. Prerequisite: 80:46. (80:306, 80:320, 80:323)

80:62. Advanced Algebra—3 hours. F. The algebra of polynomials and selected topics from the theory of equations. Prerequisite: 80:46. (80:309)

80:107. Mathematics of Finance—2 hours. S. Interest, annuities, and life insurance. Prerequisite: 1 year of high school algebra or 80:45. (80:307)

80:145. Calculus I—5 hours. F. The derivatives and integrals of the more important functions studied in 80:45 and 80:46 and their applications. Prerequisite: 80:46. (80:415 and part of 80:416)

80:146. Calculus II—5 hours. S. Continuation of Calculus I. Prerequisite: 80:145. (80:417 and part of 80:416)

80:149. Differential Equations—3 hours. Differential equations of the first order and linear equations with constant coefficients. Prerequisite: 80:146. (80:505)

80:160. Introduction to Modern Algebra—4 hours. F. Concepts of ring, group, and field used to explore selected topics in the theory of numbers and the theory of equations. (80:540)

80:172. Fundamentals of Statistical Methods—3 hours. S. Intuitive approach to probability and inferential statistics. (80:506)

80:174. Mathematical Statistics I—3 hours. Introduction to probability theory, sampling distributions, testing hypotheses and estimation. Prerequisite: 80:146. (80:665)

80:180. History of Mathematics—3 hours. Origins of the fundamental ideas of mathematics from Babylonian times to the twentieth century. Prerequisite: 80:46. (80:507)

80:190. The Teaching of Secondary Mathematics—3 hours. S. Credit also as a course in Education for a student who has a major in Mathematics. Problems of secondary school mathematics. Prerequisite: 80:46. (80:490)

80:192. Evaluation in Secondary School Mathematics—2 hours. Standardized and teacher-made tests to measure meaning and understanding. (80:535, 80:536)

80:210. Theory of Numbers—3 hours. Basic interrelations of the system of integers. (80:603)

80:240. Mathematical Analysis I—3 hours. Advanced calculus; improper and line integrals; partial differentiation and applications. (80:605)

80:241. Mathematical Analysis II—3 hours. Elementary functions of a complex variable; power series; differentiation and integration of functions of a complex variable. (80:607)

80:250. Modern Geometries—3 hours. Topics from advanced Euclidean, non-Euclidean, and elementary projective geometries. (80:660)

80:272. Mathematical Statistics II—3 hours. Design of experiments; analysis of variance. Non-parametric methods.

80:290. Problems in Teaching Junior High School Mathematics—2 hours. Seminar. Students work on individual problems and share findings. Prerequisite: Consent of the department. (80:692)

80:291. Problems in Teaching High School Mathematics—2 hours. Seminar. Students work on individual problems and share findings. Prerequisite: Consent of the department. (80:693)

Music

Russell, Head. Barker, Baum, Beckman, Birkhead, Bock, Burns, Coleman*, Conklin, Fred, Hill, Holst, Holvik, Howe, Iverson, Kennedy, Latham, Matheson, Mauck, Maxwell, Mitchell*, Redner, Sanders, Wendelburg, Whisner. Part-time: Kurtz.

An undergraduate major in music consists of 50 hours of credit which must include:

Applied Music.....	16 hours
Theory 58:50; 51, 52, 53, and electives.....	19
Music History and Literature 59:170, 171.....	6
Music Methods (elementary and secondary).....	7
Electives in Music.....	2
Senior Recital.....	0

50 hours

* On leave

The student must choose a field of applied music (known as the applied major field) for specialization, and must attain a proficiency grade of at least X in this field. A student enrolling as a freshman should have attained a proficiency grade of VI in some applied area. During his college years he will be expected to advance one grade each semester, attaining a proficiency grade of XIV at the close of the senior year.

A student who chooses a major in music must participate in at least one of the large ensembles such as orchestra, band, chorus, a cappella, chapel choir, or women's chorus, each semester he is enrolled as a regular college student. Exceptions to this may be made by the Head of this department.

It is possible for a student whose major is music to secure an endorsement as an elementary school teacher. Students interested in this possibility should consult the Head of this department or the Registrar.

A minor in music consists of 17 hours in music, including 58:50, 51, and at least 2 hours of applied music. In the school music (vocal) area, it is recommended that 57:80, 81, 82, and 58:63 be included. In the instrumental area it is recommended that 57:91, 92, 93; 58:63; 57:195, 196 be included. 52:20 may be used in meeting the minor requirement; however, credit in band, orchestra, or chorus may not be used on the minor.

A student whose major is music may receive up to 3 hours of credit per semester in applied music—one lesson, 1 hour; two lessons, 2 hours; three lessons, 3 hours credit.

One hour of credit may be earned by a student who completes an academic year (2 semesters) in either band, orchestra, or one of the several choruses. No credit is allowed unless participation is continuous for a full academic year. Credit is reported only at the close of the spring semester. Not more than one hour of such credit may be used in meeting the requirements of the two year plan or more than two in meeting degree requirements.

Activities: The department of music maintains many organizations and ensembles which present numerous concerts throughout the year; a concert band, a symphony orchestra, a marching band, a mixed chorus, a women's chorus, an a cappella choir, and miscellaneous chamber groups. An oratorio is given before Christmas recess by the chorus and orchestra; an opera or operetta is presented each year. Opportunity for participation in any one or several of these activities is afforded all students in the college as well as those who major in music. Opportunities for performance in recital, church, clubs, radio, and concert are numerous for the individual, as a soloist, or as a member of an ensemble. During the year a number of faculty recitals are open to the public. Concerts by nationally known artists, sponsored by the college, also afford the student opportunities for hearing the best in music.

General Courses in Music

52:20. Exploring Music—2 hours. F-S. Designed to introduce the art of music to non-performers. (52:130)

52:90. Elementary Grade Music—3 hours. F-S. For the room teacher in the elementary school. One hour per week is devoted to class work in piano or voice unless the student shows sufficient proficiency in either or both to be released from the requirement. (52:10 and 52:12)

52:221. Methods in Music Research—1 hour. F. Designed to acquaint the student with methods in musical research; to help locate a thesis topic and source material. Should be taken during the first semester in residence by all candidates for the master's degree with a major in Music. (52:606)

52:298. Field Study. See pages 41 and 63.

52:299. Research. See pages 63 and 128.

Applied Music

Individual Lessons. For each hour of credit the work in applied music requires one lesson a week for one semester. A student whose major is Music may earn 3 hours of credit by taking 3 lessons a week. Two of these three hours may be in the same applied area (e.g., piano). The amount of credit to be carried will be determined at the time of registration. The Head of this department assigns all students to specific instructors.

54:30, 54:130. Flute.

54:31, 54:131. Oboe.

54:32, 54:132. Clarinet.

54:33, 54:133. Bassoon.

54:34, 54:134. Saxophone.

54:35, 54:135. French Horn.

54:36, 54:136. Cornet-Trumpet.

54:37, 54:137. Trombone.

54:38, 54:138. Baritone.

54:39, 54:139. Tuba.

54:40, 54:140. Percussion.

54:41, 54:141. Violin.

54:42, 54:142. Viola.

54:43, 54:143. Cello.

54:44, 54:144. String Bass.

54:45, 54:145. Harp.

54:46, 54:146. Piano.

54:47, 54:147. Group Piano.

54:48, 54:148. Organ.

54:49, 54:149. Voice.

54:189. Senior Recital—no credit. Required of all seniors. (54:502)

String ensembles for the study and performance of sonatas, trios, quartets, and quintets are provided for students of violin, viola, cello, bass, harp, and piano. Woodwind and brass ensembles for work of a similar nature are provided for students of those instruments.

Students may also receive credit in band, chorus, or orchestra. Limitations given above. Numbers are assigned as follows depending on the student's classification:

- 52:10, 52:110. A Cappella Choir.
- 52:11, 52:111. College Chorus.
- 52:12, 52:112. Chapel Choir.
- 52:13, 52:113. Women's Chorus.
- 52:15, 52:115. Band.
- 52:17, 52:117. Orchestra.

Music Methods

57:80. **Elementary Music Methods**—2 hours. F. Methods and materials for kindergarten through sixth grade. May be taken for 1 hour credit by those who have credit in 52:90. Prerequisite: 58:50 or equivalent. (57:400, 57:401, 57:402)

57:81. **Secondary Music Methods**—2 hours. S. Methods and materials for the junior and senior high school, designed to build a well organized music program. Prerequisite: 58:50 or equivalent. (57:402, 57:403, 57:408)

57:82. **Choral Techniques and Materials**—2 hours. F. Materials and special techniques of conducting, tone production, and motivation in development of large vocal ensembles. (57:472)

57:91. **Instrumental Techniques I—Strings**—1 hour. F-S. Practicum, methods, materials, and techniques for teaching strings. (54:300, 54:306)

57:92. **Instrumental Techniques II—Woodwind**—1 hour. F-S. Practicum, methods, materials, and techniques for teaching woodwinds. (54:302, 54:305, and part of 54:304)

57:93. **Instrumental Techniques III—Brass and Percussion**—1 hour. F-S. Practicum, methods, materials, and techniques for teaching the cornet-trumpet, French horn, trombone-baritone, bass, and percussion. (54:303 and part of 54:304)

Note: 57:94, 95, 96 meet as a unit; however, credit is granted only in the area wherein the prerequisite has been met.

57:94. **Advanced Instrumental Techniques IV—Strings**—1 hour. S. Ensemble methods, materials, and problems pertaining to development of grade and junior high school orchestra. Prerequisite: 57:91 or equivalent.

57:95. **Advanced Instrumental Techniques V—Woodwind**—1 hour. S. Ensemble methods, materials, and problems pertaining to development of grade and junior high school band. Prerequisite: 57:92 or equivalent.

57:96. **Advanced Instrumental Techniques VI—Brass and Percussion**—1 hour. S. Ensemble methods, materials, and problems pertaining to development of grade and junior high school bands. Prerequisite: 57:93 or equivalent.

57:181. **Vocal Ensemble Materials**—2 hours. F-S. Materials for the small vocal combination. Offered for vocal majors to accompany student teaching.

57:182. **Voice Repertoire**—2 hours. S. A comprehensive survey of vocal literature and its suitability for different voices. Designed primarily for those interested in teaching singing. (57:539)

57:183. **Opera and Operetta Production**—1 hour. F. Techniques and materials used in the school dramatic musical production. Students direct a scene from an opera or operetta. Practical experience also is gained in the annual production of a departmental opera. (57:585)

57:195. **Instrumental Materials**—2 hours. S. Analysis and evaluation of solo and ensemble material for string, woodwind, and brass combinations, for the large group or choir, and for the full band and orchestra. Designed for students who major in instrumental music. (57:431, 57:532)

57:196. **Band Management**—2 hours. F. Practical problems of the school band. (57:513)

57:197. **Instrumental Upkeep and Repair**—2 hours. A laboratory course where practical projects in upkeep and repair are undertaken by each student. Offered for instrumental major to accompany student teaching.

57:198. **Independent Study**. See pages 41 and 63.

57:280. **Planning and Supervision**—2 hours. S. Designed for the prospective supervisor of music in a medium to large school system. (57:691)

57:281. **Seminar in Chorus**—2 hours. F. Analysis of problems in the vocal program of junior and senior high schools. (57:682)

57:290. **Seminar in Band**—2 hours. S. Designed for the student who has had actual teaching experience. Practical situations studied and analyzed. (57:680)

57:291. **Seminar in Orchestra**—2 hours. F. Designed to implement the strings and orchestral program in the elementary and secondary schools. (57:681)

57:292. **Psychology of Music**—2 hours. F. The psychological basis of teaching music. May be used to satisfy the special methods elective in the professional core for the master's degree. (57:601)

Music Theory

58:50. **Harmony, Ear Training, and Sight Singing I**—3 hours. F. Elementary theory. Rhythmic dictation. Melodic dictation. Sight singing, part writing, and figured basses. Keyboard harmony. (58:113 and part of 58:114)

58:51. **Harmony, Ear Training, and Sight Singing II**—3 hours. S. Continuation of 58:50. (58:115 and part of 58:114)

58:52. **Harmony and Counterpoint I**—3 hours. F. The contrapuntal-harmonic style of the eighteenth century. Continued ear training and keyboard drill, but more emphasis on written theory. (58:308 and part of 58:317)

58:53. **Harmony and Counterpoint II**—3 hours. S. Continuation of 58:52 with the addition of some nineteenth and twentieth century style practices. (58:318 and part of 58:317)

58:63. **Conducting**—2 hours. S. Baton technique, score reading, rehearsal technique, and practice in conducting. (58:412)

58:150. **Eighteenth Century Counterpoint**—3 hours. F. Analysis of contrapuntal techniques and instrumental forms of the eighteenth century. Prerequisite: 58:53 (58:403, 58:404, 58:405)

58:151. **Sixteenth Century Counterpoint**—2 hours. S. The vocal polyphonic style of the sixteenth century. Analysis. Creative work in vocal forms: motet, madrigal, mass. Prerequisite: 58:53. (58:507)

58:152 **Composition**—3 hours. F. Creative work in the primary forms. Prerequisite: 58:53. (58:414, 58:514, 58:515, 58:516)

58:153. **Instrumentation and Arranging**—2 hours. S. Ranges, transpositions, functions, and uses of all instruments of the band and orchestra; arranging for choir, orchestra, and band. Prerequisite: 58:53. (58:409)

58:252. **Advanced Composition**—3 hours. F. Creative work in the larger forms. Student must complete at least one original project in any of these forms. Prerequisite: 58:152. (58:615)

58:253. **Advanced Arranging**—2 hours. S. Practical work in scoring for orchestra, band, or chorus. Student must complete at least one transcription for a large instrumental or vocal group, or for a combination of both. Prerequisite: 58:153. (58:618)

Music Literature

59:170. **Music Literature I**—3 hours. F. Survey of music and its forms from classical antiquity to the beginning of the nineteenth century. (58:441, 58:535)

59:171. **Music Literature II**—3 hours. S. Survey of music from Beethoven to the present day. (58:441, 58:536, 58:537)

59:175. **Music Literature—Baroque**—2 hours. F. even years. The early, middle, and late Baroque periods in Italy, the Netherlands, Germany, France, Spain, England. Prerequisite: 59:171. (58:544)

59:176. **Music Literature—Contemporary**—2 hours. F. odd years. Principal styles and trends in the twentieth century. Prerequisite: 59:171. (58:545)

59:270. **Music Literature—Renaissance**—2 hours. S. odd years. Western music to about 1600. Prerequisite: 59:171. (58:648)

59:271. **Music Literature—American**—2 hours. S. even years. History and literature of our music from 1620 to the present.

Physical Education

Courses Offered to Both Men and Women

37:1. **Physical Education**—1 hour. F-S. Games, recreational games, beginning folk dance, intermediate folk dance, advanced folk dance, American country dance, modern dance. (37:01)

37:10. First Aid to the Injured—2 hours. F-S. Combined Standard and Advanced Red Cross course. Leads to certificates. (37:100)

37:13. Physical Education for the Elementary Grades—2 hours. F-S. No credit for a student who has credit in 39:14. Teaching methods and materials for elementary school physical education. Experience in activities. Three periods a week. (37:113)

37:15. Personal Health—2 hours. F. Consideration of various health problems.

37:50. Anatomy—3 hours. S. Gross anatomy of the osseous and muscular systems. No credit for a student who has credit in 38:150. (37:100)

37:110. Health Instruction—2 hours. F-S. Methods and materials for health instruction in the school. (37:507)

37:124. Physical Education for High School Girls—2 hours. S. odd years. No credit for a major in physical education for women. Survey of activities for girls in secondary school program. (37:530)

37:131. Recreational Leadership—2 hours. F. Principles and problems of recreational leadership. Agencies and organizations. Program materials. (38:459, 39:305)

37:132. Community Recreation and the School—2 hours. S. Trends in the development of school-community programs. Problems of leadership, facilities, and organization. (37:509)

37:151. Kinesiology—3 hours. F. Application of principles of mechanics to body movement. No credit for a student who has credit in 38:150. Prerequisite: 37:50. (37:301)

37:152. Adapted Physical Education—2 hours. S. Posture examination; the posture program; remedial exercises; and the handicapped child. Prerequisites: 37:50, 37:151, and 84:38. Three periods a week. (37:408)

37:153. Physiology of Exercise—2 hours. S. Effects of exercise upon the organic functions of the body. Prerequisites: 37:50, 37:151, or equivalent, and 84:38. (37:410)

37:174. Tests and Measurements in Physical Education—2 hours. S. Credit also as a course in Education for a student whose major is Physical Education. Survey, analysis, and use of tests in physical education. (37:492)

37:176. Organization and Administration of Physical Education—2 hours. S. School and community relationships; budget; supervisory problems. Administration of program, and facilities. (38:473; 39:406)

37:180. Physical Education and the Child—2 hours. S. Even years. Physical education as a part of the school curriculum. Implications of child development in planning a program of elementary physical education. Problems of administration and public relations. Prerequisite: 21:14 or equivalent. (37:532)

37:181. History and Philosophy of Dance—2 hours. S. even years. The dance from primitive ritual to the art forms of the twentieth century. (39:400)

37:190. Methods and Principles of Physical Education—3 hours. F. Credit as a course in Education for a student whose major is Physical

Education. General problems of class organization and class management. Identification of principles basic to program development. (37:571, 38:490, and 39:490 in part)

37:198. Independent Study. See pages 41 and 63.

Physical Education for Men

Mendenhall, Head. Clark, Dickinson, Koll, Lyons, Starbeck, Witham, Whitford.

A major in physical education for men consists of 32 hours of physical education courses, exclusive of 38:1 courses.

Required courses: 37:110, 190; 38:4, 5, 101, 102, 103, 104, 105, 106, 107, 115, 150, 170.....	26 hours
Electives	6
	32 hours

A minor in physical education for men consists of at least 18 hours as follows:

Required courses: 38:4, 101, 102, 107, 115, 170.....	13 hours
Electives chosen from: 37:131, 180, 190; 38:5, 103, 104, 105, 106	5
	18 hours

During one of the first two semesters men students must receive credit in a swimming course or pass the standard swimming test required by the department.

Men may use only one semester hour credit in courses open to both men and women in fulfilling the 38:1 requirement.

38:1. Physical Education. This work in 38:1 required of all men students is selected from the following courses: badminton, baseball, basketball, boxing, cross-country, diamond-ball, floor and mat work, football, games, golf, gymnastics, handball, modified activities, six-man football, soccer, softball, speedball, beginning swimming, advanced swimming, tennis, touch football, track and field, volleyball, and wrestling. (38:01)

38:4. Minor Sports—1 hour. F. Individual and team activities, appropriate for junior and senior high schools, physical education, and recreation programs. Two days.

38:5. Wrestling—1 hour. F. Fundamentals, elementary and advanced skills, conditioning, strategy, and administration of wrestling. Two days. (38:458)

38:101. Football—3 hours. F. Professional preparation for coaching football; condition, individual offense and defense; team offense and defense. Daily. (38:451)

38:102. Basketball—3 hours. F. Fundamentals of offensive and defensive basketball tactics with individual and team formations. Daily. (38:452)

38:103. Baseball—1 hour. S. Fundamentals of baseball techniques, individual position play, offensive and defensive team strategy and management. Two days. (38:353)

38:104. Track and Field—1 hour. S. Rules and techniques in standard track events. Demonstration and coaching of each event required. Meet management stressed. Two days. (38:354)

38:105. Gymnastics—1 hour. S. Gymnastic marching, elementary exercises on bars, horse, mats, and other apparatus. Two days. (38:455)

38:106. Swimming—1 hour. S. Teaching swimming and diving. Red Cross Senior Life Saving and instructor's certification. Prerequisite: ability to swim. Two days. (38:456)

38:107. Games and Rhythmic Activities—2 hours. F-S. Rhythms, games, and individual physical education activities for elementary, junior, and senior high schools. Four days (38:457)

38:115. Training Techniques—2 hours. F-S. Demonstration and practical work in the prevention and treatment of athletic injuries; diet, care of equipment, physiotherapy. Offered to accompany student teaching. (38:563)

38:150. Anatomy and Kinesiology—3 hours. F-S. Particular attention to the skelton, muscular system, and to joint construction. Application to analysis of skills, form, and techniques used in teaching physical education. No credit for a student who has credit in 37:50 or 37:151. (37:300, 37:301)

38:170. Curriculum and Administration of Physical Education—2 hours. F-S. School and community relationships; budget; curriculum problems. Administration of program, equipment, locker room, play field, and gymnasium. Two days. (38:473, 38:574)

38:172. Group Leadership—2 hours. F-S. Experience in group leadership of different activities under the supervision of an instructor. Prerequisite, or corequisite: 37:190. (38:472)

Physical Education for Women

Bontz, Head. Bell, Butterworth, Crawford*, Moon, Posson, Potter, Ramsay, Short, Skittery, Swanson**, Winsberg, Yager. Part Time: Van Ness.

A major in physical education for women consists of 40 semester hours which must include 84:38, and 7 hours in 39:6, 7, 108, and 109, or equivalent; and which should include: 37:15, 50, 110, 151, 152, 176, 190; 39:14, 80, 193, and 5 hours from 39:191 and 39:192.

It is possible for a major in physical education for women to become certified as an elementary school teacher.

A minor in physical education for women consists of 18 semester hours in physical education which should include 37:190, 39:193, and 3 hours from 39:191 and 39:192, or 37:124; 4 hours (12-16 activities) in physical education activity classes, and 5 additional hours elected from courses: 37:10, 15, 110, 151, 152, 153, 174, 176; 39:108, 109, 191, 192, 193. Students should consult with the Head of this department in choosing activity courses.

* On Leave

** Exchange Instructor, England, 1956-57.

39:1. Physical Education—1 hour. F-S. The work in 39:1 required of all women students is selected from the following courses:

Group Games and Team Sports: beginning basketball, intermediate basketball, advanced basketball, field-ball, simple team games, beginning hockey, advanced hockey, beginning soccer, advanced soccer, beginning softball, intermediate softball, advanced softball, speedball, beginning volleyball, intermediate volleyball, and advanced volleyball.

Individual and Dual Activities: beginning archery, intermediate archery, archery golf, indoor archery, badminton, bowling, canoeing, beginning golf, intermediate golf, horseback riding, ice skating, outing activities, recreational games, stunts and tumbling (including trampoline), beginning swimming, first intermediate swimming, second intermediate swimming, advanced swimming, diving, lifesaving, beginning tennis, intermediate tennis, advanced tennis, and winter sports.

Rhythmic Activities: beginning folk dance, intermediate folk dance, advanced folk dance, beginning modern dance, intermediate modern dance, advanced modern dance, beginning social dance, advanced social dance, beginning tap and clóg, and American country dance.

Fundamentals of Body Movement: body mechanics, and adapted gymnastics.

Physical Education for Special Groups: activities for social recreation, fundamentals of rhythmic education, individual activities, and physical education activities for high school girls.

Each semester certain activity courses taught by the department of physical education for men are open to women students for credit. A woman may enroll for other activity courses in the department of physical education for men only upon the approval of that department and will receive credit for the course only by securing the advance approval of the heads of both departments of physical education and the Dean of Instruction.

39:6. Freshman Major Activities—1 hour. F-S. Open only to prospective majors in Physical Education. Four periods a week. Activities in which freshmen participate are: soccer and speedball, tennis, basketball, volleyball, modern dance, softball, and swimming. (39:06)

39:7. Sophomore Major Activities—2 hours. F-S. Open only to majors in Physical Education. Eight periods a week. Hockey, tennis, archery, golf, badminton, stunts and tumbling, folk dance, American country dance, social dance, modern dance, body mechanics, lifesaving, swimming, diving. (39:07)

39:11. Water Safety—1 hour. S. Leads to American Red Cross Water Safety Instructors certificate. (39:102)

39:14. Activities in the Elementary School—2 hours. F. No credit for a student who has credit in 37:13. Materials for the elementary schools. Participation in activities. Discussion, 1 period a week; laboratory, two periods a week. (39:202)

39:33. Camp Leadership—3 hours. S. Background and trends in the camping movement. Leadership techniques and laboratory experience. Discussion, two periods a week; laboratory, two periods a week. (39:303)

39:80. Introduction to Physical Education—1 hour. Brief survey of the teaching of physical education as a profession. Orientation of the student to departmental policies and practices.

39:108. Junior Major Activities—1 hour. F-S. Open only to majors and minors in Physical Education. Four periods a week. May be elected to develop further skill in activities as needed. (39:08)

39:109. Senior Major Activities—1 hour. F-S. Open only to majors and minors in Physical Education. Four periods a week. Seniors are given an opportunity to improve physical skills. (39:09)

39:191. Methods and Materials in Physical Education—2 hours. F-S. Methods and materials in the teaching of physical education activities. May be repeated for credit in combination with 39:192 to a total of 6 hours credit. May be accompanied by 39:7, 108, or 109 for credit. Four periods a week. (In part: 39:403, 404, 412, 490)

39:192. Methods and Materials in Physical Education—1 hour. F-S. Methods and materials in the teaching of physical education activities. May be repeated for credit in combination with 39:191 to a total of 6 hours credit. May be accompanied by 39:7, 108, or 109 for credit. Two periods a week. (In part: 39:403, 404, 412, 490)

39:193. Dance in Education—3 hours. F. Methods and materials for a rhythmic program in the elementary and secondary school. Four periods a week. (39:401)

39:194. Teaching of Swimming and Aquatics—2 hours. S. Prerequisite: ability to swim two strokes. Lecture and laboratory, three periods a week. (39:413)

Science

Lantz, Head. Allegre, Dowell, H. Fowler, Grant, Jensen, Kercheval, Lacy, Lee, Lyon, D. Matala, McCollum, H. Nelson, Patten, Poppy, Rogers, Sauer, E. Smith, Wilson, Winier, Worley. Part-time: Abbott, Getchell.

A major in science consists of 40 hours as listed below plus such general education courses in Science as the student does not test out of.

General Education

82:20 The Physical Sciences	3 hours
82:22 The Biological Sciences.....	4
82:24 World Resources	3
	10 hours

Required major

88:54, 88:56 Physics	8
86:44, 86:46, or 86:48 Chemistry.....	8
84:34 Zoology	4
84:36 Botany	4
82:190 Teaching of Science.....	3
Advanced courses numbered 100-199 in field of emphasis....	10
Electives in Science	3
	40 hours

The required minor cannot be taken in a science field but a student who takes enough additional work in science to meet the requirements of a minor may have the minor entered on his student record.

General Courses in Science

82:18. Physical Science for Elementary Grades I—3 hours. F-S. Common physical and chemical phenomena. Simple experiments with the physics and chemistry of everyday life. Four periods a week. (82:18)

82:20. The Physical Sciences—3 hours. F-S. Basic concepts of physical science and their significance. Methods of science. (82:116)

82:22. The Biological Sciences—4 hours. F-S. Basic principles of biology and their social and economic implications. Human physiology and health. It is recommended that 82:20 precede this course. Class discussions, three periods a week; laboratory, two periods a week. (82:117, 82:118)

82:24. World Resources—3 hours. F-S. Distribution and utilization of arable land, grasslands, and forests in various types of climates; man's response to natural environment. Power and metal resources; manufacturing regions. It is recommended that 82:22 precede this course. (87:162, 87:163, 82:119)

82:118. Physical Sciences for Elementary Grades II—2 hours. F-S. Physical science materials for the elementary school. Practice in demonstrations. Simple experiments; source material. Class discussion, one period a week; laboratory, two periods a week. Prerequisite: 82:20 or equivalent. (82:518)

82:176. Field Natural History—8 hours. Six weeks field trip (and two weeks on campus) devoted to natural phenomena with particular attention to trees, wild flowers, birds, mammals, insects, minerals, rock formations, and man's use of the land, in western forests, prairies, mountains, sagebrush, desert, lakes, and the Pacific Ocean. About 6,000 miles travel by bus, with meals in restaurants, and sleeping accommodations in motels and college field stations. No prerequisite. Blanket fee to cover expenses. Class and field work, eight hours a day. Given occasionally in the summer term. (82:509)

82:190. The Teaching of Science—3 hours. F-S. Credit also as a course in Education for a student whose major is Science. Prerequisite: ten hours of science. Should precede student teaching. Class discussions, three periods a week. (82:490)

82:198. Independent Study. See pages 41 and 63.

82:200. History and Philosophy of Science—2 hours. F. Philosophical, and historical development of the scientific method. The content of science and philosophy. (82:603)

82:280. Seminar in Science Teaching—2 hours. S. Special problems in the teaching of science. Discussion of recent advances in science teaching. Students select areas for investigations in which they are interested. (82:691)

82:298. Field Study. See pages 41 and 63.

82:299. Research. See pages 63 and 128.

Biological Science

A student interested in a major in Biological Science should major in Science and declare biological science as his area of special interest.

A minor in Biological Science consists of at least 16 hours including 82:22, 84:34, and 84:36.

84:10. Biological Science for Elementary Grades I—4 hours. F-S. Study of plant and animal life with emphasis on trees, insects, birds and man. Conservation of plant and animal resources. Biological principles as applied to the physiology and health of man. Public health agencies. Class discussion, two periods a week; laboratory, four periods a week. (84:10, 82:118)

84:31. Anatomy and Physiology—4 hours. F. For nurses in training. Open only to them. Class discussions, three periods a week; laboratory, two periods a week. (84:114)

84:33. Microbiology—3 hours. F. For nurses in training. Open only to them. Class discussions, two periods a week; laboratory, two periods a week. (84:113)

84:34. General Zoology—4 hours. F-S. Activities, structure, methods of reproduction, and relationships of major types of animal life. Prerequisite: 82:22. Class discussions, two periods a week; laboratory, four periods. (84:100)

84:36. General Botany—4 hours. F-S. Activities, structure, methods of reproduction, relationships, and uses of major types of plant life. Prerequisite: 82:22. Class discussions, two periods a week; laboratory, four periods. (84:102)

84:38. Human Physiology—3 hours. F-S. Basic anatomy and functioning of the organ systems of the human body. Prerequisite: 82:22 or equivalent. Class discussions, two periods a week; laboratory, two periods a week. (84:111)

84:104. Iowa Conservation Problems B—3 hours. Wildlife, soil nutrients, and balance of nature. Field experience with emphasis on associations and interrelationships. Preparation of visual aids, demonstrations, bibliographies, and projects. Offered only at Conservation Camp. (84:104)

84:105. Iowa Conservation Problems A—3 hours. S. Soil, water, and forests and their conservation. Field experience with emphasis on associations and interrelationships. Preparation of visual aids, demonstrations, bibliographies, and projects. Two discussion and two laboratory periods per week when offered on campus. Chiefly field experience when offered at Conservation Camp. (84:105)

84:106. Comparative Anatomy of the Vertebrates—3 hours. F. A comparative study of the classes of vertebrates with reference to their origin, development, and anatomy. Prerequisite: 84:34. Class discussions, one period a week; laboratory, four periods a week. (84:306)

84:108. Vertebrate Embryology—4 hours. S. Development of vertebrate organisms, formation and development of germ cells; fertilization; growth and differentiation. Prerequisite: 84:34. Class discussions, two periods a week; laboratory, four periods a week. (84:501)

84:112. Invertebrate Zoology—3 hours. S. even years. Anatomy and physiology of type-forms of the invertebrate phyla. Prerequisite: 84:34. Class discussions, one period a week; laboratory, four periods a week. (84:502)

84:115. Biological Sciences for Elementary Grades II—2 hours. F-S. Biological materials for the elementary school. Field and laboratory ac-

tivities adapted to the elementary school. Prerequisite: 82:22 or equivalent. Class discussions, one period a week; laboratory, two periods a week. (84:515)

84:120. Plant Morphology—3 hours. S. odd years. Morphology and evolution of plant phyla with emphasis upon algae, fungi, mosses, and ferns. Prerequisite: 84:36. Class discussions, one period a week; laboratory, four periods a week. (84:507)

84:122. Plant Physiology—3 hours. S. even years. Physiological processes of plants with emphasis on plant metabolism. Responses of plants to stimuli. Prerequisite: 84:36. Class discussions, one period a week; laboratory, four periods a week. (84:504)

84:140. Genetics and Evolution—3 hours. F. Heredity, variation, and developmental history of living things, especially man. Significance of genetic laws, and their relationship to development of animals, plants, and the human race. Prerequisite: 82:22 or college course in biological sciences. (84:511 and 84:512)

84:150. Bacteriology—3 hours. S. Classification, morphology, and physiology of bacteria with special reference to man. Prerequisite: 82:22. Class discussions, two periods a week; laboratory, two periods a week. (84:508)

84:160. Field Zoology of Vertebrates—4 hours. S. Natural history of native animals of the state. Habits, behavior, structure, identification, and conservation, principally, as seen on field trips. Prerequisite: 84:34. Class discussions, two periods a week; laboratory and field work, four periods a week. Also offered during the summer at the Iowa Lakeside Laboratory. (84:510)

84:166. Plant Taxonomy and Ecology—4 hours. F. even years. Field recognition, identification, economic importance, and evolution of seed plants of our native flora, especially as seen on field trips. Plant community relationships, and effects of environment on growth and distribution of wild flowers, ferns, shrubs, and trees. Prerequisite: 84:36. Class discussions, two periods a week; laboratory and field work, four periods a week. Also offered during the summer at the Iowa Lakeside Laboratory. (84:506)

84:170. Entomology—3 hours. F. odd years. Anatomy, physiology, and development of insects and their relation to man. Prerequisite: 84:34, or equivalent. Class discussion, two periods a week; laboratory, two periods a week. (84:516)

84:210. Biological Techniques—3 hours. Biological techniques useful to the teacher of biology. Micro-technique, photography, and the collection and preparation of biological materials for laboratory and demonstration purposes. Laboratory, six periods a week. (84:682)

84:230. Special Problems in Biology—1 to 3 hours. Credit to be determined at the time of registration. Individual problems reflecting the needs of the student. Prerequisite: Approval of the Head of this department. (84:680)

Chemistry

A student interested in a major in Chemistry should major in Science and declare chemistry as his area of special interest.

A minor in Chemistry consists of at least 16 hours including 82:20.

86:41. Chemistry for Nurses—3 hours. F. Theory and practical applications of inorganic, organic, and physiological chemistry for nurses in training. Class discussion, two periods a week; laboratory, two periods a week. (86:129)

86:44. General Chemistry I—4 hours. F-S. Elementary study of structure of matter, its physical properties and laws describing them, the periodic table and its relation to atomic structure, and non-metallic elements and their compounds. Prerequisite: 82:20. Students who have had one unit of high school chemistry or equivalent may, if they show sufficient proficiency by examination, enter 86:46 or 86:48. Class discussions, two periods a week; laboratory, four periods a week. (86:121)

86:46. General Chemistry II—4 hours. S. Continuation of 86:44 with emphasis on chemistry of non-metals, metals and metallurgy, chemical equilibrium, organic and physiological compounds. Should be taken by Science majors and others who do not take organic chemistry but plan to teach some phase of science. Prerequisite: 86:44 or equivalent preparation. Class discussion, two periods a week; laboratory, four periods a week. No credit for a student who has credit in 86:48.

86:48. Inorganic Chemistry—4 hours. S. Continuation of 86:44 with more emphasis given on chemistry of non-metals, metals, chemical and ionic equilibrium, and separation and identification of ions. Class discussions, two periods a week; laboratory, four periods a week. Prerequisite: 86:44 or equivalent preparation. Should be taken by pre-professional students and Science majors with a special interest in chemistry. Others may enroll. No credit for a student who has credit in 86:46. (86:122)

86:61. Applied Inorganic Chemistry—3 hours. F. Principles of chemistry as applied to the home and farm. For home economics students and non-science majors. Class discussions, two periods a week; laboratory, two periods a week. No credit for a student who has credit in 86:44. (86:318)

86:63. Applied Organic and Physiological Chemistry—5 hours. S. No credit for a student who has credit in 86:124. Principles and practical applications of organic and physiological chemistry. For home economics students and non-science majors. Prerequisite: 86:101 or equivalent. Class discussions, three periods a week; laboratory, four periods a week. (86:319)

86:124. Organic Chemistry I—4 hours. F. Essentials of aliphatic organic chemistry including lipids and carbohydrates. For Science majors and those preparing for dentistry or medicine. Prerequisite: 86:46 or 86:48. Class discussions, two periods a week; laboratory, four periods a week. (86:521)

86:126. Organic Chemistry II—2 to 4 hours. S. Credit to be determined at the time of registration. A continuation of 86:124 with emphasis on aromatic and organic cyclic compounds, and on proteins. Prerequisite: 86:124. Class discussions, two periods per week; laboratory four periods a week. (86:522, 86:528)

86:132. Quantitative Analysis I—4 hours. S. even years. Elementary principles of volumetric and gravimetric analyses. Prerequisite: 86:46 or 86:48. Class discussions and problems two periods a week; laboratory, four periods a week. (86:524)

86:134. Quantitative Analysis II—2 to 4 hours. Credit to be determined at time of registration. Analytical principles and practices adapted to needs of students. May include food or water analysis or advanced techniques in general quantitative work. Prerequisite: 86:132. (86:527)

86:142. Physical Chemistry—3 hours. S. odd years. Physical aspects of general chemistry from the viewpoint of needs of the high school and junior college physics and chemistry teacher. Prerequisite: Approval of the Head of this department. Class discussions, two periods a week; laboratory, two periods a week. (86:529)

86:144. Advanced Inorganic Chemistry—2 hours. Study and use of the periodic chart based on structure of the elements and their consequent physical and chemical properties. Class discussions, two periods a week. Prerequisite: Approval of the Head of this department. (86:531)

86:208. Biochemistry—3 hours. Chemistry of life processes including chemistry and metabolism of fats, carbohydrates, and proteins; nature and function of enzymes, vitamins, and hormones. Prerequisite: Approval of the Head of this department. Class discussions, two periods a week; laboratory, two periods a week. (86:628)

86:220. Chemical Literature—2 hours. Chemical literature for high school teaching and advanced study. Includes types of chemical literature; its sources, organization, availability, and use for research. Prerequisite: Approval of the Head of this department. Class discussions, two periods a week. (86:640)

86:240. Special Problems in Chemistry—1 to 3 hours. F-S. Credit to be determined at the time of registration. Individual problems in chemistry selected according to needs of students. Prerequisite: Approval of the Head of this department. (86:681)

86:260. Radiochemistry—3 hours. Radioactivity, principles of nuclear reactions, production and uses of radioisotopes. Practical experience in simple instrumentation and safe handling techniques of radioactive materials. Emphasis on viewpoint of the high school and junior college science teacher. Prerequisite: Approval of the Head of this department. Class discussion, two periods a week; laboratory, two periods a week.

Earth Science

A major in Earth Science consists of 25 hours including 82:24 and 87:191.

A minor in Earth Science consists of at least 14 hours including 82:24.

87:90. Anglo-America—3 hours. F-S. Description, analysis, and interpretation of the present occupancy pattern of major regions of the United States, Canada, and Alaska. Prerequisite: 82:24. (87:366)

87:114. Historical Geography of the United States—3 hours. S. even years. Geography of major regions of the United States in past times. Successive stages in land occupancy. (87:466)

87:145. Geography of Middle America—2 hours. S. odd years. A regional study of Mexico, Central America, and the West Indies. Chief environmental controls as a basis for interpretation of the development of countries involved. Prerequisite: 82:24.

87:147. Geography of South America—3 hours. F. odd years. Geographic individuality of the major countries of South America. Prerequisite: 82:24. (87:564)

87:149. Geography of Europe—3 hours. F. even years. Regional study of the continent of Europe. Analysis of the geographic individuality of the major countries. Prerequisite: 82:24. (87:570)

87:165. Geography of Asia—3 hours. S. odd years. Survey of Asia with detailed analysis of Japan, China, Indonesia, India, Pakistan, and the Asian Middle East. Prerequisite: 82:24. (87:571)

87:167. Geography of Africa—2 hours. S. even years. Regional analysis of the various political regions. Settlement patterns and economic development in terms of natural environment. Prerequisite: 82:24.

87:169. Geography of the Soviet Union—2 hours. S. even years. Major regions of the Soviet Union with particular reference to inter-regional and international relations. Prerequisite: 82:24.

87:170. Political Geography—3 hours. F. even years. Interrelation of earth and state. Role of location, size, shape, relief, climate and resources in development of states and national and international interest. Prerequisite: 82:24 and two regional courses in geography.

87:180. Meteorology—3 hours. F. even years. Meteorological elements and their application to weather; interpretation of weather maps; world weather relations as basis for climate. Prerequisite: 82:24. (87:561)

87:182. Conservation of Natural Resources—3 hours. S. odd years. Natural resources of the United States and their exploitation. Current problems in their conservation. Prerequisite: 82:24. (87:468)

87:184. General Geology—3 hours. F. odd years. Agencies producing land forms; rocks and rock structures; diastrophism and vulcanism; eras of earth's history. Prerequisite: 82:24. (87:573)

87:191. The Teaching of Geography—2 hours. Credit also as a course in Education for a student whose major is Earth Science. Selection and organization of geographic materials for grades four to nine inclusive. Prerequisite: nine hours of college geography. (87:493)

Physics

A student interested in a major in Physics should major in Science and declare physics as his area of special interest.

A minor in Physics consists of at least 16 hours including 82:20.

88:52. Principles of Physics—3 hours. F. Principles of physics important to students of industrial arts. Does not count toward a major or minor in Physics. No credit for a student who has credit in 88:54 or 88:56. Prerequisite: 82:20. Class discussions, two periods a week; laboratory, two periods a week. (88:52)

88:54. General Physics I. Mechanics and Heat—4 hours. F-S. Laws and principles of mechanics and heat. Prerequisite: 82:20 and working knowledge of algebra. Class discussions, three periods a week; laboratory, two periods a week. (88:140 and part of 88:343)

88:56. General Physics II. Sound, Light, Electricity, and Magnetism—4 hours. F-S. Prerequisite: 88:54. Class discussions, three periods a week; laboratory, two periods a week. (88:341 and part of 88:343)

88:58. Intermediate Physics—5 hours. F. A non-laboratory course devoted to more advanced phases of mechanics, heat, and light, and to solving problems in these fields. Prerequisites: 88:54 and 88:56. (88:448)

88:107. Acoustics—2 hours. S. For students with a major or minor in music. Emphasis on nature of musical sounds and characteristics of instruments. Class discussions, two periods a week. (88:550)

88:108. Astronomy—2 hours. F. odd years. Elementary descriptive astronomy. Class discussions, two periods a week. (87:360)

88:138. Modern Physics—5 hours. S. Introduction to electronic, radioactive, and atomic phenomena. Prerequisites: 88:54 and 88:56. Class discussions, four periods a week; laboratory, two periods a week. (88:542)

88:152. Measurements in Electricity and Magnetism—3 hours. S. even years. Resistance, electromotive force, current, capacitance, inductance, magnetic field strength, and other electrical and magnetic quantities are measured, and studied. Prerequisite: 88:56 or equivalent preparation. Class discussions, two periods a week; laboratory, two periods a week. (88:540)

88:154. Alternating Currents—3 hours. S. odd years. Industrial alternating currents, high frequency currents, circuits, and devices used in radio and television. Prerequisites: 88:54 and 88:56. Class discussions, two periods a week; laboratory, two periods a week. (88:541)

88:156. Laboratory Course in Light—2 hours. F. even years. Experimental problems, preceded by discussion of the principles involved. Prerequisite: 88:56, or equivalent preparation. Class discussions, one period a week; laboratory, two periods a week. (88:546)

88:250. Special Problems in Physics. 1 to 3 hours. Credit to be determined at time of registration. Individual problems in physics selected according to needs of students. Prerequisite: Approval of the Head of this department. (86:682)

88:254. Thermodynamics—3 hours. Relationships between heat and other forms of energy. Class discussions three periods a week. Prerequisite: 88:54 and 88:56. (86:545)

88:264. Atomic Physics—4 hours. Structure of atoms including nuclear and extranuclear systems. Emphasis on nature of energy changes occurring within the atom in emission and absorption of radiation and in radioactive disintegrations. Problems of nuclear fission and applications of the large amounts of energy made available. Prerequisites: 88:54 and 88:56. (88:650)

88:266. Analytical Mechanics—4 hours. The fundamental principles of mechanics from a mathematical viewpoint. Applications of these principles to cases in which physical quantities are continually varying. Calculus used as a way of solving problems and a mode of thinking. Prerequisites: 88:54 and 80:146. (88:652)

Social Science

Lang, Head. Bultena, Dee, Dohrman, Fahrney, Harris, Howard, Jones, Leavitt, Margulies, Plaehn, Poage, Robinson, Sage, Talbott, H. Thompson, Tulasiewicz. Part-time: Hunter, M. Thompson.

A major in Social Science consists of at least 40 semester hours which must include 8 hours of history, 6 hours of government, 6 hours of economics, 6 hours of sociology, and 90:190. To complete the requirement in history, the student must take either 96:14 or 96:114 in addition to the Humanities sequence. To complete the requirements in government, the student must take the Social Science sequence and 4 additional hours in government, preferably 94:111. To complete the requirements in eco-

nomics and sociology, the student must complete 90:23, 90:24, and 3 additional hours in each field, preferably 92:52 and 98:58. Because of the large amount of history usually taught by social science teachers, at least 11 hours of history should be completed.

The required minor may not be in a social science field. However, the student whose major is Social Science and who completes 20 or more hours in either history, government, or economics and sociology may have this emphasis indicated on his permanent record provided he so requests not later than at registration for his final semester's work.

Foreign language is recommended for students majoring in Social Science, particularly those who plan to do graduate work.

General Courses in Social Science

90:10. Contemporary Affairs A—1 hour. F-S. May be repeated for credit. (90:10)

90:23. Man in Society I—4 hours. F-S. Problems relative to personality and production and work in modern society. Emphasis on the interrelationship of the Social Sciences. (90:116 and part of 90:117)

90:24. Man in Society II—4 hours. F-S. Continuation of 90:23 with emphasis upon the community in its sociological and political relationships. Prerequisite: 90:23. (90:118 and part of 90:117)

90:110. Contemporary Affairs B—1 hour. F-S. May be repeated for credit. (90:400)

90:123. Problems in American Civilization—2 hours. F-S. Problems facing the United States in its world relationships. Offered for 9 weeks to dovetail with student teaching.

90:181. Social Science Seminar, England—6 hours. Five weeks' study at Ashridge College, Berkhamsted, England; forty-five seminar lectures in government, industry, and labor. Study trips to historic places in England. Seminar followed by continental tour. Orientation lectures given en route by Iowa State Teachers College tutors. Projected for summer of 1958. (90:509)

90:182. Social Science Seminar, Mexico—6 hours. Emphasis on the social aspects of Mexico including analysis of the race and social class structure, family patterns, education, government, crime and delinquency, recreation, religions, and the economic system. Offered summer 1957.

90:190. The Teaching of the Social Studies—2 hours. F-S. Credit also as a course in Education for a student whose major is Social Science. Prerequisite: 12 hours of social science. Ordinarily should precede student teaching. (90:490)

90:198. Independent Study. See pages 41 and 63.

90:280. Social Science Seminar—1 to 3 hours. F-S. Directed independent investigation by student supplemented by faculty lectures. Usually one section each semester drawn from (1) Social Science, (2) American History, (3) European History, (4) Government, (5) Economics, or (6) Sociology. May be repeated for a maximum of 6 hours credit. Consult with the Head of this department before registering for this course.

90:285. Individual Readings—1 to 3 hours. F-S. Directed readings and reports in areas drawn from (1) History, (2) Government, (3) Eco-

nomics, or (4) Sociology. Readings may be repeated for a maximum of 6 hours credit. Consult with the Head of this department before registering for this course.

90:291. Problems in Teaching the Social Studies—2 hours. Investigation and analysis of social studies problems arising in the classroom and community. (90:691)

90:298. Field Study. See pages 41 and 63.

90:299. Research. See pages 63 and 128.

History

A student wishing to major in History should major in Social Science and declare an emphasis in history.

A minor in History consists of at least 16 hours which must include at least two courses in American history and two courses in European history. 96:114 and 96:155 are strongly recommended. The humanities sequence provides four hours of history credit.

96:11. Social and Economic History of the United States—4 hours. F-S. No credit for a student who has credit in 96:14 or 96:114. For students preparing to teach in the elementary grades. (96:11)

96:14. American History to 1877—4 hours. F-S. Foreign relations, westward expansion, development of democracy, growth of nationalism, and sectional controversies. A student with credit in 96:11 should consult the Head of this department before registering for this course. (96:14)

96:114. American History since 1877—3 hours. Rise of big business, reform movements, and emergence of the United States as a world power. A student with credit in 96:11 should consult the Head of this department before registering for this course. (96:304)

96:130. History of Iowa—2 hours. F-S. (96:321)

96:136. American Colonial History—3 hours. F. Founding of the American colonies, evolution of economic, social and governmental institutions; various phases of the independence movement. (96:506)

96:138. Diplomatic History of the United States—3 hours. S. American foreign relations to the present day. It is recommended that 3 hours

96:140. History of the West—3 hours. S. The westward-moving frontier and its influence. It is recommended that 3 hours of American history precede this course. (96:514)

96:142. American Constitutional History—3 hours. F. odd years. Development of the Constitution of the United States to the present time. It is recommended that 3 hours of American history precede this course. (96: 611)

96:144. American Intellectual History—3 hours. F. even years. American thought from colonial times to the present. It is recommended that 3 hours of American history precede this course. (96:512)

96:150. Greek, Roman, and Medieval Civilizations—4 hours. F. Analysis of these civilizations and their contributions to human progress. (96:402)

96:154. Modern Europe to 1870—3 hours. F. France, Spain, England, Prussia, Russia, Austria, the Netherlands, and the Italian States to 1870. (96:312)

96:155. Modern Europe since 1870—4 hours. S. Continuation of 96:154. (96:313)

96:160. Twentieth Century Europe—3 hours. F. Seeks the reasons for an age of conflict; political philosophies and personalities of the period. (96:521)

96:162. European Intellectual History—3 hours. S. odd years. Selected ideas and men in the 19th and 20th centuries. Prerequisite: Junior standing.

96:164. English History to 1688—3 hours. F. Ancient Britain to the Glorious Revolution. (96:403)

96:165. English History since 1688—3 hours. S. Continuation of 96:164. (96:404)

96:168. The British Empire—3 hours. British possessions throughout the world since 1815. (96:508)

96:170. Russia—4 hours. F-S. The political social, and economic history of Russia and its world relationships with emphasis on the Near East. (96:518)

96:180. Latin-American History—3 hours. F. Development of the Latin-American states and their relations to the United States. (96:516)

96:185. The Far East—3 hours. S. Recent history of China, Japan, and India. (96:510)

96:193. Historians and Historiography—2 hours. F. even years. The methodology, style problems, and personalities of historians. Strongly recommended for those declaring an emphasis in history. Prerequisite: 15 hours of history. (96:603)

Government

A student wishing to major in Government should major in Social Science and declare an emphasis in government.

A minor in Government consists of at least 14 hours. In addition to 90:24, which provides two hours credit on the Government minor, it is recommended that the student complete at least one course in each of these three areas: comparative government, political theory, and political structure and organization.

94:34. Parliamentary Law—1 hour. S. (94:134)

94:111. Principles of Political Science—4 hours. F-S. Nature, origin, and sovereignty of the state. Prerequisite: 90:24. (94:332)

94:112. Political Parties—2 hours. F. Origin, organization, and operation of political parties in the United States. (94:340)

94:124. World Government and Politics—4 hours. S. International relations of independent states. Prerequisite: 90:24 or equivalent. (94:538)

94:131. State and Local Government—3 hours. F. State, county, township, and village government in the United States. (94:532)

94:132. Municipal Government—3 hours. F. Structure and functions of city government. Relation of the city to the state. (94:534)

94:134. National Government and Administration—2 hours. S. Legislative, executive, and judicial powers and procedures of the national government. Prerequisite: 90:24 or equivalent. (94:536)

94:135. Modern European Governments—3 hours. S. Organization and administration of the governments of England, France, Germany, Switzerland, Italy, and certain newer European states. (94:546)

94:141. Constitutional Law—3 hours. The Constitution of the United States as fundamental law. Prerequisite: 90:24 or equivalent. (94:544)

94:145. School Laws of Iowa—3 hours. S. even years. Legal rights, powers, duties, and responsibilities of school corporations, school boards, school officers, parents, and pupils. (94:542)

94:148. Public Administration—3 hours. F. even years. Aspects of public administrative agencies. The place of public servants in the functioning of government and of recent trends in the expansion of administration.

94:211. Major Political Philosophers—2 hours. S. odd years. Origin and development of the State as reflected in the writings of political philosophers. (94:635)

Economics and Sociology

A student wishing to major in Economics and Sociology should major in Social Science and declare an emphasis in economics and sociology.

A minor in Economics and Sociology consists of at least 16 hours and must include 92:52 and 98:58. The Social Science sequence provides 6 hours on this minor.

Economics

92:52. Principles of Economics—3 hours. F-S. Price and distribution principles. Selected economic problems. Prerequisite: 90:23. (92:352)

92:113. Money and Banking—3 hours. F. Role of the individual bank and the banking system in the distribution of credit, the creation of money, and society's attempt to control. International monetary problems. (92:560)

92:115. Corporation Finance and Investments—3 hours. F. odd years. Financing of business enterprises; corporate and individual investments; failures and reorganizations. (92:554)

92:116. Industrial Relations—2 hours. S. Labor organizations and their policies; policies of industrial management; the public interest in employer-employee relations. (92:555)

92:117. Public Finance—3 hours. S. odd years. Expenditures, sources, and administration of public funds. (92:556)

92:134. Business Cycles—3 hours. S. The business cycle, with chief emphasis on source, nature, and correction of the general business depression and its relation to the cycle. (92:558)

92:135. Industrial Combinations and Public Control—3 hours. F. even years. Types of organization; production on a large scale; legislation for control. (92:564)

92:136. Foreign Trade Problems—3 hours. F. International trade; foreign exchange; trade policies and tariffs; international debts. Prerequisite: 90:23. (92:566)

92:137. Comparative Economic Systems—3 hours. S. Economic systems of the modern world. The capitalistic and socialistic systems examined through the work of the major defenders as well as the critics.

92:213. History of Economic Thought—3 hours. S. even years. Evolution of economic ideas and doctrines. Emphasis upon the economic concepts of industrial America. (92:653)

Sociology

98:58. Principles of Sociology—3 hours. F-S. Principal social forces and institutions involved in the evolution of society. Methods of social control. (98:358)

98:119. The Family—2 hours. F. Origin, development, and problems of the modern family and marriage. (98:568)

98:151. Social Welfare Services—2 hours. F. odd years. Introduction to social work; scope and methods.

98:152. Population—3 hours. S. Composition and theories of population; improvement of racial quality; growth of population and its bearing upon wages and standards of living. (98:570)

98:153. Crime and Delinquency—4 hours. F. Survey of the nature and causes of crime and delinquency; methods of treatment and prevention. (98:572)

98:156. General Anthropology—3 hours. F. Principal findings of physical and cultural anthropologists regarding men and their culture. (98:573)

98:157. Minority Group Relations—3 hours. S. Social relations of the ethnic and cultural minority groups within the larger American society with special reference to Negro-Caucasian relations. (98:575)

98:173. The Community—4 hours. F. Social and ecological forces affecting social life in the urban and rural areas. (98:465, 98:577)

98:174. Area Anthropology—3 hours. S. odd years. Focus of attention upon the culture of a particular area or people. Choice of subject cooperatively determined by students and instructor. Prerequisite: 98:156.

Teaching

Curtis, Head. Adams, Adney, Aldrich, L. Anderson, Aurand, Bakken, Barrett, Bebb, Blackman, Brimm, H. Brown, M. Brown, Budensiek, B. Bultena, C. Campbell, Divelbess, Dolan, Emmons, Gabel, Gilloley, Gohman, Gullickson, Gutknecht, Hansen, Happ, Harmon*, Harper, Hartwell, Helff, Hoffman, Holmberg, Hosier, Hutcheson, Immerzeel, Kasiske, Koehring, Kreb, Lattin, Lindeman, Lynch, Mahon, Mantor, Maricle, Martin, Mazula, McBride, McCarthy, McMahan*, Middleton, R. Miller, Mohn, Moon,

Mork, Nelsen, Nielsen, Oelberg, Parisho, Paulson, Pederson, Phillips, Potter, Przychodzin, Ruman, Schilder, Schlemmer, Schmitt, M. Schneider, Schools, Shefte, Shepherd, Slottag, Sonstegard*, Steininger, Stokstad, Stone, Struble, Swatts, Swota, Tietz, VanderBeek, Walter, Wikstrom, Wilmarth, Wineke. Part-time: Jackson, Rait, N. Schneider, Turner.

The completion of an undergraduate curriculum requires 8 hours' credit in student teaching.** Student teaching credit earned in other colleges does not meet the student teaching requirements of the Iowa State Teachers College. A student who has 3 semester hours or more in student teaching in another college in the same area as his major at Iowa State Teachers College will be held for at least 4 hours in student teaching at this college. A student who completed either the old two-year curriculum or the present two-year plan and desires to complete the work for a bachelor's degree is required to take additional work in student teaching only if he majors in an area other than that of teaching in the upper or lower grades of the elementary school.

Any student may elect more than the required 8 hours of work in student teaching but only 10 hours of credit in the Department of Teaching may be applied toward the requirements for graduation. For the student who chooses to take additional work in student teaching an effort is made to provide the specialized experiences most needed by the student such as work in guidance, remedial reading, and visual aids.

A student following the two-year plan enrolls for 8 hours of student teaching during his sophomore year. All other undergraduates do their required work in student teaching during either their junior or senior years. The required work in student teaching should be completed before the last semester of the senior year if possible.

Student teaching is offered in an 8-hour block requiring the student's full time for nine weeks. During the other nine weeks of the student teaching semester, the student will take work in professional education, philosophy or religion, and his major. Courses are specially scheduled for this purpose. If a student is given permission to take an additional four hours either as an elective or as a transfer student, the work will be specially scheduled in cooperation between the Director of Student Teaching and the Registrar.

The aim in student teaching is to give the student experience in as many aspects of the teacher's responsibilities as possible. This necessitates a broad pattern of experiences and includes taking charge of classes in the campus laboratory school or in an affiliated school, outlining units of work, conferring with critics, preparing comprehensive reports on student teaching activities, evaluating pupil progress, participating in the school's extra-class activities, working with consultants in special areas, learning how to make maximum instructional use of school and community facilities, and how to get along with school administrators, other teachers, children, and their parents.

The scholarship average required before a student is permitted to register for student teaching is 2.00. A student must make application for teaching at least three months in advance of the time when the work in teaching is to be taken. (Watch for announcements in the College Eye and on bulletin boards.)

* On Leave

** See "Additional Requirements for Graduation," page 60.

28:32, 132. Nursery School Teaching. Prerequisite: 8 hours of psychology and education. (28:302, 28:402)

28:34, 134. Lower Elementary Teaching. Prerequisite: 8 hours of psychology and education. (28:304, 28:404)

28:36, 136. Upper Elementary Teaching. Prerequisite: 8 hours of psychology and education. (28:306, 28:406)

28:137. Junior High School Teaching. Prerequisite: 20:16. (28:407)

28:138. High School Teaching. Prerequisite: 20:16. Special methods course in major field ordinarily should precede student teaching. (28:408)

28:250. Advanced Laboratory Practice—2 to 4 hours. Students may concentrate on any aspect of the school program such as the curriculum, methods, evaluation, remedial instruction, guidance, supervision, administration, public school relations, audio-visual aids, and extra-class activities. This course may be repeated for a total of 4 hours. (28:650)

Graduate Study

The graduate program at the Iowa State Teachers College is designed for the specific purpose of preparing professionally competent teachers, supervisors, and school administrators. Only one graduate degree is conferred—the professional degree of Master of Arts in Education.

Application for Admission to Graduate Study

Anyone possessing the bachelor's degree from this or any institution who wishes to register for either undergraduate or graduate credit in this college must make **application for admission to graduate study** through the Registrar. Seniors in this college, within three semester hours of graduation, who wish to register for graduate credit must apply for admission to graduate study.

Students who expect to earn a master's degree at this college must file a transcript from the college granting the baccalaureate degree if other than ISTC. Students who have earned graduate credit at another college or university must file official transcripts of such credit. Students who do not hold a teaching certificate and expect ISTC to recommend them for an original certificate must also file official transcripts.

Students who do not expect to become degree candidates, and who do not expect ISTC to recommend them for a certificate, do not need to file transcripts. An official statement of the degree and date awarded will be sufficient.

All new graduate students except those enrolled as undergraduates in this college during the year preceding application for admission to graduate study will file a health record.

Types of Admissions

1. **Unconditional admission** to graduate study will be granted a student if:
 - a. He is a graduate of a college or university accredited by the National Council for Accreditation of Teacher Education or by the North Central Association of Colleges and Secondary Schools or a corresponding regional accrediting agency.
 - b. All the necessary papers and information have been filed with the Registrar.
 - c. There is nothing in the student's undergraduate record or other data to indicate that the student is of doubtful promise as a graduate student.

2. **Conditional admission** to graduate study may be granted a student if:
 - a. At the time of registration all the required information and data have not been received by the Registrar.
 - b. The student has not completed the work for a bachelor's degree at the time he applies for admission to graduate study.
3. A student may be **admitted on probation** if:
 - a. He is a graduate of a college that at the time of his graduation was **not** accredited by the National Council for Accreditation of Teacher Education or by the North Central Association of Colleges and Secondary Schools or a corresponding regional agency.
 - b. His undergraduate record and other data indicate that the student is of doubtful promise as a graduate student.

The conditional admission status will be removed by the Registrar as soon as the student has filed all the required records and reports, or, in the case of a senior, he has received the bachelor's degree.

The probational admission status may be removed by the Registrar when the student has earned 8 hours of graduate credit in this institution with an average grade of B or higher.

ADMISSION TO CANDIDACY FOR THE MASTER OF ARTS IN EDUCATION DEGREE

Admission to graduate study is not the same as admission to candidacy for the master's degree. A student may desire to take only selected courses and have no intention of becoming a degree candidate. Admission to candidacy is granted after the conditions, explained below, have been met.

Application for candidacy is normally made during the first semester of residence work. The forms on which the application is made are available in the departmental offices. The application is left with the head of the major department. **Unconditional admission** to graduate study is a prerequisite for the approval of candidacy for the master's degree.

The department in which the application for candidacy is filed may recommend the applicant to the Dean of Instruction as soon as:

1. The departmental and professional examinations are satisfactorily completed.

The first two parts of this examination attempt to measure the student's mental maturity and the extent of his knowledge in the field of professional education. These are administered at the time of the first registration in graduate study. The

third part of the examination is in the area of the student's graduate major and is taken at a time convenient to both the student and the major department.

2. A program of studies prepared by the candidate and his adviser has been approved by the department committee.
3. The department committee recommends candidacy.
4. The application has been approved by the department head.

The Dean of Instruction approves the application for candidacy in the chosen major of the graduate student. For approval in the various graduate majors the following minimum requirements must be met:

1. To major in elementary teaching, the student must have sufficient professional and academic work at the undergraduate level to meet the Iowa requirements for a Professional Certificate with an endorsement in elementary teaching.
2. To major in an area of secondary school teaching or in a special subject the student must have work necessary to secure a Professional Certificate with an endorsement in secondary teaching.
3. To major in school administration and supervision with emphasis in elementary principalship or elementary supervision, the student must meet the requirements for the elementary curriculum (1, above).
4. To major in school administration and supervision with emphasis in secondary principalship, the student must have the work necessary to secure a Professional Certificate with an endorsement in secondary teaching.
5. To major in school administration and supervision with emphasis in the superintendency, the student must meet the requirements for the Professional Certificate with an endorsement in either elementary or secondary teaching.
6. To major in the guidance and counseling curriculum the student must meet the requirements for the Professional Certificate with an endorsement in either elementary or secondary teaching.

REQUIREMENTS FOR THE MASTER OF ARTS IN EDUCATION DEGREE

Credit required for the degree—At least 30 semester hours of graduate credit are required. At least 24 semester hours of graduate credit must be earned at Iowa State Teachers College.

Residence—One semester, or two summer sessions, and 20 semester hours of graduate credit in residence are required of all candidates for the master's degree. By "full-time residence" is

meant the completion of 10 or more hours of work in one semester or 6 or more hours in a summer session on this campus.

After a student has been admitted as a candidate for a master's degree in this college, providing prior arrangements have been made with the Dean of Instruction, he may take work at the State University of Iowa or Iowa State College, for which residence credit may be given at Iowa State Teachers College.

Time requirements—Courses taken more than 10 years prior to the granting of the degree cannot be used to meet the requirements for the degree.

Scholarship requirements—A cumulative grade index of 3.00 (B average) must be earned in all courses attempted at the graduate level. No credit toward graduation is allowed for a course in which a grade below C is earned.

Thesis—A thesis is required of all candidates for the master's degree. The thesis will demonstrate the candidate's ability to draw relevant and valid conclusions from the data that have been assembled. It will be an investigation relating to the improvement of instruction and to making the individual a better teacher.

Maximum Load—The maximum graduate student load per semester is 15 hours. A full-time employee will not be permitted to register for more than 5 hours of graduate credit in any semester.

Teaching Experience Requirement—The curricula in (1) guidance and counseling and (2) school administration and supervision require a minimum of **one** year of successful teaching experience before the master's degree is awarded and before certain required courses can be taken. The following courses also require at least **one** year of teaching experience as a prerequisite for enrollment: Education 21:241—Elementary School Supervision II, Education 21:288—Organization and Administration of the Guidance Program, Education 21:275—Administration of the Secondary School, and Education 21:245—Administration of the Elementary School.

Transfer Credit—Graduate credit from other approved institutions will be accepted. Regardless of the amount of such transfer credit, the student must complete the requirements of a minimum of one semester, or two summer sessions, and 24 semester hours of graduate credit at the Iowa State Teachers College.

Extension Class Credit—A maximum of six semester hours of graduate credit earned in extension classes may be applied toward the 30-hour minimum required for the master's degree.

Department Committees

Each department offering a graduate major has one or more Department Committees. A Department Committee, with the student's adviser, has responsibility for the review of the student's program of studies to insure balance, breadth, and needed specialization. This committee also acts on the student's application for candidacy for the master's degree.

Adviser and Thesis Committee

Each graduate student who has indicated he intends to be a candidate for the master's degree has an adviser. The adviser who is appointed by the head of the department in which the student intends to major, is also the chairman of the Thesis Committee. Two other members of the Thesis Committee are appointed by the Dean of Instruction at the time the application for candidacy is approved. This committee assists the student in further defining his work, supervises the candidate's work on his thesis, and eventually accepts or rejects the thesis.

Research Assistantships

A limited number of research assistantships are available for graduate students who are in residence through the academic year. These assistantships carry a maximum stipend of \$1500 for the academic year. In addition there is a remission of \$81 of the semester fees for the academic year and the succeeding summer session. The work of the assistant will be so arranged that he may normally complete his master's degree in one academic year and the equivalent of two summer sessions. Research assistants aid staff members who are engaged in research. Application blanks for research assistant may be secured from the Dean of Instruction's office. The required forms should be filed with the Dean of Instruction by March 1.

Graduate Assistantships

A limited number of graduate assistantships are available for graduate students who are in residence through the academic year. These assistantships permit the student to carry 10 to 12 semester hours of work and carry a stipend of not more than \$900 for the academic year. The assistantships are accompanied by a remission of \$81 of the semester fees of the academic year, and

the succeeding summer session. Certain non-teaching duties requiring approximately 10 hours a week are assigned each graduate assistant. Application blanks for graduate assistants are available in the office of the Dean of Instruction and application should be filed in that office by March 1.

Fees

Fees for graduate study or for work undertaken by any person holding a baccalaureate degree are \$98 per semester. A charge of \$11 per semester hour is made for those students who enroll for limited schedules. The minimum fee is \$33. Fees are subject to change by the State Board of Regents.

Housing and Food Service

Costs for a room in the residence halls and for food service in the Commons are the same as for undergraduates. Accommodations for graduate students with families may be available but no preference over undergraduate students is granted.

Projected Registration

A student who has been admitted to candidacy for the master's degree may use a procedure known as projected registration for enrollment in Field Study or Research. This work is done off-campus but under the supervision of a member of the graduate faculty and is not considered residence credit. The student must be regularly registered for such work and must have the approval of his adviser and the head of the department offering the course. The fee is \$11 per semester hour with a minimum fee of \$33. The minimum time for the completion of this work is six weeks and the maximum time is one calendar year. A student may withdraw or cancel his registration if this is done in writing before the expiration of the year. In such cases the instructor will report W, WP, or WF, but no part of the fee will be refunded unless the cancellation is at the request of the college. Failure to withdraw formally or to do satisfactory work will result in a grade of "Failed." Enrollment by projected registration is automatically terminated when the student enrolls for residence work.

Grades for work taken in this manner are reported at the end of a semester and all work must be completed and in the hands of the instructor in charge at least two weeks in advance of the close of the semester in which the report is to be made. If the last work required for graduation is taken by projected registration, the completed work must be in the instructor's hands at least one month before the date of proposed graduation.

Research Credit

A student may register for research during any semester after he has earned credit in Education 21:294 Educational Research, whether or not he has yet submitted a formal thesis proposal. This research will be carried forward under the supervision of the chairman of the student's thesis committee if appointed, or other adviser designated by the department head. The student may register for from 1 to 2 hours of such research each semester and may earn a maximum of 3 hours credit in this way. A grade will be given at the close of each semester on the basis of the research completed during that semester.

Graduate Curricula

Graduate majors are offered in **elementary teaching, school administration and supervision, guidance and counseling**, and in the following areas for teaching in the **secondary school** or in **special subjects: art, business education, English, industrial arts, mathematics, music, science, social science, and speech.**

General Requirements

On each curriculum, the student who plans to receive the Master of Arts in Education degree must:

1. Have been admitted to candidacy (see pages 123 and 124).
2. Have fulfilled the requirements relating to residence, scholarship, total hours, and thesis described on pages 124 and 125.
3. Have earned a minimum of 15 hours of work in courses numbered 200 and above.
4. Have completed successfully the 7-hour professional core consisting of:
 - a. 21:294—Educational Research—3 hours.
 - b. 20:214—Advanced Educational Psychology—2 hours, or 21:234—Philosophy of Education—2 hours.
 - c. Either a special methods course in the major field—2 hours, or any additional course numbered 200 and above in the departments of education or teaching—2 hours.
5. Have demonstrated satisfactory achievement on a final written and/or oral examination. On the recommendation of the Department Committee either or both parts of this requirement may be waived.
6. Have completed the additional requirements for a specific major and any additional work designated by the Department Committee.
7. Have made application for graduation at the time of enrollment for the last semester.

Requirements for Various Majors

Every effort has been made to keep the specific course requirements for each major at a minimum so that the student, with the help of his adviser and the Department Committee, may plan the program of graduate work which will best meet his individual needs. Such a flexible pattern permits one student a high degree of concentration in a special area while not denying another the opportunity to broaden his education by taking considerable work outside the field of concentration.

Major in Elementary Teaching—Aside from the 7-hour professional core requirement and the thesis, there are no additional required courses. The student choosing to major in elementary teaching, after consideration of his undergraduate work, experience, and future plans, will have ample opportunity to select, with the help of his adviser and the Department Committee, those courses that will best meet his needs. Such courses for one student may be entirely within the Department of Education and Psychology, while for another student all of the courses selected may be in other departments.

A master's degree in this area and the completion of four years' successful teaching entitles the student to a Permanent Professional Certificate with an endorsement in elementary teaching.*

Major in School Administration and Supervision—The student will complete the general requirements for (1) the master's degree, (2) the Iowa Professional Certificate, and (3) the particular certificate endorsement he seeks. He will have had one year of successful teaching experience appropriate to the emphasis he selects within the major. In addition, he will complete the additional courses and experiences recommended by his adviser, Department Committee and the Dean of Instruction.

1. **Emphasis in Elementary Principalship—requirements include teaching at the elementary school level, with a certificate endorsement in elementary teaching.

2 **Emphasis in Elementary Supervision—Requirements same as 1 above.

3 **Emphasis in Secondary Principalship—Requirements include teaching at the secondary school level and a certificate endorsement in secondary teaching.

*The completion of each major described in pages 129 to 134 with the master's degree and four years of successful teaching entitles the student to a Permanent Professional Certificate with appropriate endorsements.

**A student with emphasis in elementary supervision, elementary principalship, or secondary principalship may be able to qualify for an endorsement in superintendency. If interested in this possibility, the student should consult the Head of the Department of Education and Psychology.

4. **Superintendency**—Requirements include teaching experience at any level and a certificate endorsement in either elementary or secondary teaching.

Major in Guidance and Counseling—In addition to the 7-hour professional core requirement and the thesis, a student must have had at least one year of successful teaching experience and take the course work in guidance and counseling and such related fields as the student, his adviser, and the Department Committee consider most appropriate.

Major in Art—1. The candidate for the master's degree in art must fulfill the general requirements for the master's degree and be eligible for the Iowa Professional Certificate. There are no additional required courses for a graduate major in art unless the student desires to complete the requirements for a certificate endorsement as a supervisor of art.

2. In consultation with his adviser and the Department Committee, the student will review and evaluate his undergraduate work, his experience, and his present and future needs and develop a graduate program which will permit him either to pursue work to make him a better art teacher or to concentrate on completing the requirements for a certificate endorsement as a supervisor of art.

A student who chooses to qualify for a certificate endorsement in art supervision must have four years of successful teaching experience and include in his graduate program the following courses:

- a. 60:296. The Supervision of Art—3 hours.
- b. At least 7 hours from the following:
- 21:171. Secondary School Supervision—3 hours.
- 21:272. Curriculum Development in the Secondary School—3 hours.
- 21:141. Elementary School Supervision I—3 hours.
- 21:241. Elementary School Supervision II—2 hours.
- 21:243. Curriculum Development in the Elementary School—3 hours.

3. At least one semester before the master's degree is to be conferred, the student whose major is Art must demonstrate his proficiency in a selected creative area through presentation of an exhibit.
4. Completion of this major and four years of successful teaching experience make one eligible for an Iowa Permanent Professional Certificate.

Major in Business Education—1. The candidate for the master's degree in business education must fulfill the general requirements for the master's degree; be eligible for the Iowa Professional Certificate; and take 15:203 Foundations in Business Education—2 hours.

2. The remaining hours will be devoted to courses from business education and other departments chosen with the help of the student's adviser and the Department Committee after consideration of his undergraduate preparation, work experience, present problems, and future plans.
3. The major in business education will permit a concentration in one area (such as secretarial, accounting, distributive education), or it may include a combination of work in various areas.
4. To receive the Master of Arts in Education degree with a major in Business Education, the student must demonstrate that he possesses an adequate background knowledge of the business world. In evaluating this background, the student's practical business experience and his work in such areas as economics and commerce will be among the matters considered.
5. Completion of this major and four years of successful teaching experience make one eligible for an Iowa Permanent Professional Certificate.

Major in English—1. To receive a master's degree with a graduate major in English, the student must fulfill the general requirements for the master's degree, be eligible for the Iowa Professional Certificate, and complete the English core consisting of:

- a. 62:202. Teaching of Literary Forms—3 hours.
 - b. 62:203. Language Problems in the High School—2 hours.
 - c. 62:201. Bibliography and Methods of Research—1 hour.
2. The remaining hours will be devoted to courses from the Department of Languages, Speech, and Literature and other departments chosen with the help of the student's adviser and the Department Committee after consideration of his undergraduate preparation, experience, present needs, and future plans.
 3. At least one semester before the degree will be conferred, the major in English must demonstrate basic competence, confirmed by examination, in French, German, or Latin. In French or German, a reading knowledge of simple material employing a vocabulary of about 2,000 words is necessary. In Latin, a working knowledge of the foundational structure and a vocab-

ulary of about 1,500 words are required. If a graduate student wishes to work independently in order to meet this requirement, direction and assistance will be made available.

4. Completion of this major and four years of successful teaching experience make one eligible for an Iowa Permanent Professional Certificate.

Major in Industrial Arts—1. To receive a master's degree with a graduate major in Industrial Arts, the student must fulfill the general requirements for the master's degree; be eligible for the Iowa Professional Certificate, with approval to teach industrial arts; and complete 33:203 Foundations of Industrial Education.

2. A student seeking a master's degree will complete such additional courses considered essential by the Department Committee and the Dean of Instruction, including at least 40 semester hours credit in industrial arts, counting both undergraduate and graduate courses.
3. To be admitted as a candidate for the degree with a major in industrial arts a student must have a minimum of 17 semester hours credit in industrial arts.
4. Completion of this curriculum and four years of successful teaching will make one eligible for an Iowa Permanent Professional Certificate.

Major in Mathematics—1. To receive a master's degree with a graduate major in Mathematics, the student must fulfill the general requirements for the master's degree and must be eligible for the Iowa Professional Certificate.

2. Courses will be chosen from mathematics and other departments with the help of the student's adviser and the Department Committee after consideration of his undergraduate preparation, experience, present needs, future plans, and particular area of emphasis in mathematics.
3. A student will select as an area of emphasis either the teaching of elementary mathematics or the teaching of secondary mathematics.
4. Completion of this major and four years of successful teaching experience make one eligible for an Iowa Permanent Professional Certificate.

Major in Music—1. The candidate for the master's degree in music must fulfill the general requirements for the master's

degree; be eligible for the Iowa Professional Certificate; and must complete the music core consisting of:

- a. 54:131-149. Applied Music—2 hours.
 - b. 57:280. Planning and Supervision—2 hours.
 - c. 57:290. Seminar in Band—2 hours or
57:291. Seminar in Orchestra—2 hours, or
57:281. Seminar in Chorus—2 hours.
2. The remaining hours will be devoted to courses from music and other departments chosen with the help of the student's adviser and the Department Committee after consideration of his undergraduate preparation, experience, present needs, and future plans.
3. To be accepted as a graduate major in public school music, a student must have attained a proficiency in a field of applied music equal to that required of a student completing an undergraduate major in music (Grade XII). It is highly desirable for the graduate major in music to have attained Grade XVIII or higher.
4. A student will select as an area of emphasis either instrumental or vocal public school music.
By including 21:272 or 275 and 243 or 245 in the student's graduate program and with the required four years of successful teaching experience, the student may become eligible for a certificate endorsement in music supervision.
5. Completion of this major and four years of successful teaching experience make one eligible for an Iowa Permanent Professional Certificate.

Major in Science—1. The candidate for the master's degree in science must fulfill the general requirements for the master's degree; be eligible for the Iowa Professional Certificate; and must take 82:200 History and Philosophy of Science—2 hours.

2. The remaining hours will be devoted to courses from science and other departments chosen with the help of the student's adviser and the Department Committee after consideration of his undergraduate preparation, experience, present needs, future needs, and particular area of emphasis in science.
3. A student may select as a field of emphasis one of the following:
- a. Consultant or supervisor of elementary science.
 - b. General science.
 - c. Biological science.
 - d. Chemistry.
 - e. Physics.

4. Completion of this major and four years of successful teaching experience make one eligible for an Iowa Permanent Professional Certificate.

Major in Social Science—1. The candidate for the master's degree in social science must fulfill the general requirements for the master's degree and must be eligible for the Iowa Professional Certificate. There are no additional required courses for a graduate major in social science.

2. Courses will be chosen from social science and other departments with the help of the student's adviser and the Department Committee after consideration of his undergraduate preparation, experience, present needs, future needs, and particular area of emphasis in social science.
3. A student, if he desires, may select as an area of emphasis one of the following:
 - a. History.
 - b. Government.
 - c. Economics.
 - d. Sociology.
4. Completion of this major and four years of successful teaching experience make one eligible for an Iowa Permanent Professional Certificate.

Major in Speech—1. The candidate for the master's degree in speech must fulfill the general requirements for the master's degree; be eligible for an Iowa Professional Certificate; and complete the speech core consisting of:

- a. 62:203. Language Problems in the High School—2 hours.
- b. 50:230. Psychology of Speech—3 hours.
- c. 50:225. Bibliography and Methods of Research—1 hour.
2. The remaining hours will be devoted to courses chosen from the Department of Languages, Speech, and Literature or other departments with the help of the student's adviser and the Department Committee after consideration of his undergraduate preparation, experience, present needs, and future needs.
3. Completion of this major and four years of successful teaching experience make one eligible for an Iowa Permanent Professional Certificate.

Extension Service

Pendergraft, Director. Part-time: Fuller, Ritter, Shepherd

In addition to the regular staff named above, from 12-15 members of other college departments serve each semester as members of the extension faculty.

Three types of extension services are available: consultative service, publications, and extension credit work.

- I. **Consultative Service.** The services of members of the extension staff are available to teachers, administrators, and boards of education for the improvement of the public schools of Iowa and for the in-service education of teachers.
- II. **Publications.** Two types of educational service publications are issued: the teaching aid series, and the research and survey series. These publications are distributed at cost and a list of the titles and prices is available at the Extension Office.
- III. **Extension Credit Work.** Correspondence study, extension class work, and television courses comprise the media by which extension credit may be earned. **Definite limitations on the amount of extension credit which a student can earn have been set by the Iowa State Department of Public Instruction, Division of Teacher Education and Certification, and by this college.** Students registering for extension credit are urged to familiarize themselves with these regulations, a copy of which may be secured by writing the Director, Bureau of Extension Service, Iowa State Teachers College, Cedar Falls, Iowa.
 - A. **Correspondence Study.** Credit earned through correspondence study cannot be applied on the 30-hour minimum requirement for a master's degree. The fee for correspondence study is \$9 per semester hour for undergraduate students and \$11 per semester hour for graduate students.
 - B. **Extension Class Work.** The conditions for admission to extension class work are the same as for admission to residence work. Not more than 6 semester hours of credit earned through extension class work may be applied toward a master's degree. The fee for extension class work is \$11 per semester hour.
 - C. **Television Courses** are offered through WOI-TV (Channel 5). No credit earned through television may be ap-

plied toward the 30-hour minimum requirement for the master's degree. Fees are at the rate of \$11 per semester hour.

Note: Not more than one-fourth of the work required for an Iowa teaching certificate may be earned in non-resident credit.

As a service to individuals in the community who are interested in furthering their education but not in earning college credit, the Extension Service also offers Community Classes on the college campus. These carry no college credit.

For a list of courses offered either for extension credit or in community classes and for additional information on any aspect of extension service, write Dr. Daryl Pendergraft, Director, Bureau of Extension Service, Iowa State Teachers College, Cedar Falls, Iowa.

Instructional Faculty

- J. W. MAUCKER, B.A., Augustana College; M.A., Ph.D., State University of Iowa
President of the College, 1950
- MARTIN J. NELSON, B.A., Luther College; M.A., Ph.D., University of Wisconsin
Dean of Instruction and Dean of the College, 1924 (1954)

EMERITUS FACULTY MEMBERS

A single date following the title indicates the beginning of service at this college. If two dates are given, the first indicates the incumbent's first appointment to a position and the second (in parenthesis) the beginning of service in present capacity.

- R. L. ABBOTT, B.A., Iowa State Teachers College; M.S., Ph.D., University of Wisconsin
Professor of Biology, Emeritus, part-time service, 1916 (1954)
- ALISON E. AITCHISON, B.S., State University of Iowa; M.S., University of Chicago
Professor of Geography, Emeritus, 1903 (1944)
- MARY C. ANDERSON, B.A., Iowa State Teachers College; M.A., State University of Iowa
Assistant Professor of Teaching, Emeritus, 1924 (1953)
- AMY F. AREY B.S., M.A., Columbia University
Professor of Education, Emeritus, part-time service, 1919 (1947)
- LOUIS BEGEMAN, B.S., M.S., University of Michigan; Ph.D., University of Chicago
Professor of Physics, Emeritus, part-time service, 1899 (1935)
- BENJAMIN BOARDMAN, B.Ph., State University of Iowa
Business Manager Emeritus, part-time service, 1917 (1945)
- A. E. BROWN, B.S., Baker University; M.A., Yale University; Ph.D., State University of Iowa
Professor of Education, Emeritus, part-time service, 1924 (1952)
- H. S. BUFFUM, B.A., M.A., Ph.D., State University of Iowa
Professor of Education, Emeritus, 1914 (1947)
- KATHERINE BUXBAUM, B.A., State University of Iowa; M.A., University of Chicago
Associate Professor of English, Emeritus, 1924 (1948)
- EMMETT J. CABLE, B.S., M.S., Cornell College; Ph.D., State University of Iowa
Professor of Earth Science, Emeritus, part-time service as Curator of the Museum of Natural Science, 1905 (1948)
- JOHN W. CHARLES, B.A., M.A., Haverford College; Ph.D., State University of Iowa
Professor of Education, Emeritus, 1916 (1948)
- CORLEY A. CONLON, B.A., Iowa State Teachers College; M.A., Columbia University
Associate Professor of Art, Emeritus, 1923 (1954)

- FRED D. CRAM, B.A., Iowa State Teachers College; M.A., State University of Iowa
Professor of Education, Emeritus, part-time service as Associate Archivist, 1920 (1950)
- E. C. DENNY, B.A., Indiana University; M.A., University of Chicago; Ph.D., State University of Iowa
Professor of Education, Emeritus, part-time service, 1923 (1955)
- ROWENA A. EDWARDS
Cataloguer, Emeritus, 1916 (1947)
- IRENE A. EHRESMAN, B.A., Carleton College; Library Certificate, University of Wisconsin
Periodicals and Binding, Librarian, Emeritus, part-time service, 1926 (1954)
- W. B. FAGAN, B.A., Earlham College; M.A., University of Kansas
Professor of English, Emeritus, part-time service, 1915 (1955)
- ALBERT C. FULLER B.A., State University of Iowa; LL.D., Buena Vista College
Director of the Bureau of Alumni Service and Public School Relations, Emeritus, part-time service, 1917 (1947)
- MYRTLE E. GAFFIN, B.A., Iowa State Teachers College; M.A., State University of Iowa
Assistant Professor of Business Education, Emeritus, 1923 (1951)
- ROBERT W. GETCHELL, B.A., Iowa State Teachers College; M.S., Ph.D., University of Wisconsin
Professor of Chemistry, Emeritus, part-time service, 1909 (1949)
- E. W. GOETCH, B.A., M.A., Ph.D., State University of Iowa
Director of the Placement Bureau, Emeritus, part-time service as Placement Consultant, 1918 (1951)
- IRVING H. HART, B.A., Grinnell College
Director of the Bureau of Extension Service, Emeritus, part-time service as Archivist and Historian, 1914 (1948)
- MARY B. HUNTER, B.A., Iowa State Teachers College; M.A., University of Chicago
Professor of Economics, Emeritus, part-time service, 1918 (1950)
- C. L. JACKSON, B.A., Grinnell College; M.A., State University of Iowa
Associate Professor of Teaching, Emeritus, part-time service, 1924 (1952)
- EDWARD KURTZ, B.Mus., Detroit Conservatory; M.Mus., Cincinnati Conservatory of Music; M.A., State University of Iowa; D.Mus., Detroit Institute of Musical Art
Professor of Violin and Composition, Emeritus, part-time service, 1924 (1951)
- INGEBRIGT LILLEHEI, B.A., M.A., University of Minnesota, Ph.D., University of Illinois
Professor of French and Spanish, Emeritus, 1918 (1953)
- BERTHA L. PATT, Des Moines Academy of Art; New York Art Student's League
Professor of Art, Emeritus, 1895 (1938)
- JOSEPH B. PAUL, B.A., Indiana University; M.A., Ph.D., University of Wisconsin
Director of the Bureau of Research, Emeritus, 1916 (1954)

- E. GRACE RAIT, B.A., Iowa State Teachers College; M.A., Columbia University
Associate Professor of Teaching, Emeritus, part-time service, 1914 (1952)
- O. B. READ, B.Ph., Hillsdale College; M.A., University of Wisconsin
Professor of Chemistry, Emeritus, 1913 (1940)
- ELMER L. RITTER, B.A., Indiana University; M.A., Ph.D., State University of Iowa
Professor of Education and Director of the Bureau of Extension Service, Emeritus, part-time service, 1921 (1954)
- ROSE LENA RUEGNITZ, B.Mus., Northwestern University; M.Mus., Cosmopolitan Conservatory
Associate Professor of Piano, Emeritus, 1923 (1955)
- GEORGE W. SAMSON, Iowa State Teachers College
Instructor in Organ and Piano, Emeritus, 1916 (1954)
- LOU A. SHEPHERD, B.A., Iowa State Teachers College, M.A., Columbia University
Professor of Primary Education, Emeritus, part-time service, 1924 (1953)
- MAY SMITH, B.A., Coe College; M. A., Columbia University
Professor of Education, Emeritus, part-time service, 1919 (1953)
- M. R. THOMPSON, B.A., Western Union College; M.A., Ph.D., State University of Iowa
Professor of Economics, Emeritus, part-time service, 1921 (1955)
- EULALIE TURNER, B.S., State University of Iowa; M.A., Columbia University
Assistant Professor of Teaching, Emeritus, part-time service, 1915 (1951)
- DORIS E. WHITE, B.A., Simpson College; M.A., Columbia University
Professor of Physical Education for Women, Emeritus, 1915 (1952)

Faculty Members

- MRS. GEORGIA B. ADAMS, B.S., M.A., George Peabody College for Teachers
Instructor in Teaching, 1955
- JULIA E. ADKINS, B.A., Marshall College; M.A., Ph.D., Ohio State University
Assistant Professor of Mathematics, 1956
- VERNA J. ADNEY, B.A., Iowa State Teachers College; M.A., Columbia University
Associate Professor of Teaching, 1927 (1953)
- ROBERT JOHN ADRIAN, B.A., University of Illinois; M.A., University of Minnesota
Assistant Professor of Psychology, 1955
- JOHN F. ALDRICH, B.S., University of Rhode Island; M. Ed., Boston University
Assistant Professor of Teaching, 1955
- CHARLES F. ALLEGRE, B.S., Emporia, Kansas, State College; M.S., Ph.D., State University of Iowa
Associate Professor of Biology, 1950 (1955)
- LUCILE E. ANDERSON, B.A., Iowa State Teachers College; M.A., University of Chicago
Associate Professor of Teaching, 1930 (1952)
- WALLACE L. ANDERSON, B.A., M.A., Trinity College; Ph.D., University of Chicago
Associate Professor of English, 1948 (1954)
- WAYNE O. AURAND, B.A., Iowa State Teachers College; M.Mus., University of Michigan
Instructor in Teaching, 1951
- ALICE L. BAKKEN, B.A., Iowa State Teachers College; M.A., Columbia University
Associate Professor of Teaching, 1927 (1952)
- OLIVE L. BARKER, B.A., Iowa State Teachers College; M.A., Columbia University
Assistant Professor of Voice, 1926 (1946)
- ALFRED C. BARNES, JR., B.A., M.A., Arizona State College
Assistant Professor of Education and Safety Education, 1956
- MRS. JANE BARRETT, B.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1955
- JAMES IRVIN BARRON, B.A., Iowa State Teachers College
Temporary part-time Instructor in Business Education, 1956
- RUSSELL N. BAUM, B.Mus., M.Mus., Eastman School of Music, University of Rochester
Assistant Professor of Piano, 1938 (1945)

- RANDALL R. BEBB, B.A., Iowa State Teachers College; M.A., Ph.D., State University of Iowa
Associate Professor of Teaching, 1947 (1954)
- MRS. MARY BECKMAN, B.Mus., Oberlin Conservatory of Music; M.Mus., Cleveland Institute of Music
Temporary Assistant Professor of Theory and Harp, 1947 (1956)
- MARY M. BELL, B.S., Illinois State Normal University; M.S., Smith College; Ph.D., State University of Iowa
Instructor in Physical Education for Women, 1955
- HAROLD E. BERNHARD, B.A., Carthage College; B.D., Chicago Lutheran Theological Seminary; Ph.D., University of Chicago
Professor of Religion and Director of the Bureau of Religious Activities, 1949 (1956)
- JANE BIRKHEAD, B.A., M.A., University of Missouri
Assistant Professor of Voice, 1941 (1946)
- CLIFFORD L. BISHOP, B.A., Western State College of Colorado; M.A., University of Denver; D.Ed., University of Colorado
Professor of Education and Head of the Department of Education and Psychology, 1950 (1956)
- MRS. MILDRED BLACKMAN, B.S., Northwest Missouri State Teachers College; M. Ed., University of Missouri
Assistant Professor of Teaching, 1948 (1955)
- JAMES T. BLANFORD, B.S., Danville, Ind., Central Normal College; M.S., D.Ed., Indiana University
Professor of Business Education, 1946 (1956)
- MRS. MARY E. BLANFORD, B.A., Danville, Ind., Central Normal College; M.S., Indiana University
Temporary Instructor in Business Education, 1947
- DAVID R. BLUHM, B.A., Princeton University; B.Th., Princeton Theological Seminary; M.A., Ph.D., University of Pittsburgh
Associate Professor of Religion and Philosophy, 1954
- EMIL W. BOCK, B.Mus., M.Mus., Northwestern University; Ph.D., State University of Iowa
Associate Professor of Violin, 1939 (1956)
- ESTHER BOEHLJE, B.A., Iowa State Teachers College; M.A., State University of Iowa; D.Ed., Indiana University
Professor of Education, 1937 (1956)
- JEAN BONTZ, B.A., M.A., Ph.D., State University of Iowa
Professor of Physical Education for Women and Head of the Department of Physical Education for Women, 1949 (1954)
- ROBERT P. BRIMM, B.Ed., Southern Illinois University; M.Ed., D.Ed., University of Missouri
Associate Professor of Teaching and Principal of the College Secondary School, 1948 (1953)
- MRS. HELEN P. BROWN, B.S.E., M.S., University of Arkansas
Assistant Professor of Teaching, 1952 (1956)
- MRS. MABEL D. BROWN, B.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1953

- IRVIN H. BRUNE, B.S., The College of Wooster; M.A., Ph.D., Ohio State University
Professor of Mathematics, 1949 (1955)
- MRS. LENA P. BUCKINGHAM, B.S., Northeast Missouri State Teachers College; M.S., Iowa State College
Assistant Professor of Home Economics, 1954
- HAROLD L. BUDENSIEK, B.A., Houghton, New York, College
Temporary Instructor in Teaching, 1956
- LOUIS BULTENA, B.D., San Francisco Seminary; M.Ph., Ph.D., University of Wisconsin
Associate Professor of Sociology, 1946 (1955)
- MRS. BEATRICE E. BULTENA, B.A., University of Washington
Temporary part-time Instructor in Teaching, 1955
- JOSEPH A. BURNS, B.Mus., College of Emporia; M.Mus., University of Kansas; Ph.D., Harvard University
Assistant Professor of Organ, 1954
- MARGARET M. BUSWELL, B.S., M.A., Ph.D., University of Minnesota
Assistant Professor of Education, 1950 (1954)
- MARY ALICE BUTTERWORTH, B.S., M.A., Texas State College for Women
Instructor in Physical Education for Women, 1953.
- CLARA E. CAMPBELL, B.A., Irving College; B.S., Carnegie Institute of Technology; M.S., Columbia University
Instructor and Campus School Librarian, 1937 (1952)
- MARJORIE D. CAMPBELL, B.S., M.A., Ohio State University
Assistant Professor of Art, 1949
- JAMES R. CLARK, B.A., Gustavus Adolphus College; M.A., Ph.D., George Peabody College for Teachers
Professor of Physical Education for Men, 1949 (1954)
- JAMES H. CLAY, B.A., Indiana State Teachers College; M.A., Ph.D., University of Illinois
Assistant Professor of Speech, 1956
- *WALTER B. COLEMAN, B.A., Swarthmore College; M.Mus., University of Texas
Assistant Professor of Flute and Cello, 1953 (1954)
- MRS. SUZANNE M. CONKLIN, B.Mus., M.Mus., University of Michigan
Instructor in Piano, 1956
- JOHN P. COWLEY, B.A., Heidelberg College; M.A., University of Wichita; Ph.D., Yale University
Professor of English, 1945 (1951)
- *ELINOR ANN CRAWFORD, B.A., M.A., University of California
Assistant Professor of Physical Education for Women, 1949 (1954)
- RICHARD D. CRUMLEY, B.S., Ohio University; M.S., Ph.D., University of Chicago
Assistant Professor of Mathematics, 1956

*On Leave

- DWIGHT K. CURTIS, B.S., Northeast Missouri State Teachers College; M.A., Ph.D., State University of Iowa
Professor of Teaching and Director of Student Teaching, 1945 (1951)
- RICHARD E. DANKLEFF, B.S., Columbia University; M.A., University of Nebraska
Instructor in English, 1956
- WM. L. J. DEE, B.S.J., M.A., Washington University; Ph.D., University of Chicago
Assistant Professor of Sociology, 1949 (1952)
- BERNARD C. DeHOFF, B.A., Franklin and Marshall College; M.A., Indiana University
Instructor in English, 1955
- WALTER D. DeKOCK, B.A., Western State College, Kalamazoo, Mich.; M.A., D.Ed., Columbia University
Associate Professor of Education, 1956
- DAVID D. DELAFIELD, B.F.A., M.A., Ph.D., Ohio State University
Assistant Professor of Art, 1951 (1954)
- ARTHUR D. DICKINSON, B.A., Iowa State Teachers College; M.A., State University of Iowa
Assistant Professor of Physical Education for Men, 1924 (1939)
- MARGARET DIVELBESS, B.A., Grinnell College; M.A., Columbia University
Associate Professor of Teaching, 1927 (1953)
- H. THEODORE DOHRMAN, B.A., Nebraska State Teachers College; S.T.B., Ph.D., Harvard University
Assistant Professor of Sociology, 1949 (1953)
- ROSE MARIE DOLAN, B.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1955
- L. V. DOUGLAS, B.S., M.A., Ph.D., State University of Iowa
Professor of Business Education and Head of the Department of Business Education, 1937 (1946)
- VIRGIL E. DOWELL, B.S., M.S., Emporia, Kansas, State Teachers College
Assistant Professor of Biology, 1956
- WILLIAM H. DREIER, B.S., Iowa State College; M.A., Ph.D., University of Minnesota
Assistant Professor of Education, 1949 (1953)
- ARDITH L. EMMONS, B.A., Penn College; M.A., Mills College
Assistant Professor of Teaching, 1952 (1954)
- RALPH R. FAHRNEY, B.A., Mt. Morris College; M.A., Ph.D., University of Chicago
Professor of History, 1929 (1945)
- DONALD G. FINEGAN, B.F.A., M.A., Ohio State University
Assistant Professor of Art, 1955
- RICHARD L. FLOWERS, JR., B.S., North Texas State Teachers College; M.A., Louisiana State University
Assistant Professor of Speech, 1954
- CHRISTOPHER L. FONTANA, B.S., Washington University
Temporary part-time Instructor in Business Education, 1956

- MRS. LOUISE C. TURNER FOREST, B.A., M.A., Bryn Mawr College;
Ph.D., Yale University
Associate Professor of English, 1948
- ERNEST C. FOSSUM, B.A., Augustana College; M.A., Ph.D., State University of Iowa
Associate Professor of Speech, 1943, (1950)
- CLAYTON V. FOWLER, B.S., University of Michigan; M.A., Ph.D., State University of Iowa
Associate Professor of Art, 1951 (1955)
- H. SEYMOUR FOWLER, B.S., M.S., Ph.D., Cornell University
Assistant Professor of Biology, 1952
- JOSEPH W. FOX, B.A., Pennsylvania State College; M.A., Louisiana State University; Ph.D., University of Chicago
Associate Professor of English, 1947 (1955)
- BERNHART G. FRED, B.M.E., M.M.E., Ph.D., Northwestern University
Temporary Assistant Professor of Music Education, 1956
- MARY THERESA GABEL, B.S., Northeastern Oklahoma State Teachers College; M.A., Colorado State College of Education
Assistant Professor of Teaching, 1955
- E. GLENADINE GIBB, B.Ed., Western Illinois State Teachers College; M.A., George Peabody College for Teachers; Ph.D., University of Wisconsin
Associate Professor of Mathematics, 1946 (1955)
- LAURA K. GILLOLEY, B.S., M.A., University of Minnesota
Assistant Professor of Teaching, 1950 (1956)
- *ROY A. GINSTROM, B.F.A., University of Georgia; M.F.A., University of Illinois
Assistant Professor of Art, 1955
- WALDEMAR GJERDE, B.A., Augsburg College; M.A., University of Minnesota; Ph.D., State University of Iowa
Associate Professor and Specialist in Audio-Visual Education, 1945 (1955)
- KENNETH G. GOGEL, B.S., M.A., Ohio State University
Assistant Professor of Art, 1950 (1956)
- LEO P. GOGGIN, B.A., Central Oklahoma State Teachers College; M.A., Ph.D., University of Chicago
Associate Professor of English, 1950 (1956)
- WALTER J. GOHMAN, B.A., St. Cloud, Minnesota, State Teachers College; M.A., University of Minnesota
Assistant Professor of Teaching, 1951 (1955)
- MARTIN L. GRANT, B.A., Oberlin College; M.A., Ph.D., University of Minnesota
Professor of Biology, 1936 (1950)
- HARRY G. GUILLAUME, B.A., M.A., D.Ed., Columbia University
Professor of Art and Head of the Department of Art, 1948 (1956)
- AGNES GULLICKSON, B.A., Iowa State Teachers College; M.A., Columbia University
Associate Professor of Teaching, 1926 (1954)

*On Leave—Fall Quarter

- MRS. JUNE W. GUTKNECHT
Temporary Instructor in Teaching, 1955
- RUTH E. HALL, B.S., M.S., Iowa State College
Assistant Professor of Home Economics, 1956
- E. W. HAMILTON, B.A., Tarkio College; M.A., Ph.D., State University
of Iowa
Assistant Professor of Mathematics, 1949
- NELLIE D. HAMPTON, B.S., Central Missouri State Teachers College;
M.A., State University of Iowa; Ph.D., University of Wisconsin
Associate Professor of Education, 1945 (1952)
- MRS. MARY WHEAT HANAWALT, B.A., Iowa State Teachers Col-
lege; M.A., Ph.D., State University of Iowa
Associate Professor of English, 1949 (1954)
- RUSSELL G. HANSEN, B.A., Iowa State Teachers College; M.A., Col-
orado State College
Instructor in Teaching, 1956
- ALDEN B. HANSON, B.A., St. Olaf College; M.Ph., University of Wis-
consin
Assistant Professor of English, 1946 (1949)
- FRANCES F. HANSON, B.S., Moorhead, Minnesota, State Teachers
College; M.A., University of Minnesota
Assistant Professor of Education, 1956
- WILLIAM P. HAPP, B.S., Northwestern University; M.S., Ph.D., State
University of Iowa
Associate Professor of Teaching, 1948 (1955)
- *MRS. LETA NORRIS HARMON, B.S., Oklahoma Central State Col-
lege; M.Ed., University of Minnesota
Assistant Professor of Teaching, 1950 (1954)
- CORINNE D. HARPER, B.S., Kansas City Teachers College; M.Ed.,
D.Ed., University of Missouri
Professor of Teaching, 1947 (1956)
- LYMAN H. HARRIS, JR., B.A., Washington and Lee University; M.A.,
Ph.D., University of Wisconsin
Professor of History, 1946 (1952)
- FRANK C. HARTWELL, B.S., Northern Illinois State Teachers Col-
lege; M.A., Colorado State College of Education
Instructor in Teaching, 1948
- RALPH W. HASKELL, B.S., Kansas State Teachers College; M.F.A.,
State University of Iowa
Assistant Professor of Art, 1954 (1955)
- JAMES S. HEARST
Visiting Instructor in Creative Writing, 1941
- BERNICE HELFF, B.A., State University of Iowa; M.A., Columbia Uni-
versity
Associate Professor of Teaching, 1942 (1954)

*On Leave

- ARTHUR L. HENZE, B.J., M.A., University of Missouri; Ph.D., University of Michigan
Assistant Professor of Education, 1955
- CLIFFORD H. HERROLD, B.A., Central Oklahoma State Teachers College; M.A., Colorado State College; D.Ed., Stanford University
Assistant Professor of Art, 1947 (1953)
- FRANK W. HILL, B.Mus., M.Mus., Eastman School of Music, University of Rochester
Associate Professor of Violin, Viola and Theory, 1929 (1948)
- MRS. CAROLYN W. HOFFMAN, B.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1954
- MRS. OLIVE J. HOLLIDAY, B.A., Iowa State Teachers College; M.A., University of Illinois
Assistant Professor of Home Economics, 1949 (1955)
- MRS. MARJORIE B. HOLMBERG, B.S., Northwest Missouri State Teachers College; M.Ed., University of Missouri
Assistant Professor of Teaching, 1947 (1949)
- HARALD B. HOLST, B.Mus., M.Mus., American Conservatory of Music
Associate Professor of Voice, 1936 (1943)
- KARL M. HOLVIK, B.A., Concordia College; M.A., Eastman School of Music, University of Rochester; Ph.D., State University of Iowa
Assistant Professor of Woodwind Instruments, 1947 (1953)
- MAX M. HOSIER, B.A., Peru, Nebraska, State Teachers College; M.A., Colorado State College of Education
Assistant Professor of Teaching, 1951 (1955)
- DONALD F. HOWARD, B.A., Iowa State Teachers College; M.A., Ph.D., State University of Iowa
Associate Professor of History, 1947 (1952)
- MARVIN C. HOWE, B.S.M., Oberlin College; M.S., Ithaca College
Instructor in Brass Instruments, 1954
- ESTHER M. HULT, B.Ed., Superior, Wisconsin, State Teachers College; M.Ph., Ph.D., University of Wisconsin
Professor of Education, 1943 (1953)
- MRS. KATHERINE HUMPHREY, B.S.C., M.A., State University of Iowa
Assistant Professor of Business Education, 1947 (1952)
- RUTH HUTCHESON, B.A., Peru, Nebraska, State Teachers College; M.A., Colorado State College of Education
Assistant Professor of Teaching, 1953 (1956)
- GEORGE E. IMMERZEEL, B.A., M.A., Iowa State Teachers College
Instructor in Teaching, 1956
- MARJORIE M. IVERSON, B.A., Augustana College; M.Mus., University of Michigan
Assistant Professor of Music Education, 1956
- MARY ANN JACKSON, B.S., M.S., University of Arkansas
Instructor in Teaching, 1953

- BERNARD JACOBSON, B.S., Bluffton, Ohio, College; M.S., Iowa State College
Temporary Instructor in Psychology, 1956
- VERNER JENSEN, B.S., University of Nebraska; M.S., Iowa State College
Instructor in Physical Science, 1956
- ROGER W. JEPSEN, B.S., M.A., Arizona State College
Temporary part-time Instructor in Business Education, 1956
- ROSS JEWELL, B.A., Wabash College; M.A., University of Indiana
Assistant Professor of English, 1951 (1954)
- DARRELL G. JONES, B.A., M.A., Iowa State Teachers College
Instructor in Business Education, 1956
- HOWARD V. JONES, B.A., M.A., Ph.D., Harvard University
Assistant Professor of History, 1954
- MRS. JOAN B. KACERE, B.F.A., State University of Iowa
Temporary part-time Instructor in Art, 1956
- FLORENCE M. KASISKE, B.A., Illinois Wesleyan University; M.A.,
University of Illinois
Assistant Professor of Teaching, 1945 (1950)
- NAFE E. KATTER, B.A., M.A., University of Michigan
Instructor in Speech, 1956
- LEONARD J. KEEFE, B.Ed., Illinois State Normal University; M.A.,
Colorado State College of Education
Associate Professor of Business Education, 1949-1952 (1956)
- DAVID E. KENNEDY, B.Mus., M.Mus., Eastman School of Music, Uni-
versity of Rochester; Ph.D., State University of Iowa
Assistant Professor of Brass Instruments and Theory, 1948 (1955)
- JAMES W. KERCHEVAL, B.A., Iowa State Teachers College; M.S.,
Ph.D., State University of Iowa
Professor of Chemistry, 1949 (1953)
- HOWARD T. KNUTSON, B.A., Luther College; M.A., D.Ed., University
of Wyoming
Associate Professor of Education, 1953 (1956)
- DOROTHY MAY KOEHRING, B.A., Kansas State University; M.A.,
Columbia University; Ph.D., Yale University
Professor of Teaching, 1933 (1950)
- WILLIAM H. KOLL, B.A., Iowa State Teachers College; M.A., North-
western University
Assistant Professor of Physical Education for Men, 1952 (1956)
- MRS. ELLA B. KREB, B.A., Fresno, California, State College
Temporary Instructor in Teaching, 1956
- TED N. KURAHARA, B.F.A., Washington University; M.A., Bradley
University
Instructor in Art, 1956
- RICHARD J. LACEY, B.A., M.S., University of Massachusetts; Ph.D.,
University of Illinois
Assistant Professor of Biology, 1955 (1956)

- WILLIAM C. LANG, B.A., Yankton College; M.A., Ph.D., State University of Iowa
Professor of History and Head of the Department of Social Science, 1949 (1955)
- AMANDA LANGEMO, B.A., St. Olaf College; M.A., University of Wisconsin
Assistant Professor of English, 1955 (1956)
- C. W. LANTZ, B.A., M.A., Ph.D., University of Illinois
Professor of Biology and Head of the Department of Science, 1921 (1948)
- JAMES P. LARUE, B.S., Southeast Missouri State College; M.A., Colorado State College of Education
Assistant Professor of Industrial Arts, 1956
- WILLIAM P. LATHAM, B.Mus., M.Mus., College of Music of Cincinnati; Ph.D., Eastman School of Music, University of Rochester
Associate Professor of Theory, 1947 (1955)
- RICHARD T. LATTIN, B.A., Iowa State Teachers College; M.A., Ph.D., State University of Iowa
Assistant Professor of Teaching, 1947 (1953)
- MRS. CHARLOTTE E. LAWTON, B.A., Iowa State Teachers College
Temporary part-time Instructor in Speech, 1956
- CHARLES T. LEAVITT, B.A., Beloit College; M.A., Ph.D., University of Chicago
Associate Professor of History, 1946 (1953)
- AGNES LEBEDA, B.A., Northwestern Oklahoma State College; M.S., Oklahoma Agricultural and Mechanical College; Ph.D., University of Minnesota
Associate Professor of Business Education, 1953 (1956)
- VERLIN W. LEE, B.S., M.A., Marshall College
Assistant Professor of Science, 1955
- MYRNA J. LINDEMAN, B.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1954
- ARTHUR J. LOOBY, B.S., M.Ed., D.Ed., University of Missouri
Assistant Professor of Psychology, 1956
- FRED W. LOTT, JR., B.S., Cedarville, Ohio, College; M.A., Ph.D., University of Michigan
Assistant Professor of Mathematics, 1949
- HERBERT LEWIS LYNCH, B.S., M.Ed., University of Nebraska
Assistant Professor of Teaching, 1951 (1956)
- HOWARD W. LYON, B.A., M.S., State University of Iowa
Instructor in Physical Science, 1956
- EDWARD F. LYONS, B.S., Iowa State Teachers College; M.S., Drake University
Assistant Professor of Physical Education for Men, 1956
- MRS. RUTH MAHON, B.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1956

- EDNA L. MANTOR, B.A., Iowa State Teachers College; M.A., Columbia University
Associate Professor of Teaching, 1923 (1952)
- HERBERT F. MARGULIES, B.A., Reed College; M.A., Ph.D., University of Wisconsin
Assistant Professor of Economics, 1955 (1956)
- WILLIAM O. MARICLE, B.Ed., Southern Illinois Normal University; M.A., University of Illinois
Assistant Professor of Teaching, 1949 (1954)
- RAYMOND J. MARTIN, B.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1955
- FRANK E. MARTINDALE, B.Ed., Stevens Point, Wisconsin, Teachers College; M.Ph., Ph.D., University of Wisconsin
Associate Professor of Education, 1948 (1953)
- MRS. DOROTHY MATALA, B.A., Indiana Central College; M.A., Indiana University; Ph.D., Cornell University
Temporary Associate Professor of Biology, 1946 (1955)
- RAYMOND E. MATALA, B.S., M.A., University of Minnesota
Assistant Professor of Industrial Arts, 1948 (1952)
- CHARLES D. MATHESON, B.Mus., M.Mus., University of Michigan
Assistant Professor of Voice, 1955
- R. JANE MAUCK, B.Mus., M.Mus., Drake University
Assistant Professor of Voice, 1946 (1956)
- EDWIN J. MAURER, JR., B.A., State University of Iowa; M.A., University of Chicago
Assistant Professor of English, 1948 (1954)
- MRS. JVONE L. MAXWELL, B.A., Iowa State Teachers College; M.Mus., American Conservatory of Music
Temporary Assistant Professor of Piano, 1948 (1956)
- PETER M. MAZULA, B.S., Cortland, New York, State Teachers College; M.A., D.Ed., Columbia University
Assistant Professor of Teaching, 1949 (1953)
- L. L. MENDENHALL, LL.B., M.A., State University of Iowa
Professor of Physical Education for Men and Head of the Department of Physical Education for Men, 1921 (1933)
- F. ELEANOR MERRITT, B.A., Iowa State Teachers College; M.A., George Peabody College for Teachers
Instructor and Consultant, Curriculum Laboratory, 1949
- CARYL A. MIDDLETON, B.A., Iowa State Teachers College; M.A., Ph.D., State University of Iowa
Associate Professor of Teaching, 1949 (1955)
- EDNA O. MILLER, B.A., Iowa State Teachers College; M.A. Columbia University
Associate Professor of Latin, 1924 (1948)
- MRS. ROBERTA NOE MILLER, B.S., M.Ed., University of Missouri
Instructor in Teaching, 1952

- *JOHN W. MITCHELL, B.Sch.Mus., College of Wooster; M.Mus.Ed., Oberlin College
Assistant Professor of Music Education, 1946 (1949)
- MARDELLE L. MOHN, B.S., Bradley University; M.S., University of Wisconsin
Associate Professor of Teaching, 1948 (1955)
- ALFRED C. MOON, B.S., M.S., D.Ed., University of Missouri
Associate Professor of Teaching, 1948 (1955)
- DOROTHY MOON, B.Ed., Northern Illinois State Teachers College; M.A., Northwestern University
Assistant Professor of Physical Education for Women, 1946 (1950)
- VERNON N. MORCK, B.S., University of North Dakota; M.A., University of Minnesota; D.Ed., University of North Dakota
Assistant Professor of Teaching, 1949 (1954)
- ELEANOR L. McBRIDE, B.Ed., Illinois State Normal University; M.A., University of Illinois
Assistant Professor of Teaching, 1946 (1949)
- PHYLLIS McCARTHY, B.S., Northern South Dakota State Teachers College; M.A., State University of Iowa
Assistant Professor of Teaching, 1947 (1949)
- CLIFFORD G. McCOLLUM, B.S., M.A., D.Ed., University of Missouri
Associate Professor of Physical Science, 1949-1955 (1956)
- LAURETTA G. McCUSKER, B.A., Western Maryland College; Library Certificate, Columbia University; M.S., Columbia University
Assistant Professor of Library Science, 1949 (1953)
- ELAINE E. McDAVITT, B.S., M.A., Northwestern University; Ph.D., University of Michigan
Associate Professor of Speech, 1947 (1953)
- MRS. ADA McLEOD, B.A., Iowa State Teachers College; B.S., in Library Science, Columbia University
Instructor in Library Science, 1949
- *DELLA McMAHON, B.S., Eau Claire, Wisconsin, State Teachers College; M.S., University of Wisconsin
Instructor in Teaching, 1949
- MRS. NOVA MARY NELSEN, B.A., M.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1955
- HERMAN L. NELSON, B.A., Iowa State Teachers College; M.S., State University of Iowa; Ph.D., Clark University
Associate Professor of Earth Science, 1949 (1955)
- ROSS A. NIELSEN, B.A., Wartburg College; M.S., Ph.D., State University of Iowa
Assistant Professor of Teaching, 1947 (1953)
- EILEEN F. NOONAN, B.A., Nebraska State Teachers College; M.L., University of Washington
Instructor in Library Science, 1954 (1956)

*On Leave

- MRS. LOUISE J. OELBERG
Temporary Instructor in Teaching, 1956
- JOHN F. PAGE, JR., B. of Design, University of Michigan; M.F.A.,
State University of Iowa
Assistant Professor of Art, 1954 (1955)
- HAROLD G. PALMER, B.A., Iowa State Teachers College; M.A., State
University of Iowa; Ph.D., Ohio State University
Professor of Industrial Arts, 1924 (1951)
- JOHN R. PARISHO, B.S., Drake University; M.Ed., University of Col-
orado
Instructor in Teaching, 1950
- GEORGE P. PATTEN, B.S., Indiana State Teachers College; M.A., Ohio
State University; Ph.D., Northwestern University
Assistant Professor of Geography, 1955
- ROBERT L. PAULSON, B.S., M.A., State University of Iowa
Assistant Professor of Teaching, 1953 (1956)
- MRS. MARION G. PEDERSON
Temporary Instructor in Teaching, 1956
- CECIL K. PHILLIPS, B.S., Southwest Missouri State Teachers College;
M.Ed., D.Ed., University of Missouri
Associate Professor of Teaching, 1948 (1956)
- ERMA B. PLAETHN, B.A., Cornell College; M.A., Ph.D., State Univer-
sity of Iowa
Associate Professor of Government, 1936 (1950)
- JOHN F. PLUMMER, JR., B.S., M.A., Ball State Teachers College
Assistant Professor of Industrial Arts, 1956
- GEORGE R. POAGE, B.A., Iowa State Teachers College; M.A., Ph.D.,
State University of Iowa
Assistant Professor of History, 1954
- WILLARD J. POPPY, B.Ed., Oshkosh, Wisconsin, State Teachers Col-
lege; M.S., Ph.D., State University of Iowa
Professor of Physics, 1949 (1953)
- SHIRLEY POSSON, B.A., Luther College; M.A., State University of
Iowa
Instructor in Physical Education for Women, 1955
- ALBERT A. POTTER, B.A., Chadron, Nebraska, State Teachers Col-
lege; M.A., State University of Iowa
Assistant Professor of Teaching, 1946 (1954)
- MRS. JEANNETTE R. POTTER, B.A., Iowa State Teachers College;
M.S., University of Wisconsin; D.Ed., University of Oregon
Associate Professor of Physical Education for Women, 1955
- *MALCOLM PRICE, B.A., Cornell College; M.A., Ph.D., State University
of Iowa; LL.D., Cornell College
President of the College, 1940-1950
Professor of Education, 1950

*On Leave—Winter Quarter

- JOE PRZYCHODZIN, B.Ed., Southern Illinois Normal University; M.S., University of Illinois; D.Ed., University of Missouri
Assistant Professor in Teaching, 1947 (1953)
- VIRGINIA RAMSAY, B.S., Maryville, Missouri, State College; M.A., State University of Iowa
Temporary Instructor in Physical Education for Women
- ARTHUR L. REDNER, B.S., Mansfield, Pennsylvania, State Teachers College; M.Mus., University of Michigan
Assistant Professor of Music Education, 1952 (1954)
- HOWARD O. REED, B.S., Bradley University; M.Ed., D.Ed., University of Illinois
Professor of Industrial Arts and Head of the Department of Industrial Arts, 1954
- H. W. RENINGER, B.A., M.A., Ph.D., University of Michigan
Professor of English and Head of the Department of Languages, Speech and Literature, 1939 (1948)
- GORDON J. RHUM, B.A., Iowa Wesleyan College; M.A., Ph.D., State University of Iowa
Associate Professor of Education, 1948 (1954)
- H. A. RIEBE, B.Ph., M.Ph., Ph.D., University of Wisconsin
Professor of Education, 1925 (1938)
- GEORGE C. ROBINSON, B.A., University of Wisconsin; M.A., Ph.D., Harvard University
Professor of Government, 1922 (1933)
- DONALD O. ROD, B.A., Luther College; B.A. in Library Science, University of Michigan
Associate Professor of Library Science and Head Librarian, 1953
- WILLIAM T. ROENIGK, B.S., University of California; M.A., Columbia University
Temporary part-time Instructor in Business Education, 1956
- ROBERT A. ROGERS, B.A., Miami University; M.S., Ph.D., State University of Iowa
Professor of Physics, 1947 (1950)
- BETTS ANN ROTH, B.S., George Peabody College for Teachers; M.A., Columbia University
Assistant Professor of Education, 1951 (1956)
- EDWARD L. RUMAN, B.S., Southern South Dakota State Teachers College; M.A., D.Ed., Colorado State College of Education
Assistant Professor of Teaching, 1953
- MYRON E. RUSSELL, B.Mus., Kansas State Agricultural College; M.Mus., Eastman School of Music, University of Rochester; Ph.D., University of Michigan
Professor of Woodwind Instruments and Head of the Department of Music, 1929 (1951)
- LELAND L. SAGE, B.A., Vanderbilt University; M.A., Ph.D., University of Illinois
Professor of History, 1932 (1945)
- HARLAND E. SAMSON, B.S., M.A., University of Minnesota
Instructor in Business Education, 1955
- DEAN W. SANDERS, B.Mus., M.Mus., Chicago Musical College
Instructor in Piano, 1955

- PAULINE SAUER, B.Ed., Chicago Teachers College; M.A., University of Michigan; Ph.D., Cornell University
Assistant Professor of Biology, 1949 (1954)
- JOSEF SCHAEFER, State Examination, Ph.D., University of Freiburg
Professor of German, 1926 (1948)
- JOE E. SCHIFERLI, B.Mus., University of Mississippi; M.Mus., McPhail School of Music
Temporary Instructor in Teaching, 1956
- LOUIS O. SCHILDER, B.A., M.A., State University of Iowa
Instructor in Teaching, 1948
- MARILYN E. SCHLEMMER, B.A., Monmouth College; M.A., University of Illinois
Instructor in Teaching, 1955
- MARY MARGARET SCHMITT, B.A., Iowa State Teachers College; M.Ed., University of Minnesota
Assistant Professor of Teaching, 1946 (1955)
- MELVIN F. SCHNEIDER, B.Mus., M.A., University of Wisconsin
Assistant Professor of Teaching, 1945 (1949)
- MRS. MELVIN F. SCHNEIDER, B.Mus., North Central College
Temporary part-time Instructor in Teaching, 1947
- MARSHALL SCHOOLS, B.S., Mary Washington College; M.A., George Peabody College for Teachers
Assistant Professor of Teaching, 1949 (1954)
- AUGUSTA L. SCHURRER, B.A., Hunter College; M.A., Ph.D., University of Wisconsin
Assistant Professor of Mathematics, 1950 (1954)
- MRS. RUTH N. SELAH, B.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1955
- LOIS E. SHEFTE, B.A., Yankton College; M.A., State University of Iowa
Assistant Professor of Teaching, 1950 (1954)
- GENE D. SHEPHERD, B.A., Oklahoma City University; M.Ed., University of Oklahoma
Instructor in Teaching, 1953
- GERALD N. SHIRLEY, B.A., M.A., Michigan State University
Instructor in Art, 1956
- MRS. EDNA ANDERSON SHORES, B.S., M.A., Columbia University
Temporary Assistant Professor of Home Economics, 1947 (1952)
- THELMA SHORT, B.S., M.A., Columbia University
Assistant Professor of Physical Education for Women, 1929 (1946)
- MRS. INA MAE SILVEY, B.S., Central Missouri State College
Temporary Instructor in Mathematics, 1954
- WRAY D. SILVEY, B.S., Central Missouri State College; M.Ed., D.Ed., University of Missouri
Associate Professor of Education, 1950 (1955)
- JOSEPHINE MARY SKITTERY, Diploma, Bedford, England, College of Physical Education; Advanced work, St. Mary's Hospital, London
Exchange Instructor, 1956

- ERNEST A. SLOTTAG, B.A., Carthage College; B.D., Chicago Lutheran Theological Seminary
Temporary part-time Instructor in Teaching, 1956
- ERNESTINE SMITH, B.A., M.S., University of Michigan
Associate Professor of Geography, 1936 (1955)
- FRANCIS ELIOT SMITH, B.A., University of Massachusetts; M.A., Ph.D., State University of Iowa
Assistant Professor of English, 1950 (1953)
- M. B. SMITH, B.S., Northern South Dakota State Teachers College; M.A., Ph.D., University of Minnesota
Assistant Professor of Speech, 1947 (1953)
- PAUL R. SMITH, B.S., Kansas State Teachers College; M.F.A., State University of Iowa
Assistant Professor of Art, 1951 (1954)
- *MANFORD SONSTEGARD, B.Ed., St. Cloud, Minnesota, State Teachers College; M.A., University of Minnesota; Ph.D., Northwestern University
Associate Professor of Teaching, 1945 (1953)
- JULIA SPARROW, B.S., St. Cloud, Minnesota, State Teachers College; M.A., Ph.D., State University of Iowa
Associate Professor of Education, 1944 (1953)
- NORMAN C. STAGEBERG, B.S., University of Minnesota; M.A., State University of Iowa; Ph.D., University of Wisconsin
Professor of English, 1946 (1956)
- CLYDE L. STARBECK, B.S., South Dakota State College
Assistant Professor of Physical Education for Men, 1936 (1945)
- EARL W. STEININGER, B.A., M.S., University of Illinois
Instructor in Teaching, 1950
- LLOYD J. STOKSTAD, B.S., M.S., University of Wisconsin
Instructor in Teaching, 1948
- MYRTLE M. STONE, B.A., Washington State College; M.B.A., University of Washington; D.Ed., New York University
Professor of Teaching, 1928 (1950)
- MARGUIRETTE MAY STRUBLE, B.A., Ph.D., State University of Iowa
Associate Professor of Teaching, 1935 (1954)
- JOHN A. STUART, B.A., William Jewell College; M.A., Ph.D., Northwestern University
Associate Professor of English, 1954
- ELISABETH SUTHERLAND, B.S., M.S., University of Wisconsin; Ph.D., University of Minnesota
Professor of Home Economics and Head of the Department of Home Economics, 1940 (1951)
- *BETTY M. SWANSON, B.S., University of Minnesota; M.S., University of Southern California
Instructor in Physical Education for Women, 1949
Exchange Instructor, England, 1956-1957

*On Leave

- ROBERT W. SWATTS, B.A., University of Tennessee; M.A., University of Minnesota
Temporary Instructor in Teaching, 1956
- ANDREW SWOTA, B.S., Winona, Minnesota, State Teachers College
Temporary Instructor in Teaching, 1956
- NATHAN M. TALBOTT, B.A., Western Michigan College; M.A., University of Michigan; Ph.D., University of Washington
Assistant Professor of Government, 1956
- LOREN F. TAYLOR, B.A., M.F.A., State University of Iowa
Instructor in English, 1954
- HOWARD J. THOMPSON, B.A., M.A., State University of Iowa; Ph.D., Harvard University
Assistant Professor of History, 1955
- OSCAR E. THOMPSON, B.Ed., Moorhead, Minnesota, State Teachers College; M.S., University of North Dakota; Ph.D., State University of Iowa
Associate Professor of Education, 1947, (1952)
- THOMAS H. THOMPSON, B.A., M.A., Ph.D., State University of Iowa
Assistant Professor of Philosophy, 1952 (1954)
- EDWARD J. THORNE, B.A., University of Pittsburg; M.A., Ph.D., Northwestern University
Assistant Professor of Speech, 1955
- MRS. ELSIE R. TIETZ, B.A., M.A., Iowa State Teachers College
Temporary Instructor in Teaching, 1955
- HAROLD C. TRIMBLE, B.A., University of Western Ontario; M.A., Ph.D., University of Wisconsin
Professor of Mathematics, 1940-1947 (1955)
- JAN B. TULASIEWICZ, B.A., State College, Stanislawow, Poland; M.B.A., University of Foreign and Domestic Trade, Lwow, Poland; Ph.D., University of Michigan
Associate Professor of Economics, 1956
- HOWARD VANDER BEEK, B.A., State University of Iowa; M.A., D.Ed., Columbia University
Associate Professor of Teaching, 1948 (1955)
- HENRY VAN ENGEN, B.A., Nebraska Wesleyan University; M.A., Ph.D., University of Michigan
Professor of Mathematics and Head of the Department of Mathematics, 1937 (1949)
- GUY W. WAGNER, B.A., Iowa State Teachers College; M.A., Ph.D., State University of Iowa
Professor and Director of Curriculum Laboratory, 1941 (1953)
- LILLIAN ROSE WAGNER, B.A., University of South Dakota; M.A., State University of Iowa; Ph.D., University of Wisconsin
Associate Professor of Speech, 1950 (1953)
- WILLIS H. WAGNER, B.S., Central Missouri State Teachers College; M.Ed., University of Missouri
Assistant Professor of Industrial Arts, 1945 (1947)

- MILDRED M. WALTER, B.Ed., Oshkosh, Wisconsin, State Teachers College; M.Ph., University of Wisconsin
Assistant Professor of Teaching, 1953 (1954)
- NORMA R. WENDELBURG, B.Mus., Bethany College; M.Mus., Eastman School of Music, University of Rochester
Assistant Professor of Piano, 1956
- DAVID R. WHISNER, B.Mus., M.Mus., Louisiana State University
Temporary Instructor in Cello and String Bass, 1956
- LAWRENCE W. WHITFORD, B.A., Iowa State Teachers College; M.A., University of Michigan
Assistant Professor of Physical Education for Men, 1926 (1945)
- THOMAS N. WIKSTROM, B.S.Mus., Morningside College; M.A., State University of Iowa
Assistant Professor of Teaching, 1956
- M. J. WILCOX, B.S., Cornell College; M.A., Ph.D., State University of Iowa
Professor of Education, 1923 (1945)
- JOHN DAVID WILLIAMS, B.A., M.A., Ph.D., State University of Iowa
Assistant Professor of Speech, 1954 (1956)
- ALTA WILMARTH, B.A., Iowa State Teachers College; M.A., State University of Iowa
Associate Professor of Teaching, 1919 (1952)
- LELAND L. WILSON, B.S., East Kentucky State College; M.S., University of Kentucky; Ph.D., Peabody College for Teachers
Associate Professor of Chemistry and Physical Science, 1955 (1956)
- DOROTHY E. WINEKE, B.S., M.S., University of Wisconsin
Assistant Professor of Teaching, 1949 (1955)
- LEONARD WINIER, B.S., Winona, Minnesota, State Teachers College; M.A., D.Ed., Columbia University
Associate Professor of Biology, 1948 (1953)
- SHIRLEY WINSBERG, B.S., University of Illinois; M.S., Wellesley College; Ph.D., State University of Iowa
Associate Professor of Physical Education for Women, 1945 (1953)
- JAMES H. WITHAM, B.S., Bemidji, Minnesota, State Teachers College; M.Ed., University of Minnesota
Assistant Professor of Physical Education for Men, 1956
- HAROLD B. WOHL, B.A., M.A., Ph.D., State University of Iowa
Assistant Professor of History, 1956
- STANLEY G. WOOD, B.A., Iowa State Teachers College; M.A., Western Reserve University
Associate Professor of Speech, 1946 (1955)
- BERTRAM L. WOODCOCK, B.A., Iowa State Teachers College; M.A., New York University
Associate Professor of Safety Education and Director of Safety Education, 1946 (1955)
- GEORGE W. WORLEY, B.A., Buena Vista College; M.A., University of Missouri
Assistant Professor of Science, 1956

- LAWRENCE S. WRIGHT, B.S., M.S., Stout Institute; D.Ed., University of Missouri
Assistant Professor of Industrial Arts, 1949 (1954)
- BARBARA YAGER, B.S., M.A., Ohio State University
Assistant Professor of Physical Education for Women, 1949 (1956)
- EMILY J. YEAGER, B.S., Louisiana State University; M.S., University of Colorado
Assistant Professor of Home Economics, 1954
- MILES V. ZINTZ, B.A., Iowa State Teachers College; M.A., Ph.D., State University of Iowa
Associate Professor of Education, 1946 (1954)

Other Officers and Assistants

Librarians

- DONALD O. ROD, B.A., Luther College; B.A., in Library Science, University of Michigan
Associate Professor of Library Science and Head Librarian, 1953
- MARY DIETERICH, B.A., Grinnell College; B.S., Columbia University
Reference Librarian, 1930 (1946)
- EVELYN J. MULLINS, B.A., Grinnell College; B.S., Columbia University
Order Librarian, 1930 (1948)
- MARGARET FULLERTON, B.A., Iowa State Teachers College; M.A., Columbia University; B.S., in Library Science, Columbia University
Cataloguer, 1947
- LAURETTA G. McCUSKER, B.A., Western Maryland College; Library Certificate, Columbia University; M.S., Columbia University
Assistant Professor in Library Science, 1948 (1953)
- MRS. ADA McLEOD, B.A., Iowa State Teachers College; B.S., in Library Science, Columbia University
Instructor in Library Science, 1949
- EILEEN F. NOONAN, B.A., Nebraska State Teachers College; M.L., University of Washington
Instructor in Library Science, 1954, (1956)
- GERTRUDE E. VOELKER, B.A., Wartburg College; B.S., in Library Science, University of Denver; M.A., in Library Science, University of Michigan
Assistant Cataloguer, 1954
- DOROTHY LARSEN, B.A., Carleton College; B.S., in Library Science, Columbia University; M.A., Columbia University
Periodicals Librarian, 1955 (1956)
- EVERETT L. HOWELL, B.A., Iowa State Teachers College; M.A., in Library Science, University of Michigan
Assistant Reference Librarian, 1956
- KEITH C. KNIGHT, B.A., University of Tennessee; B.L.S., M.L.S., Library School, University of Illinois
Circulation Librarian, 1956

The Commons

- MARGARET FITZGERALD, B.S., Iowa State Teachers College; M.A.,
Columbia University
Director of Foods, 1945 (1949)
- MRS. ETHEL J. WINIER, B.A., Iowa State Teachers College
Director of Social Life, 1954

Residence Halls

- BEVERLY ANN BELSON, B.A., Iowa State Teachers College
Assistant Director, Bartlett Hall, 1956
- LUCILLE CASWELL, B.Ed., University of Colorado; M.A., State Uni-
versity of Iowa; R.N.
Nurse, Lawther and Campbell Halls, 1953
- AVIS ANN EVELY, B.A., Iowa State Teachers College
Assistant Director, Lawther Hall, 1956
- *MARGARET SUE LUND, B.A., Iowa State Teachers College; M.A.,
University of Wisconsin
Personnel Director, 1946
- HARRY T. MORLEY, JR., B.S., University of Missouri
Director, Seerley-Baker Hall, 1955
- ROBERT N. McINTIRE, B.A., Iowa State Teachers College
Director, Stadium Hall, 1955
- RUTH E. RENAUD, B.A., Iowa State Teachers College; M.A., Syracuse
University
Personnel Director, Campbell Hall, 1954
- HERMIONE SHANTZ, B.A., M.A., Michigan State University
Personnel Director, Lawther Hall, 1955
- MARGARET J. THOMAE, R.N.
Nurse, Bartlett Hall, 1956
- MARILYNN ANN UHL, R.N.
Temporary part-time Nurse, Campbell Hall, 1956
- JAYNE C. VAN DEUSEN, B.S., Plattsburgh, N. Y., State Teachers
College; M.S., Syracuse University
Personnel Director, Bartlett Hall, 1956

Hospital Service

- MAUDE E. HAINES, R.N.
Supervisor, 1942
- LUCILLE CASWELL, R.N.
Nurse, Lawther and Campbell Halls, 1953
- MRS. KATHLEEN FOWLER, R.N.
Nurse, Campus Laboratory School, 1953
- JESSIE JOYCE, R.N.
Nurse, 1934
- MARGARET J. THOMAE, R.N.
Nurse, Bartlett Hall, 1956
- MRS. MYRTLE TINGLE, R.N.
Nurse, 1954
- MARILYN ANN UHL, R.N.
Temporary part-time Nurse, Campbell Hall, 1956
- CATHRYN WEBER, R.N.
Nurse, 1953

*On Leave

I. Faculty Senate

Members whose terms will expire 1957:

Jean Bontz
 Erma B. Plaehn
 Clifford L. Bishop
 Tom A. Lamke

Members whose terms will expire 1958:

Mary Dieterich
 Bernice Helff
 Richard Lattin
 Clayton Fowler

Members whose terms will expire 1959:

Irvin H. Brune
 William L. J. Dee
 James W. Kercheval
 Guy W. Wagner

Ex-officio members:

President of the College
 Dean of Instruction
 Dean of Students
 Business Manager
 Director of Field Services

II. Faculty Committees

(Chairman's name first. Committees with all or part of the faculty membership elective are indicated by an asterisk.)

A. Permanent Committees responsible to the Senate

***Curricula**

Dean of Instruction
 James T. Blanford
 James R. Clark
 John P. Cowley
 Clifford L. Bishop
 Curriculum Coordinator
 Registrar

***Graduate Council**

Dean of Instruction
 Curriculum Coordinator
 Coordinator of Research
 H. W. Reninger
 Donald O. Rod
 Harry Guillaume
 William C. Lang
 Clifford L. Bishop
 Henry Van Engen
 M. R. Beard

Admission & Professional Screening

Dean of Students
 Dean of Instruction
 Associate Dean of Students

Coordinator of Student
 Counseling
 Registrar
 Placement Director

***Committees**

Jean Bontz
 Malcolm Price
 William C. Lang
 R. Paul Brimm
 John P. Cowley

***Educational Policies Commission**
(responsible to the faculty)

Margaret Buswell
 Herman Nelson
 Howard T. Knutson
 Dorothy Koehring
 Donald F. Howard
 Lillian R. Wagner
 Raymond J. Schlicher
 Olive Holliday
 Caryl Middleton
 David Delafield
 Katherine Humphrey

***Administration of Faculty Personnel**

Cecil Phillips
 Donald F. Howard
 Dorothy Koehring
 Alden B. Hanson
 Gordon J. Rhum
 C. W. Lantz
 Kenneth Gogel

***Student Loan Fund**

Frank W. Hill
 Thelma Short
 James L. Bailey

President
 Dean of Students
 Associate Dean of Students
 Business Manager

Athletic Board

R. R. Fahrney
 Raymond J. Schlicher
 William P. Happ
 Alden B. Hanson
 James W. Kercheval
 H. A. Riebe
 Business Manager
 Director of Athletics, Secretary

B. Permanent Committees responsible to the President**Educational Publications**

Director of Extension Service
 Director of Curriculum
 Laboratory
 Reference Librarian
 Director of College Relations
 Director of Bureau of Research
 Norman Stageberg
 Glenadine Gibb

Coordinating Group

President
 Dean of Instruction
 Dean of Students
 Associate Dean of Students
 Business Manager
 Director of Field Services
 Head, Dept. of Physical Plant
 Director of College Relations
 Registrar
 Curriculum Coordinator
 Coordinator of Research

Conferences

Daryl Pendergraft
 L. V. Douglas
 Wray Silvey
 H. W. Reninger
 Raymond E. Matala

Administration of Clerical Personnel (elected)

M. R. Beard
 L. V. Douglas
 Harry G. Guillaume
 Frances Hill
 Betty Stover

Student Welfare

Dean of Students
 Associate Dean of Students
 Augusta Schurrer
 H. A. Riebe
 Harold E. Bernhard

Convocations and Commencements

Frank W. Hill
 Paul F. Bender
 M. R. Beard
 Harold E. Bernhard
 P. C. Jennings
 Oscar E. Thompson
 Katherine Humphrey

Board in Control of Student Publications

George H. Holmes
 James L. Bailey
 Paul Smith
 Wallace Anderson
 5 students
 (one to be appointed by SLB)

Recreation Park

L. L. Mendenhall
 E. C. Denny
 James R. Clark
 Jean Bontz
 Shirley Winsberg

Use of Facilities

M. R. Beard
 Oscar E. Thompson
 Lyman H. Harris
 R. Paul Brimm
 George H. Holmes
 Mrs. Mary Hanawalt
 William C. Lang

Campus Planning

President
 M. R. Beard
 Paul F. Bender
 Thelma Short
 Bert L. Woodcock
 Tom A. Lamke
 George H. Holmes
 James W. Kercheval
 P. C. Jennings
 E. E. Cole
 Howard O. Reed
 Daryl Pendergraft
 M. J. Nelson

Traffic and Safety

Bert L. Woodcock
 Peter M. Mazula
 P. C. Jennings
 Paul F. Bender
 M. B. Smith

A. D. Dickinson
 E. E. Cole
 2 students

Board of Health

Health Director
 Dean of Instruction
 Dean of Students
 Associate Dean of Students
 Registrar
 Coordinator of Student
 Counseling
 Jean Bontz
 L. L. Mendenhall

Lecture-Concert

Herbert V. Hake
 Stanley Wood
 James L. Bailey
 3 students

C. Permanent Committee responsible to the Dean of Students**Homecoming**

Raymond J. Schlicher
 Clifford H. Herrold
 Lawrence S. Wright
 Milo Lawton
 5 students

D. Temporary Committees**North Central Association
(responsible to the Senate)**

John P. Cowley

**Teacher Education and Religion
(responsible to the President)**

Harold E. Bernhard
 Tom A. Lamke
 Lucile Anderson
 Martin L. Grant
 William L. J. Dee
 Josef Fox
 Julia Sparrow

**Student Teaching
(responsible to the Senate)**

Guy W. Wagner
 Howard O. Reed
 Clifford L. Bishop
 Dwight K. Curtis
 Daryl Pendergraft
 Herbert Silvey
 Elisabeth Sutherland
 Henry Van Engen
 Dean of Instruction
 President

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