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UNIVERSITY OF NORTHERN IOWA

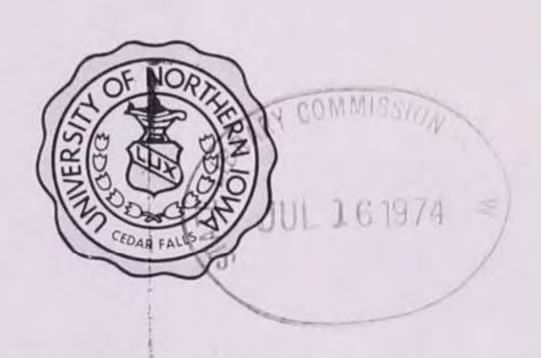


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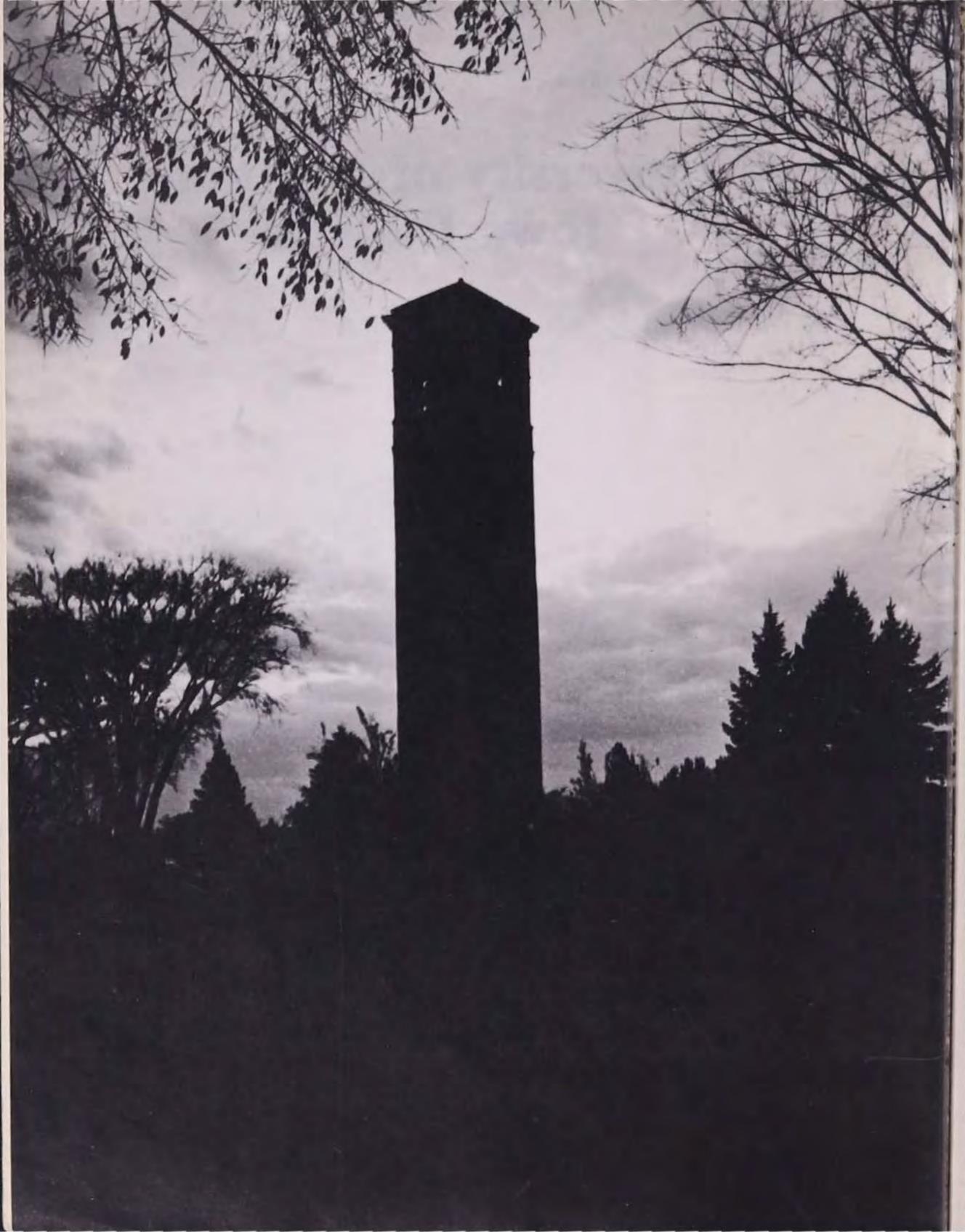
University Catalog

1974 - 1976

Effective Spring Semester - 1974

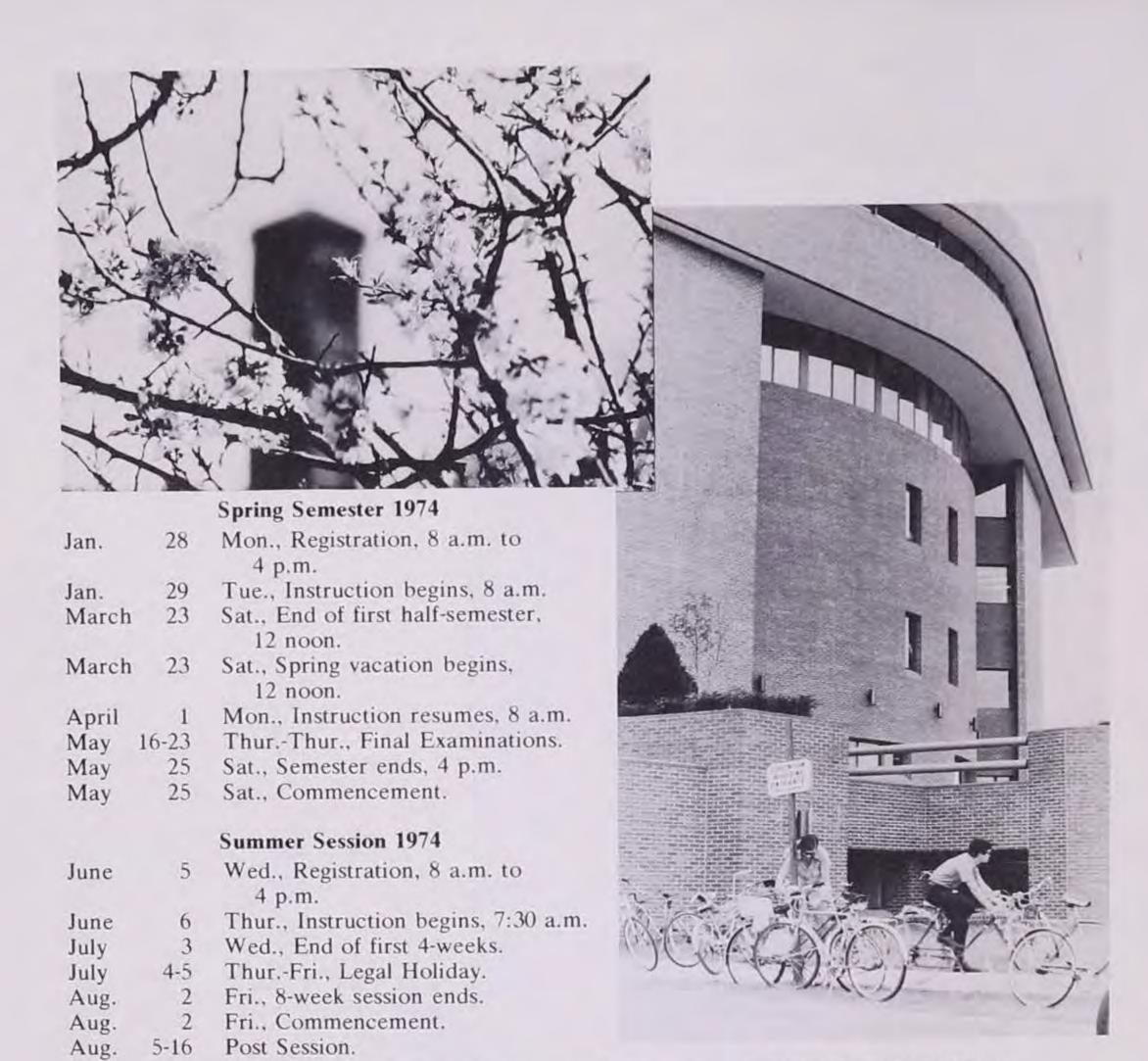
UNIVERSITY OF NORTHERN IOWA BULLETIN. Issued four times a year by the University of Northern Iowa, 1222 West 27th Street, Cedar Falls, Iowa 50613, during the months of January, February, March, and October. Second-class postage paid at Cedar Falls, Iowa 50613.

Vol. LXXV, No. 1, January 1974.



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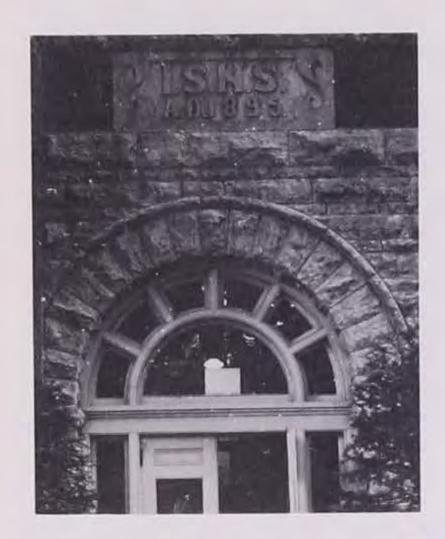
Fall Semester 1974

Aug. 21-23 Wed.-Fri., Orientation and Registration, 8 a.m. to 4 p.m. Aug. Mon., Instruction begins, 8 a.m. 26 Sept. Mon., Legal Holiday. Oct. 19 Sat., End of first half-semester, 12 noon. Nov. Wed., Thanksgiving vacation begins, 12 noon. Dec. Mon., Instruction resumes, 8 a.m. Dec. 16-20 Mon.-Fri., Final Examinations. Fri., Semester ends, 5 p.m. Dec. 20

Spring Semester 1975

Jan. 13 Mon., Registration, 8 a.m. to 4 p.m. Tue., Instruction begins, 8 a.m. Jan. 14 Sat., End of first half-semester, March 12 noon. March Sat., Spring vacation begins, 12 noon. March 17 Mon., Instruction resumes, 8 a.m. March 28 Fri., Academic Holiday. May 12-16 Mon. Fri., Final Examinations. May Sat., Semester ends, 4 p.m. 17 May 17 Sat., Commencement.





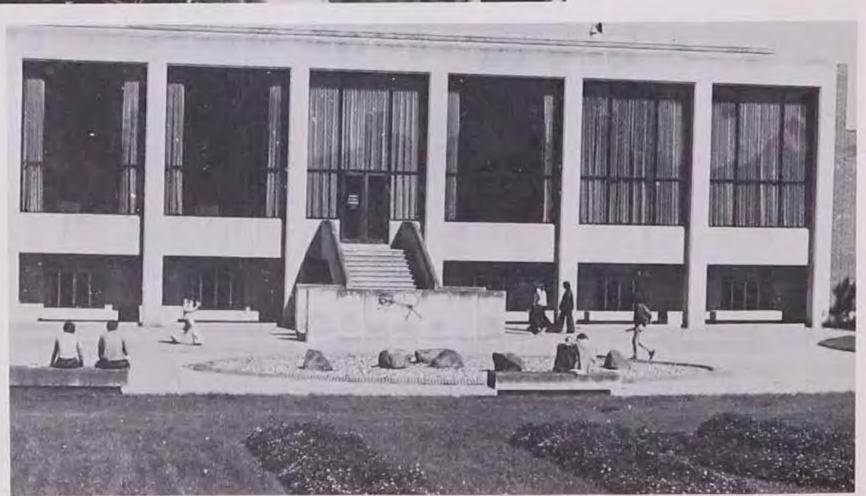
Summer Session 1975

June Thur., Registration, 8 a.m. to 4 p.m. Fri., Instruction begins, 7:30 a.m. June July Thur., End of first 4-weeks. Fri., Legal Holiday. July Fri., 8-week session ends. Aug. Fri., Commencement. Aug. Post Session 4-15 Aug.

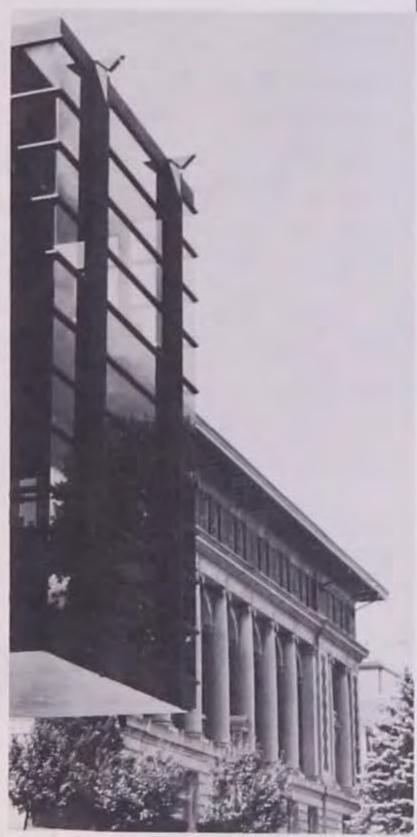
Fall Semester 1975

Wed.-Fri., Orientation and Aug. 20-22 Registration, 8 a.m. to 4 p.m. Mon., Instruction begins, 8 a.m. 25 Aug. Mon., Legal Holiday Sept. 1 Sat., End of first half-semester, Oct. 18 12 noon. Wed., Thanksgiving vacation Nov. begins, 12 noon. Mon., Instruction resumes, 8 a.m. Dec. Dec. 15-19 Mon.-Fri., Final examinations. Fri., Semester ends., 5 p.m. Dec. 19









Spring Semester 1976

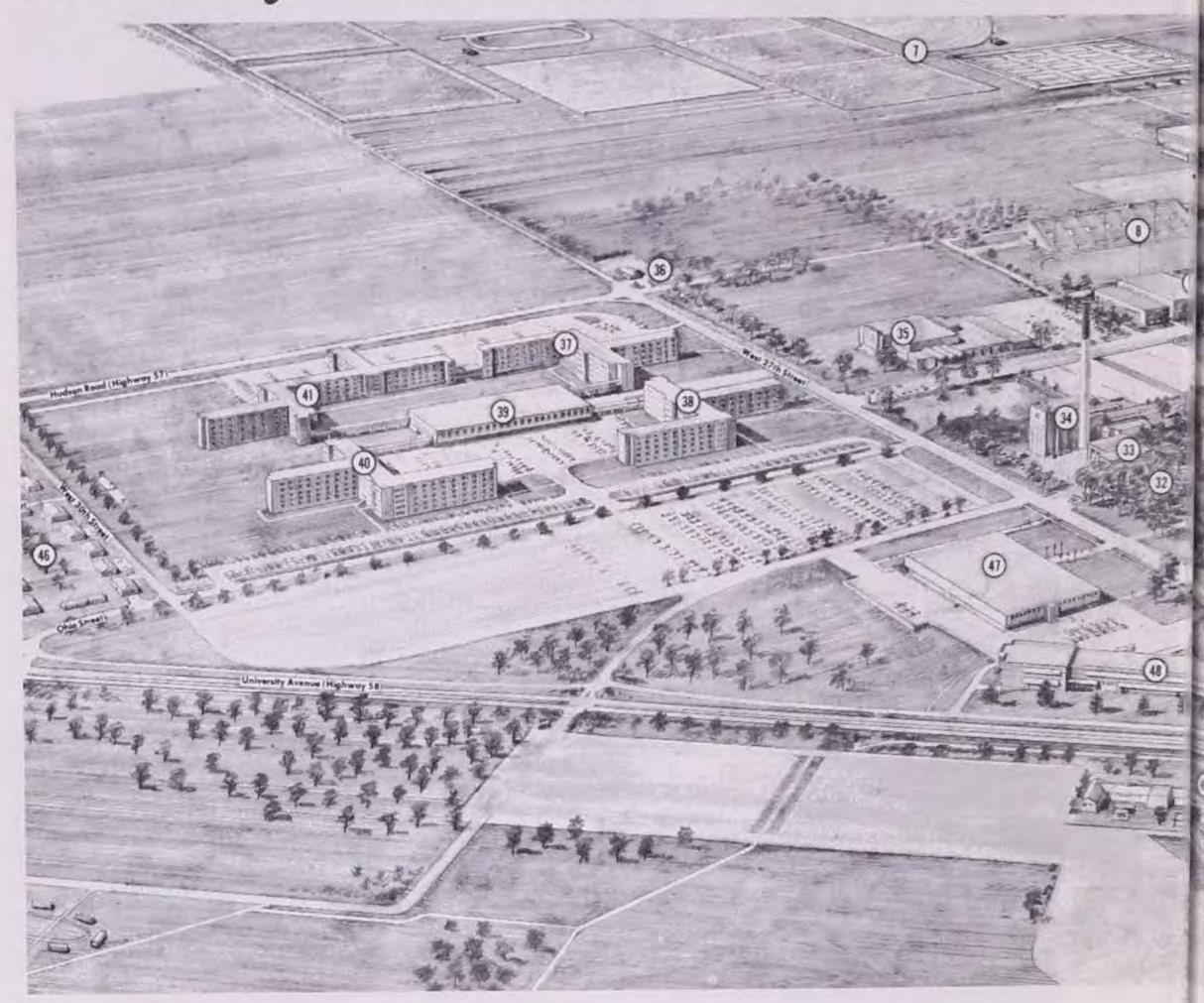
Jan. Mon., Registration, 8 a.m. to 12 4 p.m. Jan. Tue., Instruction begins, 8 a.m. March Sat., End of first half-semester, 12 noon. March Sat., Spring vacation begins, 12 noon. March Mon., Instruction resumes, 8 a.m. 15 April 16 Fri., Academic Holiday. May 10-14 Mon.-Fri., Final Examinations. May Sat., Semester ends, 4 p.m. 15 May 15 Sat., Commencement.

Summer Session 1976

June Mon., Registration, 8 a.m. to 4 p.m. Tue., Instruction begins, 7:30 a.m. June July Fri., End of first 4-weeks. July Mon., Legal Holiday. July Fri., 8 week session ends. 30 Fri., Commencement. July 30 Aug. Post Session. 2-13



University of Northern Iowa Campus

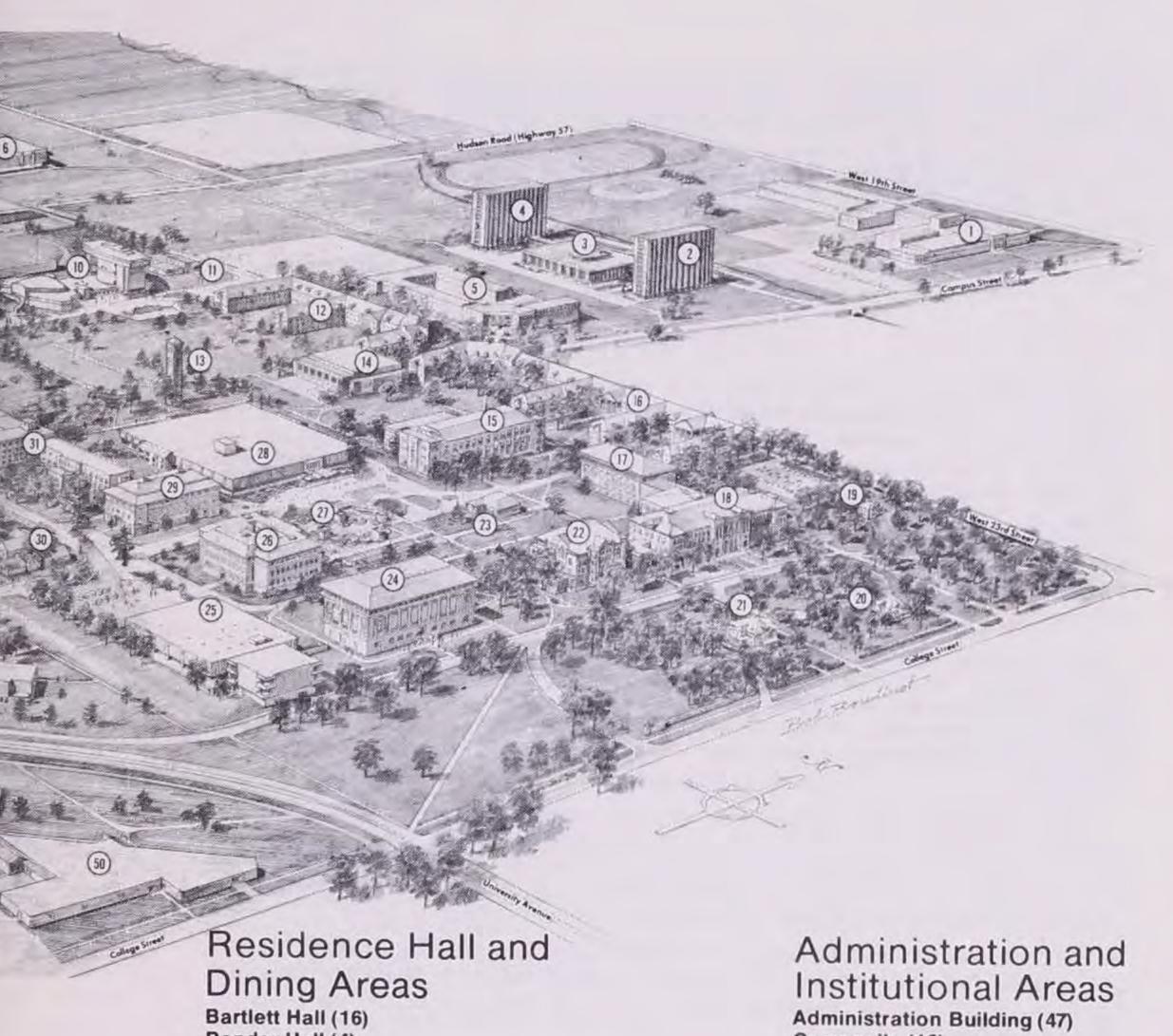


MAP DIRECTORY

Academic and Activity Areas

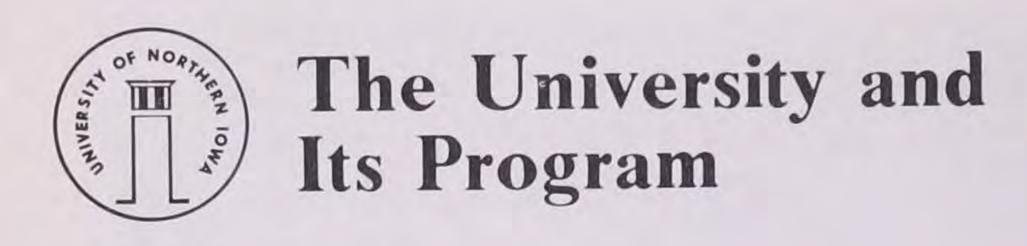
Art. No. 2 (33)
Arts and Industries (48)
Athletic Fields (7)
Auditorium Building (18)
Baker Hall (31)
Biology Research Complex (50)
Ceramics Studio (49)
Education Building (10)
Erickson Garage (36)
Home Management House (19)
Men's Gymnasium (9)

Old Administration Building (22)
Physical Education Center (6)
Physics Building (17)
Price Laboratory School (1)
Psychology No. 1 (32)
Psychology No. 2 (23)
Russell Hall (35)
Sabin Hall (26)
Science Building (25)
Seerley Hall (24)
Women's Gymnasium
and Pool (15)
Wright Hall (29)



Bartlett Hall (16)
Bender Hall (4)
Campbell Hall (5)
College Courts (46)
Dancer Hall (2)
Hillside Courts (Not shown)
Hagemann Hall (37)
Lawther Hall (12)
Noehren Hall (41)
President's Residence (21)
Regents Dining Lounge (39)
Rider Hall (38)

Shull Hall (40) South Courts (Not Shown) Towers Dining Lounge (3) Administration Building (47)
Campanile (13)
Commons and Media Center (14)
Ethnic Culture House (20)
Greenhouse (30)
Library (28)
Museum (Not Shown)
O. R. Latham Field (8)
Physical Plant Shops (Not Shown)
Power Plant No. 1 (34)
Power Plant No. 2 (Not Shown)
Radio Tower and Shack (Not Shown)
Storage Yards (Not Shown)
Student Health Center (11)
University Union (27)



The University of Northern Iowa is a member of the American Association of Colleges for Teacher Education (AACTE) and the Council of Graduate Schools in the United States. The university is fully accredited through the master's degrees and the sixth-year specialist's degrees by the North Central Association of Colleges and Secondary Schools (NCA) and by the National Council for Accreditation of Teacher Education (NCATE). The university's programs are also accredited by the National Association of Schools of Music, the National Council of Social Work Education, The American Speech and Hearing Association, the Iowa State Department of Public Instruction, and the National University Extension Association, and approved by the American Chemical Society.

The university was established in 1876 by enactment of the Iowa General Assembly, and opened on September 6, 1876 as the Iowa State Normal School — "a school for the special instruction and training of teachers for the common schools of the state." In 1909, the institution was renamed the Iowa State Teachers College, and under this name attained a national reputation and status as a leading institution in the field of teacher education.

On July 5, 1961, by enactment of the Iowa General Assembly, the name of the school was changed to the State College of Iowa. This change made the school's increased facilities of greater service to the state with the offering of degree programs for those not planning to teach. Two programs leading to the Bachelor of Arts degree, one with certification to teach and one without certification, became available.

The change to the University of Northern Iowa was effected on July 1, 1967, following an enactment by the Iowa General Assembly on the recommendation of the State Board of Regents. With university status, the function of the institution is redefined as follows:

"The University shall offer undergraduate and graduate courses of instruction, conduct research and provide extension and other public services in the areas of its competence to facilitate the social, cultural and economic development of Iowa. Its primary responsibility shall be to prepare teachers and other educational personnel for schools, colleges and universities and to carry out research and provide consultative and other services for the improvement of education throughout the state. In addition, it shall conduct programs of instruction, research and service in the liberal and vocational arts and sciences and offer such other educational programs as the State Board of Regents may from time to time approve."

University status has brought increased attention to research and services, particularly in the field of education, as well as the offering of a broader curriculum on both the undergraduate and graduate levels. The university now offers three baccalaureate degrees: Bachelor of Arts; the Bachelor of Technology, which was added in 1968; and the Bachelor of Music, added in 1969. The Bachelor of Arts and the Bachelor of Technology degrees are available in two programs, one with certification to teach and one without certification. On the graduate level, the university offers four degrees: the Master of Arts, the Master of Arts in Education, the Specialist, and the Specialist in Education.

Four instructional colleges and the Graduate College comprise the academic structure of the university, with colleges and departments grouped as follows:

College of Business and Behavioral Sciences-

Business

Business Education and Office Administration

Economics

Geography

History

Home Economics

Political Science

Psychology

Sociology and Anthropology

College of Education-

Curriculum and Instruction

Educational Psychology and Foundations

Library Science

Physical Education for Men

Physical Education for Women

School Administration and Personnel Services

Teaching

College of Humanities and Fine Arts-

Art

English Language and Literature

Foreign Languages

Music

Philosophy and Religion

Speech

Speech Pathology and Audiology

College of Natural Sciences-

Biology

Chemistry

Earth Science

Industrial Arts and Technology

Mathematics

Physics

In 1976 the University of Northern Iowa will mark its centennial with a variety of appropriate events designed to usher in its second century of service to higher education. Planning for the year-long observance is already underway. The UNI Foundation in 1973 launched a 10-year, \$10-million fund drive in three phases to finance the construction of the proposed UNI-Dome — a covered multi-purpose coliseum, an

auditorium, and special additions to the university's academic resources. In preparation, also, is a special commemorative centennial history book dealing with the evolution of the institution from its founding in 1876 to the present day.

Special programs featuring nationally noted educators and other prominent figures, as well as individuals and groups renowned in the arts, will be presented during the centennial year.

The university is located in Cedar Falls, Iowa, north and east of the geographic center of Iowa on the Cedar River. Cedar Falls has a population of approximately 32,000, with the Cedar Falls-Waterloo greater metropolitan area having a population of more than 106,000. The institution has grown from its original site of a 40-acre campus with one building—Central Hall which originally had housed the orphaned children of Civil War soldiers—until it now embraces more than 40 principal buildings, a campus of some 650 acres, a faculty numbering about 575, and a student body of nearly 10,000. Together with the University of Iowa and Iowa State University of Science and Technology, the University of Northern Iowa is governed by the State Board of Regents.



General Information



The student at the University of Northern Iowa has a wide variety of services and facilities available to enrich his education beyond the academic work in the classroom and to serve him in the round-the-clock living at UNI. These are described in the following sections:

Student Housing
Student Services
Student Financial Aid
Student Activities and Honors
University Facilities and Educational Services

Student Housing

Single freshmen and sophomores under 21 years of age who do not live in the homes of their parents or legal guardians are required to live in residence halls operated by the university. Permission for students to work for room and board in a private home, live with close relatives, or live in houses operated by university-recognized student organizations must be secured from the Housing Office prior to the beginning of any semester.

All other students may live in housing of their choice. Graduate students can be accommodated in university residence halls.

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 (see p. 38). A deposit fee of \$30 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.

In the assignment of residence hall rooms, an effort is made to give room preferences of returning students prior consideration. Definite assignments for new students are made only after they have been admitted to the university. Notices of assignment are mailed before the opening of a semester.

OCCUPANCY—The residence period for new students commences one day prior to the beginning of the Orientation program; for returning students, occupancy may begin one day prior to the last day of registration for former students. All students must vacate the halls by noon on the day following the last final examination for the semester or term for which they were registered. If a reserved room is not occupied on the opening day of classes and arrangements have not been made for later occupancy which are acceptable to the Housing Office, the reservation may be cancelled.

RATES—Residents of all halls other than Bartlett pay a fee of \$878 per academic year for a double room with full board. These rates may vary with single-room occupancy or if a less than full board option is chosen. Charges include an \$8 activity fee and a telephone in each room.

Bartlett Hall houses graduate students. A double room with full board for the academic year is \$860. A single room with no board is \$482 for the academic year. Telephones are available in the corridors.

A double room with full board for the summer session is \$209.

The housing contract is for the entire academic year, or summer session. If the contract is terminated before the expiration date, the plan of refunding as stated in the contract will apply, but the student is responsible for any financial liabilities incurred prior to the date of termination.

The above rates are subject to change.

Women's Residence Halls

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 lavoratory, beds and mattresses, dresser or chest, study desk and chair.

Campbell, Dancer, Hagemann, Lawther, and Noehren Halls house women students of all classifications. Freshmen are placed in special units within the halls and an upper-class counselor lives with them.

Men's Residence Halls

Each of the residence halls for men, in addition to its student rooms, contains lounges, study rooms, recreational areas, laundry rooms, and other facilities for the comfort and convenience of its occupants.

Bender, Rider, and Shull Halls and a wing of Noehren Hall provide accommodations for between 346 and 600 men per hall. Within each hall, areas or wings which accommodate approximately 50 students are designated as houses. Each house elects its own officers, sponsors its own social and recreational activities, and is supervised by a selected upperclassman known as a "head resident."

Food Service

All students living in university residence halls are required to eat in university dining rooms, with the exception of residents of Bartlett Hall.

The dining rooms serve three meals daily, Monday through Saturday, but only breakfast and midday dinner are served on Sunday. Two options —"no breakfast" and "no breakfast or weekend board" — are available. A student who lives off campus may make arrangements to eat some or all of his meals in a university dining service.

Married Student Housing

One and two-bedroom apartments, furnished and unfurnished, are available to married students. College Courts and South Courts provide room for 147 student families. Hillside Courts house 268 families. Students with children are given priority in making assignments. Applications should be sent to:

Director of Married Student Housing 105 E. Street Hillside Courts Cedar Falls, Iowa 50613

Student Costs

The over-all cost for undergraduate students who are residents of Iowa is approximately \$1,730.00 for the academic year.

Basic fee	\$600
Board and room	878
Books and supplies	250

Non-resident students are charged an additional \$500 basic fee. For a full statement of fees (summer session, applied music, etc.) for both undergraduate and graduate students, see pp. 50, 51.

Students are required to provide their own textbooks. Ordinarily the cost for these books will be \$75 to \$80 a semester. Students may buy their texts from any source. Student organizations operate a book exchange at the beginning of each semester.

Student Services

ORIENTATION—Orientation programs are provided for all new undergraduate students. After admission to the university each new student is invited to the campus to attend orientation activities and register for classes. Students who begin in the fall semester are invited to a two-day program during the preceding months of June and July. Students who begin at the spring or summer terms are invited to attend orientation activities immediately before classes begin.

The orientation program is designed to acquaint students with university resources available to them in setting and achieving their educational goals. The program includes placement testing, advisement and registration, academic and social activities, tours of the campus, and opportunities to meet faculty and develop friendships with other new students.

Campus tours are offered throughout the year to prospective students through the Admissions Office.

COUNSELING—Counseling services at the University of Northern Iowa are designed to assist students in becoming more effective as students and as persons, and to grow in self-understanding in order to cope more effectively with immediate situations and with future decisions. To help students benefit from their educational careers and develop their potentialities, professional counseling services are provided for a wide range of normal problems pertaining to vocational and educational choices, academic progress, personal and social adjustment, marital or pre-marital adjustment, and improvement of study skills.

The Counseling Center is located in the Administration Building where students may discuss, in confidence, any problems or situations which are of concern to them. Staff members are professional counselors who maintain the confidential nature of counseling. Counseling records are not released without the permission of the student.

Counseling is completely voluntary, and the services of the Counseling Center staff are available to all students at UNI without charge. Specialized referral services are available for students who have serious personality problems.

One counseling staff member coordinates the program for students attending the university with assistance from the Division of Vocational Rehabilitation.

THE SPEECH AND HEARING CLINIC, located in the basement of the Auditorium Building, provides clinical services for students possessing voice or articulation disorders or hearing problems. At the beginning of each semester, transfer

students who have taken a speech course elsewhere are given a speech and hearing check. Those with problems which might interfere with a teaching career are referred to the clinic.

Any student who feels the need of help concerning a speech or hearing problem is encouraged to visit the clinic at any time.

STUDENT HEALTH SERVICE—The university provides medical care for current students through the Student Health Service. Medical advice and treatment are provided students by a well qualified staff of physicians, nurses, and technicians at the Health Center. Major surgery and dental services are not available at the Health Center; however, the staff will furnish supervision and aid in obtaining these services for any student needing them. The Student Health Service affords preventive care to the student body and does not compete with private medical services. A charge is made for laboratory, X-ray, medicine, and certain examinations and procedures.

The Health Center is open from 8 a.m. to 5:30 p.m., Monday through Friday and from 9 to 11 a.m. on Saturday when university classes are in session. When the center is closed, arrangements have been made for emergency coverage through the Emergency Service of Allen Hospital in Waterloo.

A group plan of Accident and Sickness Insurance is available on a voluntary basis to all full-time registered students. Information on cost of this insurance may be obtained from the office of the Dean of Students. No student should be without insurance coverage.

A physical examination is required of all new students. The examination must have been given by a practicing physician within one year prior to registration and recorded on a form provided by the university. This examination is required regardless of classification or number of hours taken and must be on file with the Student Health Center before registration can be completed. All students who attend classes on campus must have this physical examination. Exceptions are students enrolling for the 2 or 3-week summer workshop sessions. This physical examination is not given at the Student Health Center.

For transfer students, a transcript of their physical examination from their previous school will be accepted provided it has been done within one year before coming to U.N.I.

It is recommended that students be immunized against small pox, diphtheria, tetanus, and poliomyelitis. Students are required to have had a turberculin skin test or chest X-ray within one year before registering.

OFFICE OF CAREER PLANNING AND PLACEMENT—The Office of Career Planning and Placement aids prospective graduates and alumni on the teaching and non-teaching curricula to secure positions in accordance with their qualifications and personal interests. Registration with the placement office is a graduation requirement for those on the undergraduate teaching program. On all graduate-level programs and on the liberal and vocational arts programs registration is recommended but not required.

To be eligible for placement service in teaching, an undergraduate must be in the final year of his teacher education program and must qualify for recommendation by the university for an initial teaching certificate, or for an additional endorsement or approval. On the graduate level, the student must have been admitted to candidacy for an advanced degree or qualify for an additional endorsement of approval.

Career information and counseling are also available to all students and alumni who request assistance in examining careers or seeking employment.

Student Financial Aid

Student employment and financial aid at the University of Northern Iowa are handled by the Director of Financial Aids. A brochure on financial aids, which includes information on employment, Ioans, grants, and scholarships, may be obtained from the Director of Financial Aids. University of Northern Iowa, Cedar Falls, Iowa 50613.

Employment

Many students earn a part of their expenses while attending the university. All possible help will be given 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 university standards as to health and scholarship. Appointments to work on campus 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 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.

The College Work-Study Program has helped secure jobs, both on and off campus, for students from low-income families. To be eligible to participate in the College Work-Study program, a student should be from a family that is unable to contribute a significant amount to the student's expenses. The Work-Study jobs are handled in the same way as other campus jobs. The Director of Financial Aid selects eligible students for this program.

Loans and Grants

NATIONAL DIRECT STUDENT LOANS are available to students who are on a continuous program and who meet certain standards of need. These loans are made as funds are made available. Students may borrow a combined total of not more than \$2,500 during the first two complete years and an aggregate of \$5,000 as undergraduates. This loan fund has some advantage for those entering teaching because cancellation can be earned under certain circumstances.

FEDERALLY INSURED STUDENT LOAN—Under the Federally Insured Student Loan Program a student may borrow from a lending agency up to \$2,500 per year. Federally Insured Loans are interest free to students who can show they used the loan to attend a university. Repayment begins after the student leaves college with up to ten years allowed for repayment. The major objective of this program is to make loans available to any student who desires a loan. Interested students should write to the Director of Financial Aids.

SUPPLEMENTARY EDUCATIONAL OPPORTUNITY GRANTS—Supplemental Educational Opportunity Grants (which do not need to be repaid) are available, within the limitations of the funds available, to undergraduate students with exceptional need. Eligible students enrolled on a full-time basis may receive a Supplementary Educational

Opportunity Grant for each year of college for a maximum of four years. Grants range from \$200 to \$1,500 per year, but cannot be more than one-half of the student's need.

BASIC EDUCATIONAL OPPORTUNITY GRANTS—This program is designed to provide financial assistance to those who need it to attend the university. The maximum award available is \$1,400 minus the amount expected as a family contribution. Application is made directly to a central processing agency, known to high school counselors. Questions may also be directed to the Director of Financial Aid, University of Northern Iowa.

Scholarships

STUDENT AID SCHOLARSHIPS are available each year to approximately 500 students. All applicants must be legal residents of Iowa, possess those qualities of character, personality, and academic ability essential for success at the university and need aid in financing their education.

The Student Aid Scholarships are in the form of partial remission of fees and are authorized by the Iowa State Board of Regents. There is no limitation on the number of awards that may be made to graduates of a particular high school or to students of any county.

To aid in determining academic ability, scores on the American College Tests are required of each applicant. These tests are administered at various times and places throughout Iowa. Notices of the dates and places where these examinations will be given are available from high school principals and counselors.

To aid in determining the financial status of the student and his family, every applicant for a Student Aid Scholarship is required to have his parents complete a form giving specific information concerning the family's economic position, including assets, liabilities, and income (Parents' Confidential Statement which is part of the scholarship service of the Education Testing Service, or Family Financial Statement).

MERIT AWARDS—A number of merit awards are available each year for new students coming directly from high school and those transferring from two-year colleges who have maintained excellent academic records. Students are selected without reference to financial need. There is no special application necessary. All admitted students who meet the general selection criteria are considered.

ART FAIR SCHOLARSHIPS are awarded annually to two high school seniors interested in becoming art teachers. Their value is the same as that of the Student Aid Scholarships.

IOWA INDUSTRIAL EDUCATION EXPOSITION SCHOLARSHIPS are awarded annually to high school seniors interested in becoming industrial arts teachers. These grants are made primarily on the basis of the student's work submitted at the Iowa Industrial Education Exposition held each spring on this campus, scholarship potential, and potential as an industrial arts teacher. These grants provide a Student Aid Scholarship for four years. The value and regulations governing these awards are the same as for Student Aid Scholarships.

HOME ECONOMICS scholarships are awarded to two high school seniors interested in becoming home economics teachers and attending the University of Northern Iowa to prepare for such a career. Further details concerning these scholarships may be obtained by writing to the head of the Department of Home Economics.

UNI ATHLETIC GRANTS-IN-AID AWARDS are provided by contributions from alumni, gate receipts, businessmen in Waterloo and Cedar Falls, and other friends of the

university. To be considered for this award, the student must be eligible for admission and must be recommended by the university coach of his sport and the athletic director.

SCIENCE SYMPOSIUM AWARDS are made to high school seniors ranking highest on examinations in the areas of biology, chemistry, and physics given each year on this campus. These grants provide cash and/or Student Aid Scholarships for four years. The value of and regulations governing these awards are determined on a yearly basis.

OTHER FRESHMAN SCHOLARSHIPS—A number of other scholarships are a-warded to entering freshmen. These include the Leslie I. Reed Memorial Scholarship, the University Book and Supply Scholarships, the C. A. Boehmler and Katherine S. Boehmler Memorial Scholarship, the Viking Scholarship, the McDonald Scholarship and Loan, the Alison E. Aitchison Scholarship, the Dickey Memorial Scholarship, the Anton Nielsen Scholarship and the Kappa Delta Pi Scholarship. Applications for these awards are made on the same forms as for a Student Aid Scholarship.

SCHOLARSHIPS AND AWARDS are also available to students who have been in attendance at the University of Northern Iowa. These include the Bartlett-Freeland Debate Award, The Alpha Delta Kappa Scholarship, the Mr. and Mrs. W. Anthony Scholarship, the James Clark Memorial Scholarship, the William P. Davidson Memorial



Scholarship, the Arthur D. Dickinson Memorial Scholarship. The Martin J. and Cora G. Nelson Scholarship, the Alice O. Gordon Bequest, the Ida M. Wilson Scholarship, the Louis E. Begeman Memorial Scholarship, the Faculty Memorial Scholarship, the Faculty Mem's Club Scholarship, the University of Northern Iowa Foundation Founders Award, the Dale F. Groote Industrial Arts Scholarship, the Mary Wheat Graves Award, the Kenneth L. Hansen Memorial Scholarship, the T. C. Holy Award, the Charles T. Leavitt Economics Scholarship, the Michel Scholarship, the Furniss and Mary W. Lambert Scholarship, the Bertha Martin Memorial Scholarships, the Cora G. Nelson Memorial Art Scholarship, the Anna M. Nielsen Music Scholarship, the Ann Moline Organ Scholarship, the May Smith-Amy Arey Kindergarten-Primary Award, the Pi Tau Pi Memorial Scholarship, the James Scott Memorial Scholarship, the Hazel Strayer Memorial Scholarship, the Student ISEA Scholarship, the Irene M. Thompson Scholarship, the Sigma Alpha Iota Awards, the Theta Alpha Phi Alumni Award, the Pi Gamma Mu Award, the Phi Mu Alpha Sinfonia Scholastic Award, and the Purple and Old Gold Awards.

THE WILD AND WHITE AWARDS are made to an upperclass student majoring in the Department of Physical Education for Women.

THE MERCHANT SCHOLARSHIP is awarded to a graduate of the University of Northern Iowa who plans to enter graduate school with the intention of obtaining a graduate degree. Ordinarily the award is made to a student who has been enrolled in a graduate school and has done superior work at the graduate level.

THE MARY JENSEN SHACKELFORD AWARD, established in 1968, is available to graduate students at the University of Northern Iowa. Preference is given to applicants seeking a Master of Arts in Education degree; however, the award is open for any area of graduate study at UNI. To be eligible, a student must have at least six hours of graduate work at this institution with a minimum grade point average of 3.0 and desirable personal and professional qualifications as determined by the selection committee. Each award is for \$500 and will be made to a full-time graduate student for the regular academic year only. Additional information on the award may be secured at the Office of the Dean of the Graduate College as well as the Office of the Director of Financial Aids.

Note: Explanatory materials and application forms for the above scholarships are available in the Office of the Director of Financial Aids at the university. The deadline for making applications is March 1. Students are encouraged to make application for the awards any time after the start of the first semester of their senior year if they are high school students, or the start of their sophomore year if they are junior college students. By filling out either the Parents Confidential Statement or the Family Financial Statement every applicant will be considered for every award for which he might be eligible. Applications received after March 1 will be considered only if all the scholarships have not been awarded to applicants applying before March 1. Additional forms and information may be secured from the Director of Financial Aids.

Student Activities and Honors

At the University of Northern Iowa extracurricular activities are planned and fostered because of the significant contribution they can make to the education of the student. Experience in extracurricular activities aids materially in achieving the objectives of general education. For students who plan to teach, there is additional value in participating in such activities, since teachers are expected to aid in the extracurricular programs of the public schools. The university, therefore, maintains an extensive program of extracurricular activities including athletics, dramatics, publications, forensics, music, social life, artists series, student organizations, and interest groups.

ATHLETICS - Various intercollegiate sports are available and extensive programs in intramural sports are conducted for both men and women.

The university engages in intercollegiate athletic competition in football, basketball, baseball, track, wrestling, tennis, golf, gymnastics, and swimming. Intercollegiate athletics are under the control of the Athletic Board, an eight-member faculty committee appointed by the President. For the non-participants 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 university plays, sponsored by the Department of Speech, are produced each year. Any student is eligible to try out for a part in these productions.

FORENSICS—The forensic 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 Speech, and it welcomes participation of all students.

MUSIC – Musical activities include the marching band, the varsity band, the concert band, the symphony orchestra, various instrumental ensembles, the concert chorale, the women's chorus and men's glee club, music theatre, and the madrigal singers. Numerous concerts are presented throughout the year by the university chorus and orchestra. Although the music activities are sponsored by the Department of Music, any student is eligible for participation.

During the year a number of faculty recitals are presented for the public. Concerts by nationally known artists, sponsored by the university, also afford the student opportunities for hearing the best in music.

SOCIAL LIFE—The social life at the University of Northern Iowa is an everchanging, flexible program designed to meet the current interests and needs of the student body and the university community. Although there are some traditional events, each year new activities are added. The opportunities for social life are offered in many forms including dances, community service projects, films, art shows, coffees, forums, and travel shows. Many of these activities take place in the UNI Union which is the center of campus social life and the Union Activities Board is responsible for the development of the program.

STUDENT GOVERNMENT - The student government associations include the UNI Student Association, the Residence Halls Association, the Married Student Housing Council, the Interfraternity Council, and Pan Hellenic.

THE STUDENT SENATE—The Student Senate is the legislative branch of UNISA. The executive members include the president, administrative vice-president, academic vice-president, secretary and business manager. Elected senators are chosen on a

population basis from university housing, off-campus housing, and the student body at large. Non-voting members include one representative of the Residence Halls Association, Married Student Housing Council, Graduate Students, the Senate adviser, and the UNISA president. The Student Senate endeavors to promote cooperation between students and faculty, to seek solutions to student and university problems, and to represent the entire student body in matters affecting student interests. It carries on a program of work which gives students an opportunity to participate in the life of the university in such a way as to make it an experience in democratic living. The Student Senate sponsors the selection of outstanding seniors for the Purple Key honor awards.

MARRIED STUDENT HOUSING COUNCIL is the governing body of the married student housing areas: Sunset Village, South Courts, College Courts, and Hillside Courts. The Council consists of a president, vice-president, secretary, treasurer, and councilmen. The councilmen represent wards in the various housing areas.

The purpose of the Council is to coordinate the activities of the residents of these housing units with the activities of the University of Northern Iowa; to develop interests, sociability, and organization among the residents; and to cooperate in implementing the university's policies concerning the activities of the residents.

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.

HONOR ORGANIZATIONS-Superior achievement in various lines of educational work is recognized by membership in the following honor organizations.

Beta Beta (Biology)

Chimes (Junior Women Scholarship and Leadership)

Delta Sigma Rho (Debate)

Gamma Theta Upsilon (Geography)

"I" Club (Intercollegiate Athletics)

Kappa Delta Pi (Education)

Kappa Mu Epsilon (Mathematics)

Omicron Delta Epsilon Zeta (Economics)

Phi Alpha Theta (History)

Phi Delta Kappa (Education)

Phi Mu Alpha Sinfonia (Music)

Phi Upsilon Omicron (Home Economics)

Pi Gamma Mu (Social Science)

Pi Omega Pi (Business Education)

Purple Arrow (Freshman and Sophomore Women Scholarship)

Sigma Alpha Iota (Music)

Sigma Delta Pi (Spanish)

Theta Alpha Phi (Drama)

Theta Theta Epsilon (Home Economics)

Tomahawk (Independent Sophomore Service)

Torch and Tassel (Senior Women Scholarship and Leadership)

SOCIAL ORGANIZATIONS—There are six sororities and five fraternities on the campus; and all have national affiliations. Although membership in these organizations is by invitation, all of the social fraternities and sororities at the University of Northern

Iowa—whether local or national—retain complete local autonomy in the selection of new members. Consequently, students are chosen for membership on the bases of qualifications other than race, color, or creed. All of the fraternities and sororities strive for the social and personal development of their members and for their growth as responsible scholars and citizens in the university community. The activities of the sororities are coordinated through Pan Hellenic; those of the fraternities, through the Interfraternity Council.

RELIGION—At the University of Northern Iowa there are numerous opportunities for the nurture and maturing of the religious life of the student. There are planned religious activities, lectures, seminars, student religious foundations and organizations, and the factual study of religion by way of courses in the curriculum. There are opportunities for religious counsel and worship in the churches and centers in the campus area. This program is coordinated by the Director of the Bureau of Religious Activities.

STATION KCRS, the university radio service, is a student owned and managed AM carrier current radio station, broadcasting at 970 KHz, and serves the University of Northern Iowa students living on campus. The commercial radio station, with studios and offices in the University Union, broadcasts music, national and campus news, student programs, and UNI sporting events.

STUDENT PUBLICATIONS—The Northern Iowan, a semi-weekly newspaper, and the UNI Magazine, which has replaced the yearbook and the literary magazine, are student publications on the UNI campus. The Board of Student Publications, a committee consisting of five students and four faculty members, establishes basic policies for publications under its jurisdiction. The Board appoints the executive editors for each of the student publications, which are advised by staff members of the Office of Public Information Services.

CAMPUS APPEARANCES BY PROFESSIONAL PERFORMERS—Each year, the university brings to the campus a number of nationally recognized performers who present three different series of programs. For each series, a student-faculty committee is appointed to select the performers who are invited to appear. In planning the programs, the three committees keep in mind the interests of students and their educational and recreational needs. Students may obtain season tickets to any or all of the three series at a greatly reduced price.

The four or five programs which comprise the annual "Artists Series," the senior "series" on the campus, typically present individuals, orchestras, or companies from the fine arts of classical music, the theatre, and dance. The "Chamber Music Series" offers concerts by three or four chamber music ensembles annually. The "Pop Series" specializes in the presentation of vocalists and instrumentalists from the popular music field.

University Facilities and Educational Services

THE LIBRARY—The University of Northern Iowa Library is located in the center of the campus. Occupied in September, 1964, the building is completely air-conditioned, and has seating for 1,100 persons. An "open stack" policy makes all library materials easily accessible to students and faculty. Special typing and group-study rooms, lounges, lockers, and photocopying facilities are conveniently located. The library is open for a public service week in excess of 102 hours.

Book collections as of July, 1973, totalled 382,455 volumes, including a well selected reference collection of 13,594 volumes. The library has current subscriptions to about 2,600 periodicals and 50 newspapers, with most periodical files complete from their beginning. More than 20,000 volumes of new material are added each year. The library also has a rapidly growing collection of materials in microform (11,880 reels of microfilm, 11,126 microcards, and 102,892 microfiche), as well as 15,407 maps and 4,585 albums of recordings with facilities for their use. As a depository for United States Government publications, thousands of such items are added annually to a collection numbering more than 138,147 at present. Of special interest to prospective teachers is a Youth Collection of 12,866 volumes—a representative collection of elementary and secondary school library materials.

Under construction at the present time is a major addition to the building which will almost double its size and bring its capacity to 60,000 volumes and 2,000 seats. Among many special facilities which will be added are a Fine Arts Room, Documents Room, Special Collections Room, and expanded facilities for blind students. Electronic carells will make possible additional listening and viewing capabilities (cassettes, disc recordings, slides, etc.). Completion of the structure is scheduled for September, 1974.



THE UNIVERSITY UNION—The University Union, located east of the UNI Library, serves as an informal meeting place for students, staff, alumni and guests of the university. The unique facilities of the Union are useful for a wide range of activities including social, cultural, recreational, and conference events.

General services provided by the UNI Union include: a campus information center, check cashing, ticket sales for campus events, meeting rooms, and dining services that range from coffee service to formal banquets. Recreational facilities include a billiards room, table tennis, and a crafts center. The building houses the offices of the campus newspaper and student government groups.

Social and cultural activities include art exhibits on a regular basis, weekly movies, arts and crafts programs, and a series of informal "mini courses." The Union is financed through student activity fee monies and income-producing services within the building.

THE COMMONS—The Commons serves the university community in a variety of ways. The primary function of the building is to provide a food service for the residents of Bartlett and Lawther halls; however, facilities are available for movies, dances, and forums which may be scheduled from time to time.

The Georgian Lounge (on the main floor) is used for teas and receptions, and is a place where students can relax during the day or evening. Across from the Georgian Lounge is the ballroom, a multi-purpose room with facilities for banquets, movies, dances, and lectures. Also on the first floor are the food service administrative offices. The general dining areas and kitchen are located on the ground floor.

The facilities of The Commons are open to students, staff, and campus guests. The building is open from 6:30 a.m. to 11 p.m. Sunday through Thursday, and remains open until 1 a.m. on Friday and Saturday.

THE EDUCATIONAL MEDIA CENTER—The primary function of the Educational Media Center is to provide a variety of media, equipment, and services for the total university. The Educational Media Center consists of six closely related areas—the Audio-Visual Services (including the Audio Listening Center), Graphic and Photographic Services, the Self-Instructional Media Laboratories, Television Services, the Communication Center in the Education Building, and Motion Picture Production Services.

Audio-Visual Services, located on the first floor of the Commons, is the center for university-wide distribution of media software and audio-visual equipment. The A-V Center houses motion pictures, filmstrips, and recordings as well as globes, models, slides, and transparencies. It also has a wide variety of audio-visual equipment including various types of projectors, tape recorders, record players, and limited photographic equipment. The Audio Listening Center, now part of the A-V Center, houses a university-wide collection of tape recordings and 56 listening carrels with tape recorders.

Graphic and Photographic Services, located on the ground floor of the Commons (west), provides diverse systems for the design and production of media materials. Almost any type of audio-visual material can be produced locally to assist faculty and staff in implementing instruction. Examples of these materials are overhead transparencies, posters, charts, reproduction copy for offset, printed learning packages, three-dimensional models, displays, photographs, and slides.

The Media Laboratories, located on the second floor of the Commons, provide facilities, equipment, and self-instructional programs for all students and faculty who want to produce their own instructional materials or learn the operation of a wide variety of audio-visual equipment. In addition, a media supply room houses materials available for purchase.

Television Services provides four-fold capabilities to the university community, A professional television studio, located on the third floor of the Auditorium building, is connected to five large classrooms all equipped with high quality television monitoring facilities. A smaller classroom-studio, with all equipment remotely controlled, can be scheduled for recording of student-teacher performance and other classroom activities. Two previewing areas, for both small and large-group viewing of prerecorded video tapes, are also available in the same building.

The Communication Center in the Education Building utilizes a unique color television system to distribute all types of audio-visual media to every classroom and laboratory in the building. The Center also contains a color television studio and control room for the origination of professional color television programming. Price Laboratory School is connected to the Education Building by coaxial cable permitting production and distribution from either building.

Motion Picture Production provides a university-wide service in filmmaking, including budgeting, production planning, filming, titling, limited animation, and sound recording.

THE CURRICULUM LABORATORY—The Curriculum Laboratory a service of the College of Education, is a facility where teacher education students and faculty, as well as in-service teachers and administrators, may pursue educational studies and projects related to curriculum and instructional development. The Curriculum Laboratory is located on the second floor of the new Education Center. Approximately 50,000 educational publications are systematically organized and available for examination, study, and research. Included in the Laboratory are elementary and secondary curriculum guides, resource units, current educational materials and equipment catalogs, commercial games, professional pamphlets and research monographs, elementary and secondary textbooks, education methods books, instructional pictures, and educational periodicals.

THE UNIVERSITY MUSEUM—The University Museum, founded in 1892, is housed in the Physical Plant Shops Building on 31st Street west of Hudson Road. From its modest beginnings as a "Cabinet of Natural History" in a science classroom, where it displayed a few geology and zoology specimens, it has expanded to its present collection of some 76,000 specimens covering a wide range of subject matter.

Museum collections embrace four subject categories: geology, biology, anthropology, and history. Most eminent is the geology collection consisting of some 28,000 well documented specimens of world-wide distribution. The bird collection includes most birds indigenous to the midwest as well as some rare and extinct birds, and reflects excellent taxidermy. Museum collections also contain large and small mammals, reptiles, fish, and marine invertebrates, including some 38,000 documented shells of wide distribution.

American, Iowa, and local area history are represented from colonial times to the present by written and printed documents, household furnishings, personal articles, agricultural and industrial tools and equipment, military uniforms and equipment, and other antiques. A large and elegant demitasse collection includes pieces from the world's finest china factories in the past several centuries. The anthropology area, which began with a collection of Indian arrowheads, axes, mauls, and Pueblo pottery, is at present the most rapidly expanding area at the museum and now includes important collections from Africa, Asia, the Pacific Islands, and South America.

The museum is used extensively as an educational resource by both university classes and area schools and as a cultural facility by local clubs and individual visitors. It

is open, free of charge, during the regular academic year from 1-4:30 p.m. on class days, and during the 8-week summer session from 9-12 a.m. Mondays through Fridays. It is also open the first and third Sundays of the month from 2-4:30 p.m. when the university is in session. Although large groups such as classes and clubs are asked to telephone or write the museum for appointments, all others are invited to come without appointments any time the museum is open.

MALCOLM PRICE LABORATORY SCHOOL—Located on the north edge of the campus, Price Laboratory School serves as a direct experience laboratory for professional education programs of the university. The school provides a comprehensive educational program for a multi-racial student body of 750 pupils in nursery school-kindergarten and grades one through twelve.

In addition to its role as a teacher education laboratory, the Laboratory School is widely recognized for its innovative and experimental programs, and for its work in research and curriculum development. The school is strongly committed to service to the elementary and secondary schools of the state, providing leadership through regularly sponsored conferences, workshops, and publications, and through its heavy involvement in the UNI program of extension and consultant services. The Laboratory School operates on an open-door policy; visitation and consultation are encouraged.

THE EDUCATIONAL CLINIC—The Educational Clinic is part of the Department of Educational Psychology and Foundations. Through its work with individuals and small groups, the clinic performs an important task in the education of regular and special classroom teachers as well as special services personnel such as majors in early childhood education, special education, eductional consultants, special learning disability teachers, psychologists, social workers, and counselors. Emphasizing family-school collaboration, the clinic maintains a primarily instructional and behavioral modification approach to learning disorders and questions of adaptability.

The clinic is concerned with a wide range of problems related to preschool enrichment, early identification of gifted and handicapped children, intellectual capability, aptitude, academic achievement, motivation, and personality adjustment. The clinic demonstrates, for teachers and service personnel, methods of evaluating a child's educational potential, provides an opportunity for service personnel interested in clinical teaching and special education to work with exceptional children in clinical experiences, translates psychological test findings and recommendations into educational terms and procedures, offers consultative services to the schools of Iowa at the request of school officials, and performs such research as practicable along lines that provide increased understanding of the learning and remedial processes.

THE SPEECH AND HEARING CLINIC—This clinic offers speech and hearing services to students and others (children and adults) in the vicinity of the university. These clinical services form an integral part of the program of professional preparation in speech pathology and audiology. Majors in speech pathology and audiology at both the undergraduate and graduate levels carry out clinical services under the supervision of the instructional staff of the university. Services offered by the clinic include audiological evaluations, speech and language evaluations, and remedial speech and hearing programs.

The speech and hearing services provided by the UNI Speech and Hearing Clinic have been accredited by the Professional Services Board of the American Speech and Hearing Association. The clinic is located in the ground-level floor of the Auditorium Building.

IOWA LAKESIDE LABORATORY—The three Regents universities, the University of Northern Iowa, the University of Iowa, and Iowa State University, jointly maintain a field biology station at Lake Okoboji. A scientific advisory board made up of representatives from each of the three state institutions has charge of the program. Unusual opportunities for field studies are available for students and teachers of biology. 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 February 1, lists the courses to be offered the following summer with detailed directions of enrollment. Registration is made through the Registrar's Office, University of Northern Iowa, Cedar Falls, Iowa 50613.

IOWA TEACHERS CONSERVATION CAMP—A field laboratory program in Iowa conservation problems and environmental education is offered at various locations in Iowa each summer. Two courses, 84:104 Iowa Conservation Problems I and 84:105 Iowa Conservation Problems II, are offered. Each three-week course carries three credit hours and is open to both undergraduate and graduate students.

The program is jointly sponsored by the Iowa Department of Public Instruction, the Iowa Department of Soil Conservation, the University of Northern Iowa, and the State Conservation Commission. Further information and registration materials may be secured by writing to the Department of Biology, University of Northern Iowa, Cedar Falls, Iowa 50613.

EDUCATIONAL OPPORTUNITY PROGRAMS—The University of Northern Iowa places a high priority on the higher education of low-income and minority group students. To fulfill this commitment to such students, the university has established the Office of Educational Opportunity Programs and Special Community Services with the Director in the Office of Academic Affairs. Under Educational Opportunity Programs, efforts are coordinated and designed specifically to meet the educational, social, and financial needs of project students, and a primary goal is the successful completion of the student's college career.

Five working components make up the structure of Educational Opportunity Programs and Special Community Services: UNI-CUE—the Center for Urban Education, the On-Campus Educational Opportunity Program, the Educational Talent Search Program, the Upward Bound Program, and the Ethnic Minority Cultural and Educational Center. Each component program is administered by individual program directors.

UNI-CUE (the University of Northern Iowa Center for Urban Education) is located in the heart of the urban area of Waterloo, Iowa, and is designed to increase the educational opportunities of disadvantaged people of all races. It works closely with the various university departments in the training of future teachers for work in urban areas. In addition to offering tutorial assistance to students, the staff counsels with students and provides academic advice. The Center is also the site of college-level classes for members of the community.

The Educational Talent Search Program is the primary recruitment vehicle of E.O.P. and is funded by the U. S. Office of Education. The project is designed to encourage disadvantaged young people to continue their education, and the staff searches out youth in financial, cultural, or academic need and refers them to colleges, universities, and vocational schools. These young people include high school and college dropouts, welfare recipients, and others who seek help. Educational Talent Search staff assists the eligible low-income and minority group student in completing the higher

education information application and financial processes and provides counseling and guidance in establishing the educational needs and goals of program students. Although Talent Search does not provide financial assistance, the staff attempts to place students in schools that are willing to provide financial as well as academic aids.

The On-Campus E.O.P. program offers counseling, tutoring, and other appropriate supportive services to students who are admitted to the university through the E.O.P. in an effort to assure the educational success of these students. These supportive services include assistance with specific educational and financial needs of the student along with assisting in the setting up of the academic program of the individual student. E.O.P. counselors also provide advice and direction on social and personal problems which might interfere with the student's academic progress. All of the academic supportive services available through the On-Campus E.O.P. may be used by any university student; however, only program students may receive financial assistance through the program.

The *Upward Bound Program* is sponsored by the U.S. Office of Education, and is designed to motivate the non-college bound student toward undertaking a college career. Students eligible for Upward Bound are those area tenth and eleventh grade, low-income and minority group high school students who are capable of succeeding in higher education but who do not have the educational background which would traditionally indicate college success. The upward Bound Program has two basic phases to its total program. The initial "summer session" phase, which is held on campus, includes classes structured for college preparation and a variety of recreational, cultural, and enrichment activities. The second phase is the "academic year" while the student is still in high school; this provides a monthly stipend to program students and needed academic and personal counseling. To program graduates, Upward Bound gives its full support and assistance in securing higher educational placement.

The Ethnic Minority Cultural and Educational Center was established on campus to provide a physical atmosphere for effective analysis of minority cultures and to further cross-cultural and racial understanding through participation in its programs by all segments of the UNI-Cedar Falls-Waterloo communities in a totally minority environment. The Center has a variety of actual instructional and performance methods for displaying various minority cultural and art forms. The Center staff provides direction to the Nation Time Radio Experience which provides an introduction to minority music as well as being a strong daily link between the university and the community. The Center's library facilities provide a reference point for those interested in examining literature, records, and tapes of minority cultures.

Inquiries regarding the E.O.P. and Special Community Services should be made to one of the following:

UNI-CUE, 715 East 4th Street, Waterloo, Iowa 50703

Talent Search, 715 East 4th Street, Waterloo, Iowa 50703

On-Campus E.O.P., Baker Hall, Room 151, University of Northern Iowa, Cedar Falls, Iowa 50613

Upward Bound Program, Baker Hall, Room 148, University of Northern Iowa, Cedar Falls, Iowa 50613

Ethnic Minority Cultural and Educational Center, University of Northern Iowa, Cedar Falls, Iowa 50613

Inquiries not related to any specific area should be directed to the Director of E.O.P. and Special Community Services, Office of Academic Affairs, University of Northern Iowa, Cedar Falls, Iowa 50613.

STUDY ABROAD—The University of Northern Iowa has several programs for study abroad. These include annual foreign language summer institutes, a biennial Social Science European study tour, a continuing exchange program with the Universidad Pedagogica Nacional in Bogota, Colombia, and the new two-term Iowa Regents University Campus Abroad in German program—Campus Abroad in Austria.

The foreign language summer programs are conducted in France, Germany, Austria, and Spain. Two German programs are now in operation: the 10-week Campus Abroad in Austria and Germany, sponsored by the three Iowa Regents Universities, is held in Millstadt, Austria, and at the University of Vienna with an extensive tour of Germany. The second German program is the Summer Institute in Austria and Germany for Teachers of German in Elementary and Secondary Schools, held at Klagenfurt, Austria, and the University of Vienna plus a two-week "Culture and Civilization" tour of Germany. The latter program is for graduate credit only.

The French Summer Institute (for teachers of French) is held in Angers, France, with daily classes at the Universite de l'Quest along with field trips and study tours. A 20-day period of guided travel throughout France is also a part of the institute.

A Summer Institute in Spain offers eight weeks of study and travel for teachers of Spanish. Both of these institutes are for graduate credit only.

The Campus Abroad in Austria is a two-term program, summer session plus fall semester, inaugurated for the summer and fall of 1973 and beginning in mid-June. This program in German is conducted jointly by the three Iowa Regents Universities in cooperation with private colleges and area community colleges in Iowa. Classes are held at Millstatt, Austria, the International Hochschulkurse of the University of Vienna, and the Pädagogische Akademie in Klagenfurt. Up to 30 semester hours of credit may be earned in courses in the following areas: German language, literature and culture, Linguistics, Fine Arts, Humanities, Social Sciences, Natural Sciences, Mathematics, Physical Education, and Education. Minimal admissions requirement for German is 12 semester hours of college German or the equivalent. Mature students with a good command of German may enroll in the fall term only (September-January).

The biennial Social Science Seminar in Europe is sponsored by the five social science departments at UNI: Economics, Geography, History, Political Science, and Sociology and Anthropology. The 12-week seminar includes approximately six weeks of conducted touring (including a trip behind the Iron Curtain), two weeks at Oxford



University, one week at the University of Vienna, and a "free" week for individual travel. Both undergraduate and graduate credit may be earned through this seminar.

The University of Northern Iowa has a continuing exchange program for students with the Universidad Pedagogica Nacional in Bogota, Colombia. Special summer programs for undergraduate students are held on the campus of each of the two universities in alternate summers with six to eight weeks of formal study combined with guided travel and activities to acquaint students with the culture and people of both this country and Colombia.

For additional information on these programs for study abroad, please write the Office of the Registrar, University of Northern Iowa.

INDIVIDUAL STUDIES PROGRAM—The Individual Studies Program at the University of Northern Iowa is planned for those self-reliant students who reveal the ability and independence to reach beyond the ordinary limits of a classroom course. These students, given the opportunity, read and work alone or in small groups in search of self-expression and self-discovery. Students capable of handling a program of individual or small-group study in conjunction with their regular course work need not be straight "A" students, but they must be creative, self-reliant, and ready to accept challenges and take risks.

This program awards academic credit to unique student interests—individual pursuits which lie either between or across several disciplines or in a discipline yet to be defined. Such credit, when appropriate, may be applied to elective hours, the major field, or to general education requirements.

In place of the structure ordinarily supplied by the instructor of a class, or by the staff of a department, the student involved in a course of individual study provides his own structure, choosing a consultant to guide him in the best use of this structure, or he joins mutually interested fellow students in a self-starting or specialized seminar. The course of study, in either case, is no less rigorous than one employed in an ordinary class or major, yet the projects are tailored specifically to the interests of the student. Each individual program reflects the uniqueness of a student's own personal development. The Individual Studies Program is open to all undergraduates at UNI.

Each semester the Individual Studies Program offers a variety of exploratory and interdisciplinary seminars (00:192) — these courses are generally kept small to insure lively and informal discussion. Individual Study Project (00:198) is an opportunity for research, creative work, or experience-oriented study. Interdisciplinary Readings (00:196) gives credit for special reading on a topic not offered by one of the regularly offered courses. Students who wish to study in a common area of interest may enroll in a Self-forming Seminar (00:192, sec. 1). Information about the Individual Studies Courses may be obtained from the Individual Studies Office at UNI.

Individual Studies also makes possible a larger use of study opportunities at UNI. By taking a series of courses in this program over several semesters, students may be able to graduate "with Individual Honors." The course Undergraduate Thesis (00:197) is part of the requirements for students who wish to graduate with this distinction. Special approval is required before registering for this advanced course.

The Individual Studies Program gives support to field trips initiated by students, faculty, or seminar groups. Students are encouraged to attend conferences and discover learning situations away from campus. The Individual Studies office provides guide books and maps for planning tours in Europe. Unusual expenses for undergraduate theses and larger independent study projects are often subsidized through the program.

An Individual Studies Major leading to the baccalaureate degree is offered by the

university. Program details and requirements are given on page 200.

The Individual Studies Program is for the self-starters. Students who have a desire to plan and work in an independent manner on a beginning project should talk with the Director of the Individual Studies Program, Baker Hall, UNI.

ADVANCED PLACEMENT PROGRAM-The University of Northern Iowa participates in the Advanced Placement Program of the College Entrance Examination Board. Through enrollment in special courses in a participating high school, a qualified high school senior may take achievement examinations in one or more academic subjects at the college level. UNI grants college credits in art, biology, chemistry, English, foreign languages, history, mathematics, music, and physics to students who pass examinations with scores of 3, 4, or 5. Details of this program may be obtained from the Director of Admissions, UNI.

REGENTS UNIVERSITIES STUDENT EXCHANGE PROGRAM-University of Northern Iowa students may take courses at either of the other two Regents universities for UNI resident credit. Regular, degree-bound students in good standing at any of the three Regents universities may attend another Regents university for a maximum of two semesters (three quarters), and the credits earned at the other university will be counted as resident credit at their home institution. Approval for participation and credit in the exchange program must be obtained well in advance of registration since the department head must approve the acceptance of such credits if these are to apply on the major. and to insure complete processing of the application between the cooperating universities within specified dates for enrollment. Detailed information and application forms for the exchange program are available from the Office of the Registrar, UNI.

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)-The University of Northern Iowa is a participating institution in the College-Level Examination Program (CLEP). Students who plan to attend UNI and who wish further information on CLEP may write to the Office of Admissions for information. Enrolled students interested in earning credit through CLEP should contact the Bureau of Research and Examination Services at UNI for information and dates of examinations.

At the present time five General Examinations are given at UNI-English Composition, Humanities, Mathematics, Natural Sciences, and Social Sciences-History. The test scores are given with the percentile ranks based on scores achieved by a representative sample of all students at the end of their sophomore year in American colleges and universities. Credit earned by CLEP through the General Examinations may be applied only to general education requirements at UNI with the 70th percentile the minimum achievement level for credit.

Tests are ordinarily taken early in the freshman year, usually at the time of first registration, but must be completed before registering for general education courses in the subject areas to which the tests apply. The examinations are given during the orientation and registration program of new students, but may be taken at other times during the year as set by the Bureau of Research and Examination Services.

A maximum of 32 semester hours of credit earned through examination may be applied toward degree requirements at UNI. This includes credit earned by CLEP or any other kind of examination taken to earn credit.

A fee is charged for the examinations at the following rate:

General Examinations -\$15 for one examination

\$25 for two to five examinations

Fees are paid at the University Business Office prior to taking the examinations.

UNIVERSITY EXTENSION SERVICE—The University of Northern Iowa has had an organized extension program since 1913. As an integral part of its total responsibility to the state, the university has a legislative charge to provide extension and other public services to assist in the cultural, economic, and social development of the people of the state. Primarily, the extension division is the organization through which the university is able to provide consultative and other services for the improvement of education throughout Iowa.

The total staff of UNI is utilized in providing extension services to the public schools, business and industry, and professional groups through a variety of extension programs. Varied kinds of extension services are available: consultative service, publications, extension credit work, non-credit community classes, conferences and workshops, and the UNI Museum.

CONSULTATIVE SERVICE—The services of members of the university staff assigned to extension are available to teachers, administrators, and boards of education for assistance in the improvement of public education in Iowa and for the in-service education of teachers.

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; a list of titles and prices is available from the Extension Office.

EXTENSION CREDIT WORK—Correspondence study and extension classes 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 university. Students registering for extension credit are urged to familiarize themselves with these regulations, a copy of which may be secured by writing the Director of Extension Service.

A. Correspondence Study—Correspondence courses do not follow the regular semester time schedule: a student may enroll at any time of year. Any student who fully meets university admission standards will be permitted to enroll for Correspondence Study and may continue such study so long as he maintains a grade point average of 2.00. A student may not enroll in a course he has previously failed. Credit earned through Correspondence Study may be applied with special permission from the Dean of the Graduate College on the 30-hour minimum requirement for a master's degree at the University of Northern Iowa.

Students in residence at the University of Northern Iowa may be enrolled for correspondence study provided such concurrent enrollment has been approved by the appropriate college dean (see page 58). The fee for Correspondence Study is \$22 per semester hour for both undergraduate and graduate students.

B. Extension Class Study — Conditions for admission to extension class study are the same as for admission to residence work. There is no distinction between on-campus and off-campus credit in meeting university degree requirements. Two-thirds of the credit required on a graduate degree program must be earned in classes taught by UNI staff. The fee for extension credit is \$34 per semester hour for undergraduates and \$35 for graduate students.

Note: Not more than one-fourth of the work required for an Iowa teaching certificate or the bachelor's degree may be earned in non-resident credit.

COMMUNITY CLASSES—As a service to individuals in the community who are interested in furthering their education but not in earning university credit, the Extension Service also offers community classes on the UNI campus. These classes are open to

any mature person regardless of educational background. These classes carry no credit, but if the course offered is listed in the university catalog, it may be possible for a person who completes the community class to receive credit in the course by special examination. Fees for community classes are established on the basis of the length of each class and the number of sessions.

The Extension Service is available to assist organizations and clubs in planning continuing-education type programs suitable to their needs and wishes.

For a list of extension courses, credit and non-credit, or for information on the establishment of such courses, call or write the Director, University of Extension Service.

CONFERENCES AND WORKSHOPS—As a part of the university's program of continuing education many conferences and workshops are held throughout the year. Nationally known leaders in many facets of teacher education as well as in other academic areas are brought to the campus for these events. University credit may be earned in some of the workshops conducted during the summer session.

The Extension Service is a focal office in assisting with the development and coordination of continuing education programs held on campus for various age-level groups including many high school level activities.

EXHIBITS - Exhibits of art, works of both UNI staff and students and touring exhibits, and displays of instructional materials are held periodically. Certain departments of the university sponsor special days for high school students with particular interests.

SATURDAY AND EVENING CLASSES—As a service to persons in the vicinity of Cedar Falls, some resident university courses are scheduled for evening hours and for Saturday mornings. Some of these are especially for graduate students; others are open to junior and senior students; a few are available for freshmen and sophomores. While the selection of courses is made with in-service teachers in mind, other courses are scheduled as the demand seems to justify.

Students who plan to enroll for Saturday and/or evening classes ONLY may register by mail. Mail-in forms are available in the Office of the Registrar upon request. Schedules of evening and Saturday classes are generally available in May for the fall semester and in November for the spring semester. Specific instructions for registration by mail are contained in the schedule and on the mail-in registration form.

Students who register for Saturday and/or evening classes in addition to other classes will register for them at the time of the regular class registration, and may not register by mail.

Specific information for each semester's registration is available at the Office of the Registrar.

BROADCASTING SERVICES—Educational, cultural, and informative programs are made available to Iowa television and radio stations as well as broadcast over the University of Northern Iowa's new 100,000 watt FM stereo radio station, KUNI(FM), 90.9 MHz on the FM dial. The recently added stereo radio facilities were made possible by a grant from the Department of Health, Education and Welfare. The studios occupy an extensive area on the second floor of the Old Administration Building.

Through the cooperation of WOI-TV Ames, the university has produced a weekly program on Iowa history since 1952. This program continues to be broadcast by several commercial television stations across the state.

Broadcasting Services, serving under the Dean of the College of Humanities and

Fine Arts, works closely with the Department of Speech in the integration of actual broadcasting experience with academic training in broadcasting.

OFFICE OF PUBLIC INFORMATION SERVICES—Serving under the Vice-President for University Relations and Development, the Office of Public Information Services has the general responsibility of helping develop public understanding of university aims, policies, and activities, both in the immediate university community and with the public at large. To fulfill this responsibility, the office staff works in close cooperation with the faculty, the administration, and the university students as well as with the press, radio, and TV. The office maintains general news and sports information services, a publications service, and a public relations advisory service.

The public relations service includes advisement of faculty and students in promotion of public events, and consultation with the administrative staff on the public relations implications of university policies. The Director of the Office of Public Information Services assists in the public information program of the State Board of Regents and represents the president of the university in relationships with student publications.

The general news information service interprets the program of the university through daily release of news articles and photographs to the press, radio and television as well as through the preparation of informative articles for special and general interest periodicals. Information files on all aspects of the institution are maintained in order to answer requests and to assist representatives of the press who call or visit the campus seeking background information for news stories or magazine articles. An information assistant edits the quarterly *Alumnus* magazine and *Century*, a newspaper for parents of students, alumni, and friends of the university.

The publications service supervises the design and printing of the more than 200 booklets, catalogs, and other publications produced at the university annually. The assistant in charge of the publications service also serves in a consultative capacity to faculty responsible for university publications.

The sports information service assistant keeps the public informed about intercollegiate athletic events through various media such as news releases, photographs, radio and TV programs, sports brochures, and wall calendars.



Alumni Association of the University of Northern Iowa

The Alumni Association of the University of Northern Iowa was organized in 1879 "to promote the interests of the Alumni of I.S.N.S. (Iowa State Normal School) and to give social and intellectual improvement to its members." One of the early constitutions provided for a literary program of oration, history, and essay, which for many years was presented at the annual meeting on the day preceding spring Commencement.

With the growth and development of the institution, the Alumni Association has developed into a working organization pledged to further the best interests of the university and her graduates. All graduates of the University of Northern Iowa are eligible for membership in the association and are inducted into the organization as a part of the Commencement exercises.

The Alumnus is the association's official publication of alumni and university news, and is published quarterly. The Century is a new quarterly tabloid newspaper which is sent to alumni, friends, and parents of students. UNI Alumni Clubs meet annually in many of the major cities throughout the country. Alumni assist the university in many ways, including the provision of financial support to scholarships, facilities, and cultural activities for which state funds are not available (see UNI Foundation below), as well as the recruitment of students, serving on special university committees, and representing the university in public activities.

The Alumni Office now services the records of more than 43,000 living alumni from offices in the new Administration Building. The office provides clerical assistance to the Alumni Clubs, and is a source of information to alumni regarding conferences, workshops, and meetings of special interest on campus. The office also assists university departments in maintaining a continuing relationship with their majors after graduation.

The University of Northern Iowa Foundation

The University of Northern Iowa Foundation is a non-profit corporation formed in 1959 to assist the university in projects which are vital to its growth and development but are most appropriately financed from private funds. Through its annual giving program, the Foundation provides alumni and friends of the university an opportunity to assist in extending the usefulness of the university, providing that margin of excellence which is characteristic of a university of quality.

As part of the program observing UNI's 1976 centennial anniversary, the UNI Foundation is involved in a 10-year, \$10,000,000 Centennial Fund campaign. The first phase of the Centennial Fund Campaign is the construction of the UNI-Dome, a multipurpose facility for university and community use. The second phase will be the construction of a new university auditorium; and the third phase, a program of special acquisitions and projects.

The Foundation is the official channel through which gifts, both large and small, may be given for the benefit of the University of Northern Iowa. Individuals and organizations are assured of continuity of management of such funds and of their being used for the purposes which the donor intended. As a charitable organization, all gifts to the Foundation are tax deductible.

Gifts should be addressed to:
UNI Foundation
Administration Building
University of Northern Iowa
Cedar Falls, Iowa 50613

University Policies



Admission

ADMISSION POLICIES AND PROCEDURES

A student must have filed an application for admission with the required records and other supporting material, have met all conditions, and have been issued an admission statement by the Director of Admissions before he is permitted to register in the university. Consideration is given to the scholarship, health, character, and personality of the applicant. Individual students may be required to come to the campus for interview and tests. Those who do not give reasonable promise of success as students at the university may be denied.

The application for admission forms neither require nor invite the applicant to indicate his race, color, religion, or nationality; and the representatives of the university, both on and off campus, encourage or discourage an applicant on the basis of his academic or co-curricular record, scores on standardized tests, seriousness of purpose, statements from teachers, counselors, school administrators, and similar evidences of potential ability to do college work. The registration forms provide a space in which a student may indicate his religious preference by using a coded number. This is to provide information to the directors of the student religious centers. The registrant may leave the space vacant if he desires.

A student should take the following steps in applying for admission to the university. These should be taken as far in advance as possible since admissions may be granted up to twelve months in advance of the opening of the term for which application is being made.

- A. Application for Admission. The application for admission form is obtained from the Office of the Director of Admissions, University of Northern Iowa, Cedar Falls, Iowa. Complete the application carefully, and return as indicated on the form. Your request for an application for admission should indicate whether you wish to enroll for undergraduate or graduate study and the semester you wish to enter the university.
- B. Application Fee. A fee of \$10.00 must accompany the application. The fee is not refundable, except to Iowans who are denied admission, and is not applicable to later registration fees. The \$10.00 fee paid with the original application may be applied to a later entry within one calendar year. The fee will be applied to this later entry only if the student notifies the Admissions Office of his change in plans before the beginning of the session for which he originally applied.
- C. Application Deadlines. Applicants for admission should submit the required applications for admission and the necessary official transcripts and other required documents to the Director of Admissions at least ten days prior to the beginning of orientation for the session for which the student is applying.
- D. High School Record. Ask your high school principal to send a six- or sevensemester transcript if you ARE still in high school and a final report on graduation. If you are OUT of school, ask your principal to send a complete transcript. If you have attended more than one high school, a single report is

sufficient if it contains all your work; otherwise, a report will be needed from each high school attended.

- E. Transcripts of College or University Records. If you have attended another college or university, an official transcript of record MUST be filed from EACH Institution attended. If you are still enrolled in another college or university, a partial record may be used for considering admission, but a complete record will be required before your admission file is complete.
- F. Tests and Interviews. All new undergraduate students are required to take the American College Tests before admission will be granted. The tests are given in all states.

Be certain to specify that your test record be sent to the University of Northern Iowa.

A visit to the campus is encouraged if convenient. In some situations the university may require an interview or additional tests before acting on an application for admission. Students are notified by mail if these are required of them.

G. Health and Housing Forms. These forms are included with the form for application for admission. The health certificate must be completed and returned as indicated on the form. The housing card must be completed and returned by all students, including those living off campus. The housing contract must be signed and returned with the housing deposit for all students applying for university housing.

Each student enrolling for the first time is required to present a health record prepared by his physician. After an absence from the university for four or more semesters, the student is required to have a physical examination by a family physician.

Note: Admission procedures will be considered completed only when all required papers are returned to the university and all specified fees paid.

All students taking work beyond the bachelor's degree, whether they are studying for an advanced degree or not, are classified as graduate students. Specific information for the admission of students to graduate study is given on pp. 203-206.

Classification of residents and non-residents for admission and fee purposes for all students is listed on pp. 43-45.



PREPARATION FOR UNDERGRADUATE ADMISSION TO THE UNIVERSITY

For admission to the University of Northern Iowa one does not need to have chosen a particular program in high school. However, it is expected that the record of the student seeking admission will be in conformity with the following pattern:

- Graduation from an approved high school shall ordinarily precede admission to the university. The student who applies for admission to an institution of higher learning shall, in general, have:
 - A. Completed a balanced program of studies designed to insure a well rounded background of knowledge in basic fields.
 - B. Developed proficiency in the use of the English language in reading, writing, and speaking.
 - C. Acquired proficiency in basic mathematical skills.
 - D. Developed effective study skills and work habits.
 - E. Developed an adequate intellectual, physical, moral, and social maturity.
 - F. Developed a sincere interest in further formal education.
- II. Those planning to enter the university shall be guided by the following standards in completing their preparatory academic work:
 - A. ENGLISH—Since the ability to write clearly and to read with understanding and appreciation are essential to success in college, it is highly desirable that the student complete at least three and preferably four units in English, with strong emphasis on writing.
 - B. MATHEMATICS Mathematics has much to offer not only as a tool to further learning but as a means of providing basic education. Two and one-half years of study should be the minimum for those planning to attend college. Students planning to specialize in the sciences or in engineering should complete at least two and one-half units and preferably three units or more in mathematics in high school.
 - C. 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 university student.
 - D. THE SCIENCES The field is rich in possibilities for understanding the modern world. A minimum of two units in science is recommended. For those who plan to emphasize science or engineering, three units would be helpful.
 - E. FOREIGN LANGUAGE—The prospective university student should develop a basic reading or speaking knowledge of a foreign language, classical or modern. For most students this would suggest a minimum of two years of study; three or four would be preferable.
 - F. ART AND MUSIC-This field offers opportunity for development in an important area of general education which can contribute much toward individual growth.
 - G. OTHER Subjects —Agriculture, business, home economics, industrial arts, speech, etc., when properly studied, contribute materially to the educational growth of the individual and prepare him for continued study as well as for the more general activities of living. The prospective university student with an interest in further study in a field related to one of these subjects should find one or two years of high school work in it to be particularly valuable.

GENERAL ADMISSION STANDARDS OF THE STATE BOARD OF REGENTS

A. ADMISSION OF FRESHMAN STUDENTS

A student desiring admission must meet the requirements in this section and also any special requirements for the curriculum or major of his choice.

He must submit a formal application for admission and must have the secondary school provide a certificate of high school credits, including a complete statement of the applicant's high school record, rank in class, scores on standardized tests, and certification of high school graduation. The applicant must also submit any other evidence such as a certificate of health that may be required by the individual institution of higher learning.

 A GRADUATE OF AN APPROVED IOWA HIGH SCHOOL who has the proper subject-matter background, who is in the upper one-half of his graduating class, and who meets specific curricular requirements will generally be admitted upon certification of graduation, if he applies for admission.

A candidate who is not in the upper one-half of his graduating class may be required to take special examinations and may after a review of his entire record and at the discretion of the Admissions Office: (1) be admitted unconditionally, (2) be admitted on probation, (3) be required to enroll for a tryout period during a preceding summer session, or (4) be denied admission.

- A GRADUATE OF AN ACCREDITED HIGH SCHOOL IN ANOTHER STATE must meet at least the same standards as a graduate of an Iowa high school. The options for admission by probation or tryout enrollment may not be open to these students. The university reserves the right to demand higher standards from graduates of out-ofstate high schools.
- A GRADUATE OF A NON-APPROVED HIGH SCHOOL must submit all data as required above and in addition must take examinations which will demonstrate his general competence to do successful university work.
- 4. An APPLICANT WHO Is NOT a HIGH SCHOOL GRADUATE must submit all data required above in so far as it exists and must take examinations to demonstrate competence to do university work. Evidence of specific competence for admission to a given curriculum will also be required.

B. ADMISSION OF UNDERGRADUATE STUDENTS BY TRANSFER FROM OTHER COLLEGES

- STUDENTS FROM ACCREDITED COLLEGES AND UNIVERSITIES—Transcripts of record are given full value if coming from colleges or universities accredited by the North Central Association of Colleges and Secondary Schools or similar regional associations. For schools not regionally accredited the recommendations contained in the current issue of the Report of Credit Given by Educational Institutions published by the American Association of Collegiate Registrars and Admissions Officers will be followed.
 - a. Each applicant shall submit an official transcript bearing the original seal and signature of the official in charge of records from each college or university which the student has attended previously. The student will also submit any other records or letters which the university may require to support his application for admission.
 - b. A transfer applicant shall be expected to have maintained a "C" average (2.00 based on an "A" grade being 4 points) for all college work previously attempted

and not be under suspension from the last college or university attended. Students who are not residents of Iowa may be expected to have maintained a 2.25 grade index.

c. A student who is below the above standards may be permitted to take entrance examinations. If the applicant successfully completes the examinations, he may be admitted on probation.

- d. In general, transfer applicants under academic suspension from the last institution attended will not be considered for admission during the period of suspension or if for an indefinite period, until six months have passed since the last date of attendance. When eligible for consideration the applicant will be considered as in "c" above.
- e. A transfer applicant under disciplinary suspension will not be considered for admission until a clearance and a statement of the reason for suspension is filed from the previous institution. When it becomes proper to consider an application from a student under suspension, the university must take into account the fact of the previous suspension in consideration of the application. Applicants granted admission under these circumstances will always be on probation and their admission subject to cancellation.
- f. Applicants for admission by transfer who do not meet the standards may be denied.
- g. Transfer credit from a two-year college will not be accepted if that credit is earned after the total number of hours of credit accumulated by the student at all institutions attended exceeds one-half the number of hours needed for the earning

of a baccalaureate degree.

2. STUDENTS FROM NON-ACCREDITED COLLEGES - The university may refuse to recognize credit from a non-accredited college or may admit the applicant on a provisional basis and provide a means for the validation of some or all of the credit. The validation period shall not be less than one semester and will ordinarily be a full academic year. The university will specify to the student the terms of the validation process at the time of provisional admission. Each student from a non-accredited college will be considered on his merits and his admission or rejection is at the discretion of the admissions officer.

Note: A transfer student who is allowed to enter with any grade point deficiency (at any college previously attended) shall be placed on probation. Transfer students who have no grade point deficiency (at any college previously attended) but whose previous college grade distribution, high school rank, test scores, or major objective raises questions about probable success may be admitted with a transfer warning.

C. CURRICULUM ADJUSTMENTS FOR TRANSFER STUDENTS.

- 1. The work of students who transfer from other institutions of higher education will be evaluated in terms of curriculum requirements at the University of Northern Iowa. In so far as possible, courses covering similar areas will be accepted in lieu of courses required here. Students who have had two full years of a general education or liberal arts curriculum will usually have satisfied many if not all of the requirements of the first two years. It should be understood that piecemeal work in several different institutions or an irregular pattern of work in a single institution will probably not meet many of the requirements of the first two years.
- 2. In determining the requirements for the baccalaureate degree, the records of transfer students having two or more years of college work will be examined in terms of the

following requirements:

- (1) The number of hours required for the degree less the number of hours accepted by transfer.
- (2) All general education courses for which no reasonable substitute can be found.
- (3) 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. A transfer student is required to take at least 10 hours of work at this university on his major.
- (4) Competence in reading, speaking, and writing is required of all candidates seeking degrees or university recommendation for certification.
- (5) Scholarship requirements: (see statement B-Scholarship under Requirements for Graduation, p. 45).
- 3. Practices followed in evaluation of transcripts of record presented by the new transfer student include:
 - (1) College work presented by the transfer student is evaluated and reported to the student in terms of University of Northern Iowa equivalents when they exist. Credit earned in courses for which this university does not have an equivalent is simply reported as credit accepted. The student is also provided with another report including general university requirements still to be met.
 - (2) All college work previously attempted is considered for acceptance, including work for which a grade of D is earned. Grades of failure remain as part of the student's record and transfer grade index.
 - (3) If an undergraduate student repeats a course, only the last grade earned affects the cumulative average; the grade point value of the first grade is no longer included in calculating the cumulative average.
 - (4) Credit earned in excess of the maximum credit acceptable from the two-year college is not applicable toward minimum total hours required for a degree. However, this work is entered on the student's record and may be used to meet specific course requirements.
 - (5) Acceptance of credit earned in physical education activity courses is limited to one semester hour per semester with a maximum total of 4 semester hours. It is assumed that students transferring 30 or more semester hours have met requirements in physical education activities.
- 4. Transfer students on the Bachelor of Arts-Teaching Program must fulfill the following requirements:
 - (1) All required courses in education, psychology, and teaching.
 - (2) 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 university. However, the transfer student is normally required to take 20:016 as a prerequisite to Student Teaching on the campus.
 - (3) 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.

ADMISSION REQUIREMENTS 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. See p. 203 for regulations governing admission to graduate study.

A graduate of a college or university that is not accredited may be granted conditional admission at the discretion of the Registrar. Admission to graduate study does not guarantee admission to candidacy for an advanced degree.

CLASSIFICATION OF RESIDENTS AND NONRESIDENTS FOR ADMISSION AND FEE PURPOSES

1. GENERAL—Students enrolling at one of three state institutions shall be classified as Resident or Nonresident for admission, fee, and tuition purposes by the Registrar. The decision shall be based upon information furnished by the student and all other relevant information. The Registrar and the Director of Admissions are authorized to require such written documents, affidavits, verifications; or other evidence as are deemed necessary to establish the domicile of a student, including proof of emancipation, adoption, award of custody, or appointment of a guardian. The burden of establishing that a student is exempt from paying the nonresident fee is upon the student.

For purposes of resident and nonresident classifications, the word "parents" as herein used shall include legal guardians or others standing in local parentis in all cases where lawful custody of any applicant for admission has been awarded to persons other than actual parents.

- 2. RESIDENCE FOR TUITION PURPoses Regulations regarding residence for admission, fee and tuition payment are generally divided into two categories—those that apply to students who are minors and those that apply to students who are over eighteen years of age. The requirements in these categories are different. Domicile within the state means adoption of the state as a fixed permanent home and involves personal presence within the state. The two categories are discussed in more detail below.
- 3. STUDENTS WHO ARE MINORS—The residence of a minor shall follow that of the parents at all times, except in extremely rare cases where emancipation can be proved beyond question. The residence of the father during his life, and after his death, the residence of the mother, is the residence of the unemancipated minor, but if the father and the mother have separate places of residence, the minor takes the residence of the parent with whom he lives or to whom he has been assigned by court order. The parents of a minor applying for admission will be considered residents of Iowa only if they have a domicile within the state at the time of the beginning of the semester, quarter, or session in which the minor is first enrolled at Iowa State University or the State University of Iowa, or University of Northern Iowa, and if the parents establish such domicile for purposes other than to qualify their child for resident tuition.

A minor admitted before his parents have moved to Iowa may be reclassified as a resident at the beginning of the next semester or quarter in which the student is enrolled after his parents have a domicile in Iowa.

A minor under legal guardianship shall not be granted resident status if the primary purpose of the guardianship is to qualify the minor for resident tuition.

A minor living with and being supported by a relative or a friend who is a resident of Iowa, but not a minor's legal guardian, may be granted resident status if he has lived with the relative or friend at least three years prior to high school graduation.

4. STUDENTS OVER EIGHTEEN YEARS OF AGE AND MARRIED STUDENTS UNDER EIGHTEEN YEARS OF AGE—A student eighteen years of age or over and a married

student under eighteen years of age shall be classified as a resident if (1) the student's parents were residents of the state at the time such student reached majority or was married and the student is not domiciled in another state, or (2) who after marriage or reaching majority has established a bona fide residence in the state of Iowa by residing in the state at least 12 consecutive months immediately preceding the beginning of the semester, quarter or session. Bona fide residence in Iowa means that the student is not in the state primarily to attend a college; that he is in the state for purposes other than to attempt to qualify for resident status.

Any nonresident student who reaches the age of 18 years or is married while under eighteen years of age while a student at any school or college does not by virtue of such fact attain residence in this state for admission or tuition payment purposes.

GENERAL FACTS — The resident status for admission, fee, and tuition purposes of a
married student shall usually be determined under these rules irrespective of the
classification of the spouse. Married students under eighteen years of age shall be
considered to have attained legal age as of the date of their marriage.

Persons who are moved into the state as the result of military or civil orders from the government, or the minor children of such persons, are entitled to resident status. However, if the arrival of the parents is subsequent to the time of the beginning of the semester, quarter or session in which the minor child is first enrolled, nonresident tuition will be charged in all cases until the beginning of the next

semester, quarter or session in which the student is enrolled.

Dependents of persons whose legal residence is permanently established in Iowa, who have been classified as residents for tuition purposes may continue to be classified as residents so long as such residence is maintained, even though circumstances may require extended absence of said persons from the state. It is required that persons who claim an Iowa residence while living in another state or country will provide proof of the continual Iowa domicile such as (1) evidence that they have not acquired a domicile in another state, (2) they have maintained a continuous voting record in Iowa, and (3) they have filed regular Iowa income tax returns during their absence from the state.

Ownership of property in Iowa, or the payment of Iowa taxes, does not in itself

establish residence.

A student from another state who has enrolled for a full program or substantially a full program in any type of educational institution will be presumed to be in Iowa primarily for education purposes, and will be considered not to have established residence in Iowa. Continued residence in Iowa during vacation periods or occasional periods of interruption to the courses of study does not of itself overcome the presumption.

All students not classified as resident students shall be classified as nonresidents

for admission, fee and tuition purposes.

A student who willfully gives incorrect or misleading information to evade payment of the nonresident fees and tuition shall be subject to serious disciplinary action and must also pay the nonresident fee for each semester, quarter or session attended.

An alien who has entered the United States on an immigration visa and who has established a bona fide residence in Iowa by living in the state for at least twelve consecutive months immediately preceding the beginning of the semester, quarter or session may be eligible for resident classification provided he is in the state for purposes other than to attempt to qualify for resident status as a student.

Men in military service (except career service men) who listed Iowa as their residence prior to entering service and who, immediately upon release, return to

Iowa to establish their residence or enter college, will be classified as residents unless their parents moved from the state while the individual was still a minor.

Change of classification from nonresident to resident will not be made retroactive beyond the semester, quarter or session in which application for resident classification is made.

 REVIEW COMMITTEE—The decision of the Registrar or the Director of Admissions on the residence of a student for admission, fee and tuition purposes may be appealed to a Review Committee. The finding of the Review Committee may be appealed to the Board of Regents.

Requirements for Graduation

In addition to the completion of one of the three baccalaureate degree programs, there are other specific requirements for graduation which apply to all undergraduate students seeking a bachelor's degree. These are listed below. See pages 209 and 233 for graduation requirements for a master's and specialist's degree programs.

A. RESIDENCE

 Not more than 32 semester hours earned in correspondence, extension, radio, or television courses may be used toward graduation.

 At least 36 weeks spent in residence at this university while earning in such residence at least 32 hours of credit, of which 20 hours must be earned in the junior and senior years.

 At least 32 hours of credit earned in the junior and senior years in courses at this university. This total may include nonresidence credit.

 The last semester or full summer session before graduation spent in residence at this university.

B. SCHOLARSHIP

 A student working toward the bachelor's degree with certification to teach must achieve a cumulative grade-index in all course work attempted, at this university and elsewhere, of at least 2.20 to be recommended for graduation. The student must also achieve a cumulative grade-index of 2.20 on all work attempted at the University of Northern Iowa.

2. A student working toward the bachelor's degree (without certification) must achieve a cumulative grade-index in all work attempted, at this university and elsewhere, of at least 2.00 to be recommended for graduation; he must also achieve a cumulative grade-index of 2.00 on all work attempted at the University of Northern Iowa.

Note: If a student has failed to be recommended for graduation because of his scholastic average, the deficiency may be removed only by work taken in residence.

- C. COMMUNICATION—Competence in reading, speaking, and writing is required of all candidates seeking degrees or university recommendations for certification.
- D. ADVANCED COURSES At least 10 hours of work in a major in courses numbered 100-199 and taken at this university.

E. PHYSICAL EDUCATION

A minimum of 2 hours of physical education activity credit is required for graduation. Not more than 4 hours of such credit will apply toward graduation requirements. Except for students majoring or minoring in Physical Education for

Women, only one hour of activity credit may be earned each semester, although a student may take more than one course. The registration card must indicate the course in which credit is desired.

No physical education activity course may be repeated for credit except with the approval of the head of the appropriate physical education department.

A temporary release from physical education for all or part of a semester does not release the student from any part of the total requirement.

F. 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 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.

G. APPLICATION FOR GRADUATION

A student who expects to be graduated at the end of a semester must make written application at the opening of the semester. This application is filed in the office of the Registrar.

H. 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.

The university does not grant two degrees, one with a Teaching Program and one with a Liberal Arts Program, for the same basic hours of credit (130 hours). A student may have a double major, one in Teaching and one in Liberal Arts, but the Teaching major must be the first major and the degree granted on the teaching program since it has the higher hour and grade index requirement.

ADDITIONAL REQUIREMENTS FOR THE BACCALAUREATE—TEACHING PROGRAM:

A. STUDENT TEACHING

- For the completion of any undergraduate curriculum the student must earn 8
 hours of credit in student teaching at this university, except that an undergraduate student with 3 or more semester hours credit in student teaching
 earned at the same level in another college or university may be released from
 4 hours of student teaching at this institution.
- 2. A student who has completed a two-year elementary teaching program at this university will not be held for additional student teaching if he desires to complete a major in elementary education. However, credit in Teaching 28:138 (28:137 for majors in junior high school education) will be required if the student majors in a field other than elementary education. Elementary majors who wish to major also in a subject for teaching at the secondary level are required to take 4 hours or more of secondary school student teaching in addition to 8 hours at the elementary level.
- 3. 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 is not offered during the summer.
- 4. Not more than 12 hours of credit in student teaching may be used toward 130 hour minimum required for graduation.

B. CAREER PLANNING AND PLACEMENT REGISTRATION

Registration with the Office of Career Planning and Placement is required of all candidates for degrees and must be completed at the beginning of the last semester in residence.

TEACHING CERTIFICATES

Teaching certificates are issued by state departments of public instruction and are valid only in the state of issue. A college or university recommendation that a certificate be issued is required.

Students on the teaching program must meet requirements for an Iowa teaching certificate to be graduated from the University of Northern Iowa. At graduation they are eligible for the Professional Certificate, valid for a period of ten years for the kind of service indicated by the endorsement on the certificate; e.g., elementary teaching, secondary teaching, teaching a special subject such as art or music. The student can usually secure appropriate certificates in other states by making proper application.

In addition to holding a certificate valid for the level of teaching being done, the secondary teacher must also have APPROVAL in each subject he is to teach. Approvals are issued by the Iowa Department of Public Instruction on the recommendation of an acceptable preparing educational institution. To secure the recommendation of the University of Northern Iowa, the student must usually meet the requirements for a major or a minor (or equivalent) in the subject. Exceptions are made only with the authorization of the university department offering the subject.

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

Iowa requires a course in American history or American government for all certificates.

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

HOURS OF CREDIT 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 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 the Registrar of the university or from

Department of Public Instruction
Division of Teacher Education and Certification
Grimes State Office Building
Des Moines, Iowa 50319

Enrollment, Registration, and General Academic Regulations

ENROLLMENT AND REGISTRATION

ORGANIZATION BY SEMESTERS—The university operates on the semester basis. This means that the work during the academic year is divided into two semesters of approximately eighteen weeks each. One semester hour of credit is based on one hour of work per week for eighteen weeks.

ENROLLMENT-Usually a student enrolls for the first time during the fall semester; however, a student may enroll for the first time during the spring or summer sessions.

SUMMER SESSIONS—The 1974 and 1975 summer sessions will include a full 8-week session and several compact sessions of four to five weeks duration. In addition, there will be a number of special sessions and workshops of varying lengths. For information write the Director of the Summer Session.

UNIVERSITY OFFICE HOURS—From Labor Day to Memorial Day the principal administrative offices are open from 8 a.m. to 5 p.m. on Mondays through Fridays. During the remainder of the year (the summer months) the offices are open from 7:30 a.m. to 4:30 p.m. on Mondays through Fridays.

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

All university offices are also closed for the following holidays:

1974	1975
Mon., Dec. 31, 1973, and Tues., Jan. 1, 1974	Wed., Jan. 1
Mon., May 27	Mon., May 26
ThurFri., July 4-5	Fri., July 4
	Mon., Sept. 1
	ThurFri., Nov. 27-28
	ThurFri., Dec. 25-26
	ThurFri., Jan. 1-2, 1976 (New Year's Day, 1976)
	Mon., Dec. 31, 1973, and Tues., Jan. 1, 1974

REGISTRATION PROCEDURE

NEW STUDENTS cannot register for classes until all requirements for admission to the university have been met. After the admission requirements are met, new undergraduate students will receive their registration materials in connection with the orientation program provided for such students. Further instructions for completing registration will be given during the orientation program

FORMER STUDENTS, including those currently enrolled and those returning to the university after a semester's or more absence, must file a notice of intent to register

for the semester in which they plan to enroll, except that students enrolled for a fall semester are not required to file a notice of intent to register for the following spring semester. The notice of intent to register is filed with the Registrar's Office before registration so that the student registration materials can be prepared. Former students pay a Registration Deposit of \$25. Specific information for each semester's registration procedures is given in the front section of the Schedule of Classes for that particular semester; this schedule is available at the Office of the Registrar.

PHYSICAL EXAMINATION—Each student enrolling for the first time is required to present a health record prepared by the family physician. After an absence from the university for *four* or more semesters, the student is required to have a new physical examination.

VETERANS—All students planning to receive benefits from the Veterans Administration must file a Certificate of Eligibility from the Veterans Administration in the Office of the Registrar when enrolling at the University of Northern Iowa for the first



time. The university cooperates with the Veterans Administration in providing for the education for veterans under the provision of federal laws. Dependents of veterans or of those persons who may be classified as prisoners of war or missing in action in Vietnam may also receive financial assistance from the Veterans Administration. The Office of Veterans Affairs and the Office of the Registrar will assist students eligible under any of these laws and provide the required reports. Subsistence will depend upon the number of course hours for which the student enrolls.

Veterans may be excused from the required activity courses in physical education upon filing a copy of DD214 form with the Registrar. This action does not excuse the student from completing the total number of hours of work required for a degree.

FEES SCHEDULE

The basic fee is charged to all students carrying nine (9) or more hours during a semester, or six (6) or more hours during any eight-week summer session. All other students are assessed on a credit-hour basis. Students assessed on an hourly basis do not have any portion of their fees applied to services supported by activity fees and, thus, their identification cards are valid only for library services.

	Effective Sep	otember 1973
		Non-
I. BASIC FEES	Resident	Resident
A. ACADEMIC YEAR 1. Undergraduates, per semester a. Less than 9 hours, per hour b. Minimum fee 2. Graduates, per semester a. Less than 9 hours, per hour b. Minimum fee	\$300* 34 68 \$315* 35 70	\$550* 62 124 \$640* 72 144
B. SUMMER SESSION (8 week) 1. Undergraduates a. Less than 6 hours, per hour b. Minimum fee 2. Graduates a. Less than 6 hours, per hour b. Minimum fee	185* 34 68 195* 35 70	340* 62 124 395* 72 144
C. SUMMER SESSION (10 week) 1. Undergraduates a. Less than 6 hours, per hour b. Minimum fee 2. Graduates a. Less than 6 hours, per hour b. Minimum fee	220* 34 68 230 35 70	395* 62 124 460 72 144

^{*}Includes amount designated by the State Board of Regents for support of Student Activities (both Graduates and Undergraduates)

a. Academic year, per semester 536 b. Summer Session 22

II.	RESIDENCE HALL FEES (Board and Room)	Semester	Academic Year
	Bartlett Hall	\$430	860
	Bender Hall	439	878
	Campbell Hall	439	878
	Dancer Hall	439	878
	Hagemann Hall	439	878
	Lawther Hall	439	878
	Noehren Hall	439	878
	Rider Hall	439	878
	Shull Hall	439	878

Residence Hall fees for the summer sessions are approximately as follows: 8 weeks, \$209; post sessions, \$37 per week.

Halls to be used in a given summer will be designated later and exact fees determined later.

III.	OTHER FEES S	emester
Ã.	Applied Music	
	 Regularly enrolled students, per credit hour	
-	per credit hour	70.00
В.	Late enrollment fee	. 5.00
C.	Change of registration (each form filed)	3.00
D.	Credit by Examination, per semester hour	. 10.00
E.	Correspondence, per semester hour	. 22.00
F.		
	1. Undergraduate	. 34.00
	2. Graduate	. 35.00
G.	Community Class per hour of class meeting	. 25.00
H.	Visitors: by week	15.00
	by the course, per semester hour	15.00
	undergraduates	34.00
	graduates	
I.	Transcript of College Credits	2.00
J.	Application (for admission to university) fee	10.00
	Health insurance (voluntary), per year (approximately)	19.50
I	Thesis binding fee (graduate students only)	18.50
Live	rices offiding fee (graduate students only)	6.00

All fees and all policies governing the refund of fees are subject to change by the State Board of Regents.

GENERAL REGULATIONS

WITHDRAWAL REFUNDS

If credit is earned during the period of enrollment, there is no refund of academic fees. For any two- or three-week session, there is no refund. Room and board refunds

are made according to agreement set out in the "Contract for Room and Board" signed by the student at time of enrollment.

Students enrolled for a load requiring full basic fee payment for a semester-

A student who has had his class cards pulled is considered to have enrolled. Thereafter, the first \$25 of his tuition fee is considered not refundable, unless cancellation of the registration is made before the date specified in the Schedule of Classes for that semester, or unless cancellation or withdrawal of registration (after this date and prior to the beginning of the semester) is for an extenuating circumstance which must be validated. The remainder of the basic fee is refundable on the percentage schedule given below, beginning with the date of formal withdrawal.

Students enrolled for a load requiring payment by the credit or for a summer session-

A student who has had his class cards pulled is considered to have enrolled. Thereafter, the first \$15 of his academic fee is considered not refundable, unless cancellation of the registration is made before the date specified in the Schedule of Classes for that semester or summer session, or unless cancellation or withdrawal of registration (after this date and prior to the beginning of the semester) is for an extenuating circumstance which must be validated. The remainder of the basic fee is refundable on the percentage schedule given below, beginning with the date of formal withdrawal.

Percentage of	Semester From	
Remainder	1st day of classes	Summer Sessions
Refundable	to the end of	(8 and 10 weeks)
100%	1 week*	1-3 days#
90%	2 weeks	4-3 days
80%	3 weeks	6-7 days
70%	4 weeks	8-9 days
60%	5 weeks	10-11 days
50%	6 weeks	12-13 days
40%	7 weeks	14-15 days
30%	8 weeks	16-17 days
20%	9 weeks	18-19 days
10%	10 weeks	20-21 days**

^{*} Weeks are defined as seven calendar days. The first week begins with the day the semester begins.

WITHDRAWAL PROCEDURE

A student who has started attending classes and who finds it necessary to withdraw from school, initiates the withdrawal through the Director of the residence hall in which he lives. If the student does not live in a residence hall, he (or she) begins the withdrawal in the Office of the Dean of Students.

A student who has enrolled but decides not to come to the University of Northern Iowa should advise the Office of the Dean of Students in writing at as early a date as possible of his desire to cancel his registration, listing the reasons for withdrawing from the university.

[#] Days are class days. Day count begins with the day summer session classes begin.
(See date in Summer Schedule of Classes.)

^{**} Refund applies only if academic fee is paid on the 10-week basis. No refund after the 19th day for the 8-week summer session. No refund for two- or three-week sessions.

STUDENT IDENTIFICATION CARD

Each new student receives a plastic Identification Card which is used throughout attendance at the university. Each semester or summer session the student also receives a registration certificate as a receipt for payment of fees. This registration certificate serves to validate the Identification Card for the particular semester for which the registration certificate is issued. Full-time students receive one type of registration certificate which, with the Identification Card, permits the withdrawal of books from the university library, admission to athletic events, and entitles the student to use other facilities of the university. Part-time students receive a different type of registration certificate which entitles them to the use of the library but does not provide admission to athletic events or the use of some other facilities. A fee of \$3.00 is charged to replace either the plastic ID card or the registration certificate. Replacement of both items would cost \$6.00.

ACADEMIC PROGRAM

The registration of every student is subject to the approval of his academic adviser.

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

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. Persons employed full time should not register for more than 6 hours of academic work during either semester.

The regular work of an undergraduate student for the 8-week summer session is eight to nine hours. However, a student on academic probation should not plan to carry more than eight semester hours.

Graduate students who have a UNI graduate grade point index of 3.00 or higher may enroll for a maximum of 9 semester hours of course work during the 8-week summer session without securing special permission.

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

CLASSIFICATION OF STUDENTS

Freshman Up to 31
Sophomore 32-63
Junior 64-95
Senior 96 and over

DECLARATION OF MAJOR-STATEMENT OF FURTHER WORK

The declaration of a major is made through the department offering the major. The choice of major should be made as early as possible in the student's university career, usually by the beginning of the sophomore year, in order to complete the program and fulfill requirements for graduation within the normal four years of academic work. When the major is declared, the student is assigned an adviser in the major department and a Student Declaration of Curricular Intent with this information is filed (by the student) in the Office of the Registrar.

When a student has earned at least 60 to 65 hours of credit and has declared a major, he should file an application for a Statement of Further Work required for graduation. The application is made to the Office of the Registrar.

CHANGE OF REGISTRATION

When a student finds it necessary to change his scheduled classes—either to drop and/or add a course and to change from one section to another of a course—he must obtain a Change of Registration form, complete the form as required, and file the Change of Registration with the Scheduling Office. There is a \$3.00 fee for each Change of Registration form filed. The form must be signed by the student's academic adviser.

Classes are rarely added after the first one-sixth of the term and must have the approval of the Dean of the College in which the course is offered. Courses dropped during the last one-half of the term will be recorded as failed (F), unless there are unusual circumstances and the student is doing passing work in which case permission to indicate W (Withdrawn) may be given by the Dean of the College in which the course is offered.

CLASS ATTENDANCE

The responsibility for attending classes rests with the student. As the citizens of lowa have every right to assume, students at this university are expected to attend class. This idea is neither novel nor unreasonable.

Students are expected to learn and observe whatever attendance rules each individual instructor may require for the course(s) he teaches. Caution, therefore, must be exercised lest needless absences affect the quality of work expected by the instructor.

Instructors will help students to make up work whenever a student has to be absent for good cause. Here again the matter lies between the student and instructor. Students should realize that an hour missed cannot be relived, that work can seldom be made up 100 percent, and that made-up work seldom equals the original experience in class. Where possible, a student should notify the instructor in advance of circumstances which prevent the student from attending class. The established policy makes students responsible for attendance, provides for whatever make-up work is possible when absence cannot be avoided, and frees students from securing and carrying excuses.

Instructors will notify the Office of the Dean of Students in case a student's attendance is such that his membership in a class is in doubt. Failure to make such reports often puts the university in an embarrassing position with the Veterans Administration, parents, or with the students themselves.

THE MAKING UP OF WORK

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

Work lost by late enrollment or by change of registration may be made up for credit by an undergraduate student with the consent of the Office of Academic Affairs. Graduate students must have the consent of the Dean of the Graduate College.

Work lost because of absence due to illness, or other extenuating circumstances, may be made up, but arrangements for making up work missed are made between the student and the instructor.

Work left incomplete at the end of a semester or summer session will be reported as a Failure unless a report of Unfinished (U) has been authorized by the instructor. The U is restricted to students doing satisfactory work in the class who, because of extenuating circumstances, are unable to complete the work of the course. The U is limited to assigned work during the final sixth of the term. If a course is reported as Unfinished, a student is not prevented from registering for another course for which the unfinished course is a prerequisite. Work reported as Unfinished must be completed within six months from the time at which the report was made. If the work reported Unfinished is not made up within six months, it is automatically entered as a Failure on the student's record. However, if for sufficient cause an Unfinished cannot be removed in

six months, request for an extension of the time may be made to the Head of the Department in which the course is offered.

MARKS AND GRADE POINTS

The marks A, B, C, D, F (Failed), and U (Unfinished) are used in indicating quality of work. Courses dropped during the first one-sixth of the semester or summer session are not recorded on the student's record. Courses dropped during the second and third one-sixths of the term are indicated on the student's record by W (Withdrawn). For courses dropped during the final one-half of the term, F (Failure) shall be reported unless for unusual circumstances specific permission is given to report otherwise.

The time for dropping classes in the summer session is proportionately shorter than in the regular semester. Date deadlines for dropping or adding courses are given in the Schedule of Classes for each semester and the summer session.

Grade points are awarded as follows: For each hour of credit marked A, 4 grade points; A-, 3.67; B+, 3.33; B, 3 grade points; B-, 2.67; C+, 2.33; C, 2 grade points; C-, 1.67; D+, 1.33; D, 1 grade point; D-, 0.67; F, 0 grade points.

GRADE INDEX—In determining a student's cumulative grade index, all course work attempted at this university shall be used as the basis of computation with the following exceptions for undergraduate students: If a student repeats successfully a course he has previously failed, only the grade received for the successful completion will be included in figuring the cumulative grade point. If a student repeats a course he has successfully completed, the grade received the last time he takes the course will be used in figuring the grade index even though the last grade may be lower than the grade received previously. (The student's transcript of record will show every time the course is taken and the grade earned.) Post-baccalaureate students enrolled for work to meet requirements for certification as elementary or secondary teachers are given the same grade index advantage as is given undergraduate students for courses repeated. This applies only to those courses required for certification. If a graduate student repeats a course, both grades count in computing the index.



FAILED COURSES — A course that has been failed must be repeated in an on-campus class in order to earn credit for the course. A course that has been failed may not be repeated by correspondence, nor may credit be established by examination for a course which has been taken previously and failed.

ACADEMIC WARNING, PROBATION. AND SUSPENSION—The university believes that there are times when students must be called to account for their academic progress. This may be to stimulate the student to do a better quality of work, or it may be to terminate a student's stay at the university so as to make room for another student who is willing to make better use of the facilities. It is recognized that all types and varieties of situations occur and that, therefore, it is not reasonable to have a completely rigid set of rules governing probations and suspension. The university has a set of guide lines but allows the Committee on Admissions and Retention considerable discretion in the application of these guide lines to individual student situations.

Warning: This is the mildest form of action taken by the Committee and no entry of this is made on the student's permanent record. Transfer students who have no grade point deficiency (at any college previously attended) but whose previous college grade distribution, high school rank, test scores, or major objective raises questions about probable success, may be admitted with a transfer warning. A freshman or sophomore who is from one to nine grade points deficient of the number necessary for a 2.00 index at UNI will be warned, but a junior or senior in the same situation may be either warned or placed on probation.

Probation: This action is a more serious one and it is entered on the student's permanent record. Any student who is deficient from ten to fifteen grade points for a 2.00 cumulative index at UNI will be placed on probation. A student who has been placed on probation may improve his record and be removed from probation after reaching a 2.00 cumulative index at UNI or he may lower his record and be subject to a suspension.

Suspension: A student who at the end of any semester or summer session is more than fifteen grade points deficient for a 2.00 grade index at UNI may be suspended indefinitely or for a predetermined period of time.

The university has very generous provisions for a student to drop courses during a semester, or to withdraw from school without serious academic penalties. However, there are times when repeated withdrawals or dropping of courses may raise questions as to the serious intent of the students, and when it would be well to consider the need to make spaces available for other students who are serious in their efforts. Therefore, if in two consecutive semzsters (summer omitted) a student withdraws from the university or drops more than half the work for which he was enrolled at the end of the third week, he may be suspended indefinitely or for a predetermined period of time.

Readmission after Suspension: If a student has been suspended for a predetermined period of time and this time was indicated in his notice of suspension, he may return without any formal action by the Committee on Admission and Retention at any time after the suspension period has expired. If the student has been suspended for an indefinite period, he may be readmitted only after applying for readmission in writing and receiving favorable action on the application from the Committee. Readmission is seldom granted before the student has been out of college at least six months. Applications for readmission may be secured from and filed with the secretary of the Committee in the Office of the Registrar.

Students who are readmitted after suspension are on probation. The Committee will expect an improved quality of academic work and will check the student's progress regularly. If there is no improvement, the next suspension can be permanent.

DEAN'S LIST—Effective 1974 Fall Semester: To be eligible for the Dean's Honor List, which is published each fall and spring semester, a student must have earned a grade-point average of no less than 3.50 while completing at least 12 semester hours in graded work or in field experience in that semester. A Dean's Honor List is not compiled for the summer session, nor does the list include graduate students.

PASS/NO CREDIT GRADING—An undergraduate student having earned twelve semester hours of credit at this university may take courses offered by this institution for which he is otherwise eligible for degree credit without grade under the following conditions:

- The course work requirements for a student taking work on an ungraded basis shall be the same as for a student taking the work on a graded basis.
- Not more than 22 hours of ungraded course work in addition to student teaching or Field Experience in Social Work (45:184) may be taken toward any bachelor's degree.
- Ungraded credit may not be applied to work required for a major or minor except with the consent of the head of the department in which the course is offered.
- Ungraded credit may not be used in the Common Professional Sequence requirements for student teaching.
- Course work passed without grade may not be re-taken except by special permission of the Dean of the College in which the course is offered.
- 6. A graded course completed may not be re-taken on an ungraded basis.
- 7. The Pass-No-Credit system may not be used with Credit by Examination, Extension, or Correspondence Courses.
- Change of registration in a course to or from a non-graded basis may not be made after the end of the first one-half of a term. Only one change of registration may be made per course.

OPEN CREDIT SYSTEM—This type of credit is designed for special projects such as a paper, experiment, or a work of art. The student must be registered for a minimum of nine hours of work during the semester open credit is requested. No prior registration for open credit is necessary and there is no specific time period set for the completion of a project; however, there is no guarantee of credit prior to or upon submittal of the project. Open credit is strictly elective credit.

The number of open credit hours assigned for a project will reflect the academic evaluation of the project; no letter grades are given. One or two credit hours for a single effort is recorded as open credit. A single effort awarded three hours of credit is entered as open honors credit.

A student is limited to one project in any academic year up to a maximum of 12 hours credit over a normal, four-year undergraduate program. A project may be submitted any time during the semester up to a date three weeks prior to the last day of regularly scheduled classes.

The results of the student's efforts are submitted to an ad hoc committee of three faculty members of the student's choosing: two from the academic area or discipline in which the project falls, one from any area or discipline. The student may not submit a project evaluated by one committee to a second committee for re-evaluation. He may resubmit a project to the original committee at that comittee's discretion or with its encouragement.

Application forms may be secured from the Office of the Registrar.

CORRESPONDENCE STUDY

Any student who fully meets admission standards will be permitted to enroll for Correspondence Study and may be permitted to continue Correspondence Study so long as he continues to maintain a minimum academic average of 2.00. As correspondence courses do not follow the regular semester time schedule, a student may enroll at any time of year; however, a student must have special permission to enroll in or continue with correspondence work while he is currently enrolled for regular courses on campus. Students who have declared a major must have the approval of the Dean of the College in which their major is offered. A student without a declared major must have approval from the Office of Academic Affairs.

A student may not take by correspondence a course which he has previously failed. See page for details on both correspondence study and extension class credit.

CREDIT BY EXAMINATION

Credit in a course may be earned by examination. Credit is earned only if a grade of A or B is received in the examination. A grade of C will release a student from a course requirement, but gives no credit. A grade below C gives neither credit nor release, and is recorded as a failure. Credit earned by examination is recorded on the student record only as Passed, Released, or Failed. The results are not counted in a student's grade index.

Credit may not be established by examination for a course which has been taken previously and failed, nor for a course for which the student does not meet the prerequisite, nor for a course which is a prerequisite to one for which credit has already been earned.

Application for credit by examination is made to the Office of the Registrar, and approved by the Head of the department offering the course and the Dean of the College in which the course is offered.

The department may set the policy of giving the examinations, and establishing the requirements for fulfilling the examinations. Credit by examination is open to most courses offered on campus; however, a student should discuss the course requirements with the department head before making application for credit by examination.

GRADUATE CREDIT FOR UNDERGRADUATE STUDENTS

Seniors at this university who are within fourteen semester hours of graduation and who wish to take graduate study for graduate credit must file an application for admission as a graduate student. Exception to the limit is rarely made and the student must have special permission from the Dean of the Graduate College.

INDEPENDENT STUDY

Students of outstanding ability and achievement may be permitted to earn credit by departmental 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. This report is filed in the department of-fice.

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

Application for independent study, including an outline of the proposed project, should be made to the head of the department in which the study is to be done and must have his approval before the project is undertaken. The student's program of independent study will be under the immediate supervision of one or more faculty members. Except for the major in Individual Studies, not more than six hours of credit earned by independent study may be used to meet the requirements of a major.

Independent study may also be taken under the Individual Studies program. See pages 31 and 200 for details.

VISITING CLASSES

A student may attend classes on a non-credit basis at the University of Northern Iowa if a space is available in the class, and under the following conditions. To visit (audit) a course, the student must have the approval of the instructor of the course and the dean of the college in which the course is offered. However, if the addition of the course to be visited (audited) makes the student's total course load hours more than he is permitted to carry according to his grade point average, the student also must have the written permission of the dean of the college of his major to visit the course. (Undeclared majors will need approval from the Office of Academic Affairs for an overload of course work.)

The student who is currently enrolled for a program requiring payment of the fulltime tuition fee does not have to pay an additional fee to visit (audit) a course.

Students enrolled on a part-time basis (with fees charged on a per-credit-hour basis) and those persons who are not regularly enrolled for any classes will be required to pay the regular credit-hour fee for each course attended as a visitor.

A by-the-week visitor's fee is charged those persons who are on campus for a limited time and may wish to visit a series of classes for usually not more than one or two weeks.

Specific information on visiting (auditing) classes may be obtained from the Office of the Registrar. Visitors in the courses are not required to take examinations or complete other work; nor are they permitted to take part in class discussion. They are present as observers.

ADVANCED PLACEMENT PROGRAM

The University of Northern Iowa participates in the Advanced Placement Program of the College Entrance Examination Board. Through enrollment in special courses in a participating high school, a qualified high school senior may take achievement examinations in one or more academic subjects at the college level. UNI grants college credits in art, biology, chemistry, English, foreign languages, history, mathematics, music, and physics to students who pass examinations with scores of 3, 4, or 5. Details of this program may be obtained from the Director of Admissions, UNI.

REGENTS UNIVERSITIES STUDENT EXCHANGE PROGRAM

University of Northern Iowa students may take courses at either of the other two Regents universities for UNI resident credit. Regular, degree-bound students in good standing at any of the three Regents universities may attend another Regents university for a maximum of two semesters (three quarters), and the credits earned at the other university will be counted as resident credit at their home institution. Approval for participation and credit in the exchange program must be obtained well in advance of registration since the department head must approve the acceptance of such credits if these are to apply on the major, and to insure complete processing of the application between the cooperating universities within specified dates for enrollment.

Detailed information and application forms for the exchange program are available from the Office of the Registrar, UNI.

WORKSHOP AND STUDY TOURS

From time to time, and especially during the summer session, opportunities are offered for earning credit under the workshop plan. Workshops provide residence credit but a maximum of 6 semester hours may be applied toward graduation.

Occasionally departments of the university may arrange extensive study tours here and abroad 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 university publications. During recent summers several study tours were conducted by departments of the university. (See p. 30 for details).

NONDISCRIMINATION POLICY OF THE UNIVERSITY OF NORTHERN IOWA

Believing that the freedom of an individual should in no way be restricted or circumscribed because of race, national origin, or religious beliefs, the administration of the University of Northern Iowa pledges its unqualified endorsement and support of the Nondiscrimination Policy Statement adopted by the Iowa State Board of Regents on September 25, 1954.

The administration of the University of Northern Iowa also pledges its compliance with Iowa Fair Employment Practices and Public Accommodation laws and the federal Civil Rights Act of 1964 and its cooperation with the Iowa Civil Rights Commission.

The University of Northern Iowa recognizes a responsibility to observe the spirit as well as the letter of the federal and state laws regarding discrimination. It is the intent of the university not only to avoid policies and practices which tend to deny opportunity to, or deprecate or denigrate, any individual or group because of race, color, creed, sex or national origin, but also to work actively to provide opportunities for disadvantaged individuals.

STUDENT CONDUCT

The University of Northern Iowa expects each student, as a condition of remaining in the university, to conduct himself so as to maintain an effective environment for learning, to observe university regulations and the city, state and federal laws, and to respect fully the rights of others. The Student Guide contains more specific information concerning student conduct and related disciplinary action.















Curricula

The University of Northern Iowa offers degrees at both the undergraduate and graduate levels. The graduate program is given in detail on pp. 202-240. At the undergraduate level the University of Northern Iowa offers baccalaureate degrees: the Bachelor of Arts, the Bachelor of Music, and the Bachelor of Technology. Major goals in the programs leading to these degrees are the advancement of humane learning and the preparation of young men and women to cope intelligently, effectively, and reasonably with the complex and changing conditions of life in modern society. To attain these goals students are expected to make significant progress while at the university toward:

1. understanding themselves and the society in which they live.

2. developing the ability to read, write, and speak their own language well and to appreciate its literature.

gaining an acquaintance with the literature of another language and the culture of its people, preferably in the original but certainly through the study of translations,

 securing a thorough grounding in the history and cultural traditions of the modern world with a special sympathetic understanding for the economic, social, and political problems of our time,

5. acquiring an understanding of the principles and methods of the natural sciences

and mathematics and the part they play in modern society.

6. developing the ability to perceive the values of the arts and derive an enjoyment from them,

 acquiring a knowledge of how to care for their own health and physical environment and to take an intelligent interest in the health and welfare of the community in which they live,

8. growing in the desire to secure knowledge.

To achieve these ends the students are obliged to take a variety of courses drawn from among the arts, humanities, philosophy, mathematics and language, and from among the biological, physical and social sciences. Concentration in a major field enables a student to engage in intensive study, to think for himself, and to exercise discriminating judgment. It prepares him for more advanced work if he decides to go on to graduate school, or for immediate employment. This emphasis on the academic program is not to exclude the contributions made by other parts of the college life to the substantial development of a student's personality—social and athletic activities, public speaking and dramatic arts, music, art, public affairs, or other programs.

The desired result of these degree programs is not an individual who conforms to society as it is or sees his own vocation within the narrow confines of his day-to-day occupation, but rather a person enriched in mind and spirit and so stimulated that he will seek with eagerness to contribute to the benefit of the world in which he lives. Such a

program is desirable for all students whatever their future professions may be.

For those who plan to become teachers, additional work is required in professional education. This work seeks to enhance the student's interest in teaching, to instill loyalty toward the profession, and to encourage the desire for continuous professional growth. The student learns the skills, techniques, and understandings necessary to good teaching. He studies the recent knowledge concerning the physical and mental growth of the

child, the ways children learn, 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.

The prospective teacher must also spend a significant part 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.

The teaching program requires more hours to complete than the non-teaching program in order to include the necessary professional work and to approximate, as far as possible in a four-year period, the other major goals listed above. Students on the teaching program especially are encouraged to continue their education beyond the bachelor's degree.

The University of Northern Iowa offers both undergraduate and graduate curricula.

I. UNDERGRADUATE CURRICULA

BACHELOR OF ARTS DEGREE

Two programs leading to the Bachelor of Arts degree are available.

A. BACHELOR OF ARTS - TEACHING PROGRAM - 130 semester hours.

On this program students are prepared as:

 Secondary teachers of art, business education, geography, English, foreign languages, home economics and vocational home economics, industrial arts, mathematics, music, physical education, science, social science subjects, and speech.

2. Special teachers of art, industrial arts, music, physical education, speech

correction; and as school librarians.

Elementary teachers, kindergarten through sixth grade.
 Junior high school teachers in all usual areas of instruction.

B. Bachelor of Arts – 124 semester hours.

On this program students are prepared in the following areas:

 Liberal Arts – Art, English, foreign language, mathematics, music, psychology, speech, social science, and science.

2. Vocational - Business, home economics, industrial arts, and physical education.

3. Joint Programs

Students interested in one of the following professional programs may complete the basic work on the University of Northern Iowa campus and transfer to UNI a year's credit from the professional school to complete the requirements for a Bachelor of Arts degree at UNI:

> Dentistry Medicine Medical Technology

Physical Therapy

A student shall complete at UNI all the requirements in General Education (40 semester hours) and the requirements for a major in Science and have a total of at least 96 semester hours at UNI. The professional courses transferred will bring the total hours to at least 124 semester hours. Credit is accepted only from professional schools which are fully accredited.

The student must know the requirements for entrance of the professional school so as to be able to take at the University of Northern Iowa the work

required for admission while at the same time meeting UNI degree requirements. The student will work with a pre-professional adviser who will help in the selection of proper courses.

a. Acceptance of credit from professional schools of dentistry, medicine, osteopathy, and podiatry toward meeting part of degree requirements:

A student who has completed three years or more of college work with a minimum of 96 semester hours, of which at least the last 30 hours of work was completed at the University of Northern Iowa before admission to an accredited professional college, may use professional credit to satisfy the remaining hours required for the baccalaureate degree at the University of Northern Iowa. The student shall have completed all of the specific requirements for the degree as well as the requirements of an appropriate major at this university.

b. Acceptance of credit from a professional school of Medical Technology or Physical Therapy toward meeting part of degree requirements:

A student who has completed three or more years of college or university work with a minimum of 96 semester hours, of which at least the last 30 hours of work was completed at the University of Northern Iowa before admission to an approved school of Medical Technology or Physical Therapy, may use professional credit to satisfy the remaining hours required for the baccalaureate degree at the University of Northern Iowa. The student shall have completed all of the specific requirements for the degree, as well as the requirements of an appropriate major at this university. In addition, medical technologists shall successfully complete the examinations of the Registry of Medical Technology of the American Society of Clinical Pathologists; physical therapists must pass the examination of the American Registry of Physical Therapists.

C. OTHER PROGRAMS

- Pre-professional—Suggested programs are available for those planning to transfer into Medicine, Dentistry, Osteopathy, Podiatry, Law, and Engineering. These may be requested in advance from the Registrar.
- 2. Cooperative Programs
 - a. Two-Year Cooperative Nursing Program with the University of Iowa. Through a cooperative arrangement between the University of Northern Iowa and the College of Nursing at the University of Iowa, students may enroll at the University of Northern Iowa for the first two years of the four-year Bachelor of Science in Nursing program. The program is completed at the University of Iowa and the degree awarded by that institution. A carefully planned sequence of courses, covering two academic years, has been developed for students who find it advantageous to begin the four-year baccalaureate program at UNI. Students who complete the two-year sequence with at least a 2.20 grade point average on all college work undertaken may apply for admission to the College of Nursing, University of Iowa, for one summer session and two academic years of study in the nursing major. Upon completion of the major, graduates may write the examination for Registered Nurse licensure.

At the University of Northern Iowa students complete two years of basic studies. These courses include work in general education along with introductory and basic science courses. Program details are available from the Dean of the College of Natural Science.

During the first semester of the sophomore year students who have earned the required 2.20 grade point average will submit an application to the University of Iowa for admission to the College of Nursing. The Admissions Committee of the College of Nursing reserves the right to select those students for the summer session course in Foundations of Nursing who are deemed most likely to succeed in the nursing major. Tenative admission statements will be given to qualified students by April I, with final admission statements reserved until sophomore grades are certified by the University of Northern Iowa.

b. Freshman Academic Program with the Allen Memorial School of Nursing. The University of Northern Iowa cooperates with Allen Memorial School of Nursing, Waterloo, Iowa, to offer the freshman year academic work. Admission to the program is a joint action of the School of Nursing and the

university. Applications should be made to the School of Nursing.

c. Three-year Program in Medical Technology. The University of Northern Iowa cooperates with Allen Memorial School of Medical Technology and Schoitz School of Medical Technology, both located in Waterloo, Iowa, to offer the first three years of work; the schools of medical technology offer the fourth year. Applications should be made to the Registrar of the university and a copy of the combined program requested.

A student who expects to transfer to another institution should declare his special interest at the time of admission. He will be 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 school to which he wishes to transfer, and know its requirements thoroughly. If he remains more than one year at the University of Northern Iowa he must clear his program with the Coordinator of Advising at the beginning of the sophomore year.



BACHELOR OF MUSIC DEGREE

Majors on this degree program have a choice of five areas: voice, piano, organ, orchestral instruments, and theory-composition; each requires a total of 130 semester hours. Students are prepared for careers in college teaching, as performers, and for other fields where a high degree of musical knowledge or performing skill is required.

BACHELOR OF TECHNOLOGY

This program allows the student a choice of majoring in three areas: technical institute, trade and industrial education, or industrial technology. The first two areas lead to a degree with certification to teach.

A. Technical Institute Education major—133 hours. This major is designed to prepare teachers for post-high school technical programs, and also requires one year of recent and significant technical work experience in industry in the major area.

B. Trade and Industrial Education major – 133 hours.
The purpose of this major is to prepare teachers for vocational-technical schools to teach such skill trades as machine shop, carpentry, electrical, and other trade programs. Two years of recent and significant trade experience in desired trade is required in addition to the course work.

C. Industrial Technology major – 127 hours, This major is designed to prepare persons for supervisory and leadership positions that are auxiliary to the field of engineering; more specifically, graduates from these programs may be employed in one of the following divisions of industry: engineering, design and development, production and manufacturing, field service and product utilization, and sales and distribution. The degree program requires one year of recent and significant technical experience in industry in the major area in addition to the required course work.

CHANGE OF DEGREE PROGRAM

Students who change from one degree program to the other will be held for all specific requirements of the program on which they expect to graduate. There will be little difficulty in making such a change if it is made not later than the beginning of the junior year. However, if the change is made later than that, there is no assurance that the student will be able to complete the work required for graduation within the usual four-year period.

II. GRADUATE CURRICULA

The University of Northern Iowa offers four graduate degrees:

- A Master of Arts in Education 30-38 semester hours.
- B. Master of Arts-30-33 semester hours.
- C. Specialist in Education—Minimum of 30 semester hours beyond the master's degree.
- D. Specialist-Minimum of 30 semester hours beyond the master's degree.

For details of graduate programs, see pp. 202-240.

General Education Program

All candidates for the baccalaureate degrees on any curriculum are required to complete the designated program of General Education. Credit earned in General Education and in the major or minor may be used to meet requirements in one or the other, but not in both. Because of the flexibility of the program and the wide choice in courses available to the student, General Education requirements must be satisfied through class enrollment (or credit by examination). (General Education requirements may not be satisfied by demonstration of competency or release-without credit-by examination.) Specific courses which may be taken to fulfill the General Education requirements are listed in the Schedule of Classes for each semester and summer session. The student is advised to complete the General Education Program as early as possible in his university career, preferably by the end of the sophomore year.

GENERAL EDUCATION REQUIREMENTS -

Humanities—courses from at least	st two of the following areas	8-10 hours
Art	Music	
History	Philosophy	
Humanities	Religion	
Literature	Theater	
Social Sciences-courses from at	least two of the following areas	8-10 hours
Anthropology	Political Science	io nours
Economics	Psychology	
Geography	Sociology	
Science-courses from at least tw	o of the following areas	8-10 hours
Biology	Physical Science	0 10 110015
Chemistry	Physics	
Earth Science	Technology	
Mathematics	, ceimology	
Physical Education: at least 2 hor	urs of activity courses	2-4 hours
(Women must have credit in be		26-34 hours
Electives: from the following groups	s (student must select at least	

3 hours from the category "Other Cultures") 6-14 hour

Communication:

Composition Mass Media Foreign Language Speech

Other Cultures:

American Indian Foreign Area Studies American Negro Culture Values East and West Culture of the Ghetto

Independent Study:

Open-credit: Seminars:

Total

40 hours

Bachelor of Arts Degree Curricula

Bachelor of Arts-Teaching Program

All candidates on this program will choose one of the following patterns not later than the beginning of the sophomore year. Graduation from a teaching program requires credit in American history or American government.

A. Preparation for teaching in the secondary school or in special subjects.

Semester Ho	ours
General education	
Common professional sequence	
130	

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

	Semester Hours
General education	. Minimum 40
Common professional sequence	22-23
Additional specific requirements	10
Subject field and elective	57-58
	130

C. Preparation for teaching in the elementary school (kindergarten and grades 1-6)

	Semester Hours
General education	. Minimum 40
Common professional sequence	22-23
Major requirements	13-15
Professional semester	17
Other requirements and electives	36-38
	130

D. Preparation for teaching in early childhood education (nursery school and kindergarten).

Semester Ho	ars
General education	
Common professional sequence	
Major requirements	
Professional semester	
Other requirements and electives	
130	

THE COMMON PROFESSIONAL SEQUENCE

All candidates for the Bachelor of Arts-Teaching Program are required to take the courses in the common professional sequence as outlined below, and in addition one departmental methods course.

	Semester Hours
20:014 The Teacher and the Child	5
20:016 Psychology of Learning	5
25:118 Social Foundations of Education	4
28:1 Student Teaching*	8
	22

*Course number in Teaching denotes area in which experience is gained: 28:132, 134, 135, 136, 137, 138, 139.

Note: During the next several years the present Common Professional Sequence will be revised by phasing out the above program requirements and replacing these with the following prescribed series of courses. Departmental methods courses and Student Teaching (28:1xx) are required in addition to this series.

First semester:

Phase I -

Field Experience: 20:017 Interpersonal Interaction Patterns-1 hr.

Value Clarification Seminar: 20:020 Interpersonal Influence Preferences -2 hrs.

Developmental Psychology Core: 20:030 Dynamics of Human Development -2 hrs.

Second semester:

Phase II -

Socio-Cultural Core:

25:020 Educational Purposes and Practices - 2 hrs. 25:030 The Community and the Curriculum - 2 hrs.

Field Experience: 20:018 Teacher as Change Agent-1 hr.

Third semester:

Phase III -

Learning and Instruction Core: 20:040 Nature and Conditions of Learning —3 hrs.

Measurement and Evaluation Core: 25:050 Classroom Evaluation Instruments -2 hrs.

With the required eight hours of student teaching (28:1xx) this sequence includes a total of 23 hours. The Department of Educational Psychology and Foundations must be consulted at the time of registration for beginning the Common Professional Sequence.

Application for Approval in a teacher education program is made as a part of the student's declaration of a teacher education major. The student must pass such tests and meet such other standards as may be prescribed by the Committee on Teacher-Education Standards and Practices. For full approval, a student must have earned at least 24 semester hours of credit at the University of Northern Iowa and must have at least a 2.20 grade index in all of his course work. The committee may grant provisional approval for students in exceptional cases but may not grant full approval until all standards have been met. Normally a student will be expected to meet full approval by the beginning of the junior year if he wishes to complete requirements in the minimum time.

A student may, at the time of admission to the university, declare an intent to enter a teaching program and be assigned a teaching advisor from his first enrollment. The

university must give special consideration to scholarship, health, character, personality,

and quality of potential leadership of an applicant for a teaching curriculum.

Detailed information regarding admission and retention may be found in the brochure entitled Teacher Education, a statement of policies, requirements, and procedures for admission to and retention in teacher education at the University of Northern Iowa, which each student should obtain from the office of the Registrar.

DIRECTED EXPERIENCES—At the University of Northern Iowa directed experiences in teaching and the observation of teaching are an integral part of the teacher-education curriculum. The emphasis on experimentation and creative approaches gives the student insight into turning theory into practice. The professional laboratory experiences include directed observation, participation, and the September Experience, to culminate in the

actual period of student teaching in the senior year.

Directed observation gives the student an opportunity to see the teaching-learning operation without becoming involved in the on-going activity itself. In the participation experience, the student takes an active part under direction and guidance in the teaching-learning situation or other community activities. The September Experience calls for a student in teacher education to spend a brief period of time in an elementary or secondary school during late August and early September, and always includes the pre-school faculty workshop and the first several days of classes.

Student involvement in all of the directed experiences in teacher education is vital to the preparation of the prospective teacher. Observation and participation experiences are provided through specific courses in the teacher education program. The September Experience is voluntary and credit is not offered. These experiences give the student the background needed to make professional coursework and student teaching more

meaningful.

Student Teaching is an eight-week period of guided teaching during which the student assumes increasing responsibility in the classroom and during the learning of a given group. The student receives credit for and is graded on his work in the student



MAJORS AND MINORS-SECONDARY SCHOOL TEACHING

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. He will also select at least one minor if a minor requirement is indicated under the description of the major he has chosen. Even if not required, a student may select a second major or one or more minors.

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 of the chapter entitled Courses of Instruction.

MAJORS

Art

Asian Studies

Biology

Business Education

Chemistry
Earth Science
Economics
English

English as a Foreign Language

French Geography German

Health Education

History

Home Economics Industrial Arts Library Science Mathematics

Music

Physical Education (Men)

Physical Education and Health (Men)

Physical Education (Women)

Physics

Political Science Psychology

Safety Education

Science

Social Science Sociology Spanish Speech

Speech Pathology

Vocational Home Ecomomics

MINORS Art

Biology

Business Education

Chemistry Coaching Dance

Earth Science Economics

Education of the Handicapped-Secondary

Level English

English as a Foreign Language

Family Life Education

French Geography German

Health Education (Men)

Health History Industrial Arts Journalism Latin

Library Science Mathematics

Music

Physical Education (Women)
Physical Education—Elementary

Teaching

Physics

Political Science Psychology Russian

Safety Education

Sociology Spanish Speech

To be approved for teaching in a major or minor area a student must make satisfactory grades in that area, must secure approval of the department, and pass such tests as the area department may require. A student may be held for additional work if he fails to demonstrate competence.

MAJOR IN JUNIOR HIGH SCHOOL EDUCATION

Complete program requirements for the Major in Junior High Education are given on page 111 under the listings of the Department of Curriculum and Instruction. Specific course patterns in each subject field offered for the Junior High Education Major may be found with the various department listings, pp. 79 to 200.

MAJORS IN EARLY CHILDHOOD EDUCATION AND ELEMENTARY EDUCATION

These majors are given in specific detail under the department of Curriculum and Instruction in the section entitled Course of Instruction, pp. 109 and 110.

Bachelor of Arts-Liberal and Vocational Arts

All candidates on this program will complete the following pattern:

Semester Ho	ours
General Education	
Major, Minor, Foreign Language, Electives84	
124	

Not later than the beginning of the sophomore year each student enrolled on this program will choose one major from the list below. A minor is required for those majoring in geography. A knowledge of a foreign language is required or recommended for several majors. Specific information regarding the foreign language requirements will be found with the departmental listings. It is recommended that the student include in his electives a course in the literature of some language or languages other than English (in translation if not in the original).

MAJORS AND MINORS

Specific requirements for the various majors and minors will be found with the departmental listings.

MAJORS

Accounting

American Studies

Art

Biology

Business Management

Chemistry

Economics

English

English as a Foreign Language

French

Geography Geology

German

History

Home Economics

Humanities

Individual Studies

Industrial Arts

Latin American Studies

Marketing

Mathematics

Music

Office Administration

Philosophy

Philosophy and Religion

Physical Education: Recreation Emphasis

Physics

Political Science Psychology

Religion

Russian Area Studies

Science Social Work Sociology

Spanish

Speech

MINORS

Art

Athletic Training

Biology Business

Chemistry

Comparative Literature

Dance

Earth Science Economics

Educational Media

English

English as a Foreign Language

French Geography German Health History Home Economics Industrial Arts Journalism Latin

Mathamatia

Mathematics Music

Philosophy

Physical Education (Women)

Physics

Political Science Psychology Religion

Religion Russian Sociology Spanish Speech

Bachelor of Music Degree Curricula

All candidates for the Bachelor of Music degree will complete the following pattern:

MAJORS:

Voice

Piano

Organ

Orchestral Instruments

Theory-Composition

Admission to this program may be granted upon the completion of 30 semester hours of outstanding work; however, admission will generally be considered upon the completion of 60 hours of acceptable work, an audition, or other acceptable evidence, and approval by the proper area faculty. It is recommended that the student include in his elective courses some work in French and German. Other languages are also acceptable.

Participation in a performance organization such as band, chorus, orchestra, music theatre, and other ensembles, is required of all degree students every semester in residence. Applied credit of one hour may be granted for each semester of participation but not more than six semester hours of credit may be earned toward the Bachelor of Music degree.

Teaching certificate. The Bachelor of Music degree does not provide for teaching certification, but it is possible to take part of the necessary work during the undergraduate program and the remainder as a post-graduate and thus earn a teaching certificate. Such students must complete six (6) hours in music methods and 22 hours in the professional sequence as required on the Bachelor of Arts Teaching program. A course in American history or American government is also required for certification to teach. Upon completion of this work in addition to the Bachelor of Music degree, a student will be eligible to teach music in both elementary and secondary schools.

Bachelor of Technology Degree Curricula

The requirements for each area are designed specifically for that particular program and are shown in detail in the statement of the major under the departmental listings in the section entitled Courses of Instruction (pp. 180).

Teaching Program

All candidates on the teaching (education) programs for this degree will choose one of the following patterns not later than the beginning of the sophomore year:

A. Preparation for teaching in area technical and community colleges.

	Semester Hours
General Education	. minimum 40
Mathmatics-Science	
Related Technical	16
Applied Science	4
Professional sequence	23
Concentration in special area	
	133

B. Preparation for teaching industrial trades in area vocational-technical, and secondary schools.
Semester Hours

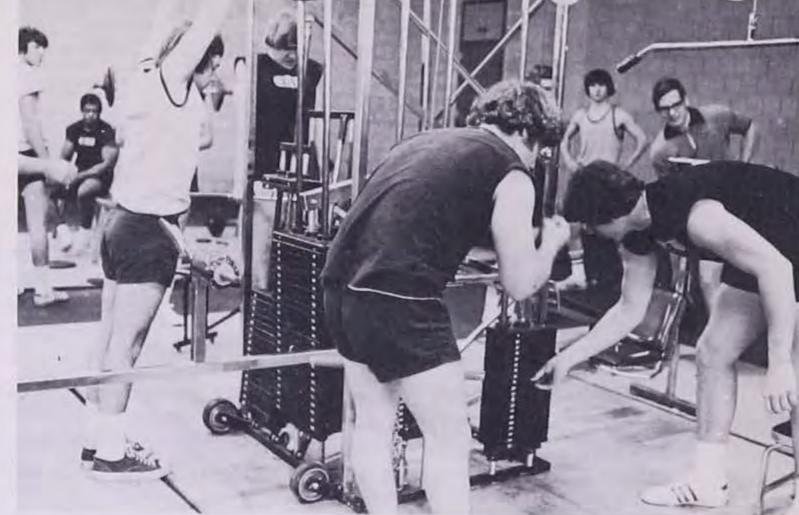
	Semester II
General Education	Minimum 40
Mathematics-Science	16
Related Trade	
Applied Science	9
Professional sequence	
Supervision	
Concentration in special area, electives	21
	133

Technology Program

All candidates on this program will complete the following pattern:

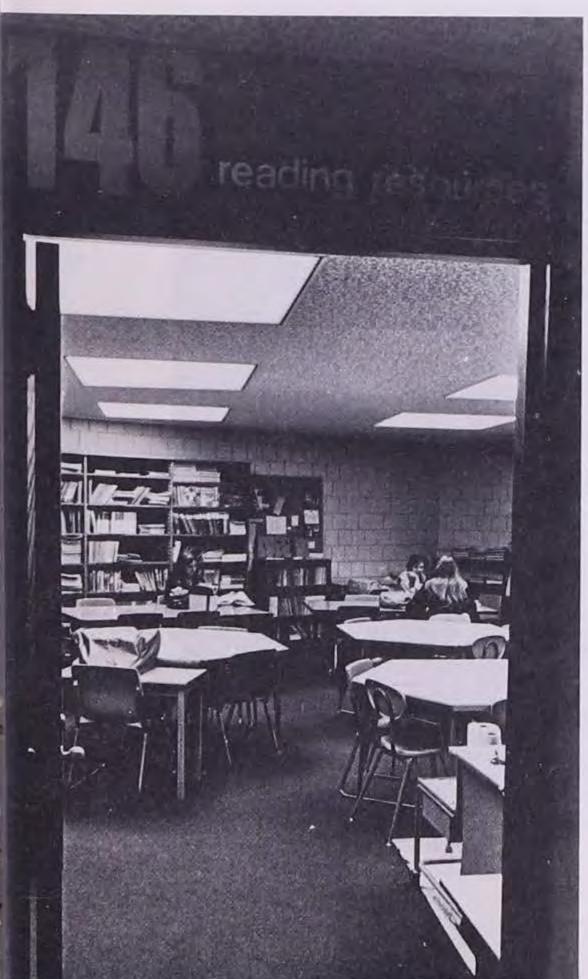
	Semester Hou
General Education	40
Mathematics-Science	
Related Technical (required and electives)	
Applied Science	
Concentration in special areas	
	127











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 designated 60:111 the "60" refers to the Department of Art and the "111" 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. However, only those 100-level courses whose numbers are followed by a "g" provide graduate credit, e.g., 57:181(g). In all courses of the 100(g) series greater academic achievement, both qualitative and quantitative, is expected of those receiving graduate credit than those receiving undergraduate credit.

Courses 200-299 are primarily designed for graduate students. Undergraduates seeking admission to graduate courses must secure the permission of the head of the department offering the course. Courses numbered 200 taken as an undergraduate cannot later be used for an advanced degree unless the student was eligible to earn graduate credit. See pp. 203.

Students are classified as follows:

	Earned Semester Hours
Freshman	up to 31
Sophomore	32-63
Junior	64-95
Senior	
raduate classification is earned by admission to graduate s	study.

Course Numbers Common to Many Departments

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

059, 159, 259—Reserved for temporary courses of a special or experimental nature.

133 or 233 Workshop—1 to 6 hrs. 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.

086, 186, 286 STUDIES IN "______"-Courses to be offered by departments for specialized work not covered by regular courses. Credit and topic for "study" to be given in Schedule of Classes.

198 INDEPENDENT STUDY—Hours to be arranged in advance. A provision for students to do work in a special area not offered in formal courses. Permission of the Dean of the College and head of the department offering the work is required. Projects must be approved well before the beginning of the semester in which the work is to be done.

199 STUDY TOUR-1 to 8 hrs. Offered as announced in the Summer Bulletin and Schedule of Classes. See Summer Bulletin for general description and consult appropriate department for specific information.

297 PRACTICUM-2-3 hrs. Offered as needed in the various disciplines to provide

practical experience in college teaching.

299 RESEARCH. For details of approval and registration, see pages 211 and 234.

Individual Studies Program

Courses offered in the Individual Studies Program may have a prefix of 00:xxx instead of a department number. These include:

192 EXPLORATORY SEMINAR — 1-3 hrs.

196 INTERDISCIPLINARY READINGS - 1-3 hrs.

197 UNDERGRADUATE THESIS - 3-6 hrs.

198 INDIVIDUAL STUDY PROJECT - Hours arranged by Individual Studies Director.

Course Descriptions

In the pages immediately following are listed all the courses offered by the various departments of the university. Departments are listed alphabetically by colleges. Within each section the list of courses is preceded by the departmental requirements for the majors and minors as well as for the subject field on the junior high school major. For departments which cover a number of fields, the material has been subdivided. Requirements for graduate majors are listed under The Graduate Program, pp. 214-240.



College of Business and Behavioral Sciences

The College of Business and Behavioral Sciences houses nine academic departments: Business, Business Education and Office Administration, Economics, Geography, History, Home Economics, Political Science, Psychology, and Sociology and Anthropology. All departments share a concern for understanding man in his social and economic relationships.

The college is the home of excellent professional programs as well as a major segment of the university's course offerings in the liberal arts. One commitment of the faculty is to assure that all students, including those in career oriented programs, receive the benefits of a broad liberal education. A complementary commitment exists in a college-wide concern that graduates have reasonable vocational opportunities.

All departments in the college cooperate in the preparation of teachers, and all except Business have programs which lead to a "Bachelor of Arts — Teaching," the requisite degree for certification in the discipline as a secondary school teacher. Two interdisciplinary programs housed within the college, namely the programs in Asian Studies and Social Science, also lead to a teaching degree.

The Bachelor of Arts degree is also awarded for studies in the liberal and vocational arts. Students in Business can major in Accounting, Management, Marketing, or Office Administration. In the Department of Sociology and Anthropology, there are majors in Sociology and in Social Work. Programs leading to a non-teaching degree are also offered in the Departments of Economics, Geography, History, Home Economics, Political Science, and Psychology. Graduate work leading to the Master of Arts degree is offered in Social Science and in all departments except Economics and Psychology.

The primary function of the university and of the College of Business and Behavioral Sciences is instruction. Every effort is made to provide a diversity of educational experiences tuned to the needs of students. In addition to regular classroom activities, many students receive individualized instruction through field experiences, internship assignments, and individual study projects. The college offers or participates in a great variety of special programs and activities dedicated to enriching and deepening the educational experience of its students. Of note are departmental colloquia at which distinguished scholars and citizens speak, special seminars, and programs like the Social Science Seminar in Europe, the Model United Nations, and the Latin American Studies Program.

Research and service are an integral part of the mission of the college. The instructional responsibilities of the college are served when faculty and students participate in research, and when they work on service projects which take the disciplines of Business and Behavioral Sciences off the campus to confront man's social and economic problems. The Center for Business and Behavioral Research is an agency within the college which performs both research and service functions.

Vocational opportunities for graduates exist in a broad spectrum of positions in education, public and social service, commerce, and industry. Students interested in detailed information on careers may contact the college office or that of any department.

Business

Reuschling, Head. J. Blanford, H. Brewer, Chiattello, Dailey, Denton, S. Diamond, English, Evenson, Gardner, Halverson, Hollman, Huemoeller, Jedlicka, Kaplan, Keefe, Lebeda, Massmann, Norem, M. Rod, Schempf, Waller.

Business Core (required on all business majors): 15:010; 15:020; 15:040; 15:050; 15:070; 15:151; 12:030; 12:031; 13:040; 92:053;
92:054
BUSINESS MANAGEMENT MAJOR
Required: Business Core
emphases listed below
1) Production Management: 15:105; 15:182; 15:161; 15:167; 12:131; 15:170(Sec. 2).
 Financial Management: 15:152; 15:182; 92:113; 15:170(Sec. 5). Organizational Management: 15:181; 15:184; 15:187; 15:188; 15:170(Sec. 2).
ACCOUNTING MAJOR
Required: Business Core
and may include 15:167 hours
Students who qualify to sit for the CPA Examination in Iowa must include 12:131; 12:132; and 12:134. In addition, the student should substitute the following sequence in place of 15:040 in the Business Core: 15:101, 15:102, and 15:104.
MARKETING MAJOR
Required: Business Core
52 hours
OFFICE ADMINISTRATION MAJOR
Required: Business Core
52 hours
* Students with strong backgrounds in these subjects are encouraged to earn credit or releases by examination.

BUSINESS MINOR

Required: 12:030; 13:040; 15:050	9 hours
Electives: at least 9 hours from one of the following	
areas - accounting, management, or marketing	9 hours
	100.1

18 hours

GENERAL BUSINESS

15:010. Development and Structure of American Industry - 3 hrs.

The development of American business in a dynamic socio-economic system.

15:020. Quantitative Methods for Business -4 hrs.

Quantitative aspects of business-problem solving and decision making. Covers linear systems, matrix algebra, linear programming. Prerequisite: 80:020 or equivalent.

15:040. Social Forces and the Law-3 hrs.

Non-technical approach to the law and society with emphasis in the area of business law; how our society is governed; social forces that make the law; law in operation.

15:050. Fundamentals of Management -3 hrs.

Basic principles of management with emphasis on the behavioral approach to the scientific management of organization.

15:070. Business Statistics - 3 hrs.

A functional approach to descriptive inductive uses of statistics as tools of business management.

15:101(g). Business Law 1-2 hrs.

Contracts and sales. Prerequisite: 15:040.

15:102(g). Business Law II-2 hrs.

Partnerships, corporations, and commercial paper. Prerequisite: 15:040.

15:104(g). C.P.A. Law Review-3 hrs.

Intensive study of Business Law to prepare accounting students for the law part of the C.P.A. examination. Prerequisites: 15:101; 15:102; qualified to sit for C.P.A. examination.

15:105(g). Labor Law-3 hrs.

Analysis of the interrelationships between the development of labor organizations and the techniques used to further their interests; the actions and decisions of the executive, legislative, and judicial branches of government, labor management, problems, and the economic and social consequences.

15:107(g). Arbitration and Collective Bargaining - 3 hrs.

Collective bargaining; strategies and tactics; issues in collective bargaining; arbitration provisions of the Taft-Hartley Act; the arbitration proceeding. Case problems. Prerequisite: 15:105.

15:151(g). Corporation Finance-3 hrs.

Study of role of finance function within the corporate enterprise. Prerequisites: 12:30: 12:31.

15:152(g). Business Investments - 3 hrs.

A study of investment policy. Measuring investment return; factors of choice in investments; types of industrial and non-industrial investments. Prerequisite: 15:151.

15:160(g). Organization Theory - 3 hrs.

Emphasis on the formal organization as an open socio-technical system; relations of the organization to larger environmental systems; methods and patterns in organizational analysis. Prerequisite: 15:050.

15:161(g). Production Management

Basic principles of management in the production phase of business; mechanization, the division of labor, specialization, standardization. Work flow and plant layout, machines and automation, methods of control.

15:162(g). Risk Management and Insurance - 3 hrs.

Fundamentals of risk and of insurance as they apply to financial management.

15:163(g). Management Decision Making - 3 hrs.

The nature of organizational decisions; problem identification and structuring; methods of decision making on the certainty-uncertainty continuum. Prerequisites: 15:160 and 15:165.

15:165(g). Individual and the Organization — 3 hrs.

Concepts of the individual; the individual's relationship with his peer group; individual and group relationship with the total organization.

15:167(g). Basic Computer Concepts -3 hrs.

An introduction to the techniques and procedures of data processing. Analysis and study of date processing systems, including punch card equipment and electronic computers.

15:169(g). Business Internship - 2-8 hrs.

A full-time business internship extending for a minimum of eight weeks. The internship may be in (1) Accounting, (2) Management, (3) Marketing or (4) Secretarial, Prerequisite: departmental approval.

15:170(g). Problems - 1-3 hrs.

Credit determined at registration. Student will choose one of the following areas:

1. Accounting

2. Management

3. Marketing

4. Law

5. Finance

May be repeated with the concentration in different areas. Prerequisite: Consent of the head of the department.

15:181(g). Management Information Systems - 3 hrs.

Information systems analysis and design for communication techniques in the organization; analysis and design for management decision making and control.

15:182(g). Capital Budgeting - 3 hrs.

Economic analysis and financing of business capital project alternatives; measuring return on investment, evaluating risk, cost of capital, planning capital structure, appraising alternative investment opportunities when capital is rationed, leasing vs. ownership, and tax consideration.

15:184(g). Technology, Environment, and Organization — 3 hrs.

A systems analysis of the technology employed by an organization, the socio-economic environment faced by the organization, and how these two variables influence organizational structure, behavior, and performance.

15:187(g). Organizational Behavior - 3 hrs.

An extension and enlargement of the concepts presented in 15:165.

15:188(g). Planning and Policy Making -3 hrs.

Techniques of long and short-range planning, policy making, and control.

15:210. Legal Environment of Business Management – 3 hrs.

Investigates the judicial process, organization of the legal system, and the conceptual development of this system with substantive emphasis in the area of antitrust, trade regulation, and labor-management.

15:260. Administrative Theory -3 hrs.

Attention given to the history and development of management thought, new theories of management, and the operation of the complex organization as a goal-oriented institution.

15:270. Business Ethics - 3 hrs.

The role of business management in meeting its responsibilities to the individual and to society, issues, practices and professional standards.

15:282. Seminar in Business-1-3 hrs.

May be repeated for a total of 12 hours credit. Prerequisite: department approval. Sections: 1. Accounting, 2. Marketing, 3. Management, 4. Finance, 5. Office Administration.

15:285. Individual Readings - 1-2 hrs.

Directed readings and reports. May be repeated for a maximum of 4 hours.

15:292. Business Research - 3 hrs.

The nature, design, tools and completion of research projects.

15:297. Practicum.

15:299. Research.

ACCOUNTING

12:030. Principles of Accounting I-3 hrs.

Preparation of financial statements, effects of merchandising operations, accounting procedures, voucher system, payroll and tax accounting.

12:031. Principles of Accounting II - 3 hrs. Continuation of 12:30. Partnership, corporation, departmental, branch, and manufacturing accounting. Statement analysis and supplementary statements.

12:129. Intermediate Accounting I−3 hrs. Prerequisite: 12:31.

12:130. Intermediate Accounting II-3 hrs. Balance sheet analysis; supplementary statements. Prerequisite: 12:129.

12:131(g). Cost Accounting —4 hrs. Emphasis on job-order costs. Prerequisite: 12:31.

12:132(g). Income Tax-3 hrs.

Accounting problems relating to individual and corporation income taxes (state and federal).

12:134(g). Auditing - 3 hrs.

Procedures used to determine accuracy and reliability of financial records. Prerequisite: 12:130.

12:135(g). Advanced Accounting -4 hrs.

Analysis of working capital and operation; supplementary statements (funds, cash-flow from incomplete records); quasi-reorganizations; income tax allocation; partnership dissolutions; consolidations. Prerequisite: 12:130.

12:138(g). Auditing Practice-2 hrs.

Preparation of auditing work papers, writing of formal audit reports, EDP audits, study of official auditing bulletins and case studies, discussion of current topics. Prerequisite or corequisite: 12:134.

12:140(g). Accounting Systems - 3 hrs.

Analysis of modern accounting systems with emphasis on system building; application of data processing methods to system development with special attention to the use of electrical and electronic devices. Prerequisite: 12:130.

MARKETING

13:040. Principles of Marketing - 3 hrs.

Facets in the distribution of goods and services.

13:041. Consumer Behavior – 3 hrs.

Study of recent findings of psychologists, sociologists, anthropologists, and marketers in relationship to consumer behavior. Prerequisite: 13:040.

13:141(g). Retailing and Wholesaling -4 hrs.

Behavorial trends of U.S.A. retailing. Survey of organization, buying, selling, and supporting activities of retail, service, and wholesale establishments.

13:142(g). Advertising -3 hrs.

Functions of advertising display and visual merchandising, techniques and media of advertising, and sales promotion techniques.

13:143(g). Retail Merchandising - 3 hrs.

13:145(g). Retail Advertising and Display -3 hrs.

Advertising problems of both small and large stores including campaigns, media, layout, display techniques, and public relations.

13:147(g). Advertising Management - 3 hrs.

Decisions advertising executives make. Emphasis on selection of media, establishing, and operating advertising budgets, and evaluating advertising effectiveness.

12:142(g). Advanced Income Tax - 3 hrs.

Advanced phases of income taxation as related to partnerships and corporations and estate and gift taxes; problems which require investigation of concepts and theories of taxable income.

12:148(g). C.P.A. Review - 3 hrs.

Designed to aid candidates in developing approaches to solutions of problems and answers to questions in the CPA examination. Prerequisite: Qualified to sit for CPA examination.

12:149(g). Problems in Computer Accounting -4 hrs.

A project course in which the student analyzes business situations to determine accounting data needed, writes computer programs, and presents resulting data in the form of management reports. Prerequisites: 15:167 and either 12:131 or 15:170 or equivalent.

13:150(g). Marketing Management - 3 hrs.

A comprehensive study of problems encountered by marketing executives in modern business. Prerequisite: 6 hours of credit in marketing.

13:151(g). Marketing Research-3 hrs.

Procedures used in defining a marketing problem and carrying out the research necessary for its proper solution. Prerequisite: 6 hours of credit in marketing.

13:153(g). Sales Management - 3 hrs.

The management problems relating to recruiting, training, and control of sales personnel. Methods of assigning sales territories and determining quotas.

13:155(g). Industrial Marketing - 3 hrs.

Marketing problems of manufacturers of industrial goods.

13:157(g). International Marketing - 3 hrs.

Marketing practices and trends in businesses serving foreign markets.

13:162(g). Copywriting and Layout - 3 hrs.
A problem approach to the writing of advertising copy (printed, audio, and visual),

13:164(g). Transportation and Traffic Management — 3 hrs.

storyboards, layouts, and campaigns.

A study of the five major transportation facilities (rail, motor, water, air, and pipe), and regulatory practices in each facility area.

Business Education and Office Administration

E. Weber, Head. O. Anderson, M. Blanford, Ditzenberger, *R. Hahn, Handorf, *G. Hansen, Humphrey, Klink, Reece, J. Reed, Shontz, Timpany, G. Weber.

*on leave

BUSINESS EDUCATION MAJOR - TEACHING

Student may elect to take credit in any course by examination.

Emphases: A student must complete one of the following special emphasis requirements in addition to the core requirement.

- A. General Business: Required: 12:031; 13:040; 13:041; 14:051; 15:101; 15:102. Electives totaling at least 15 hours chosen from courses in Business and Business Education; recommended are: 14:012; 14:053; 14:054; 14:151; 15:167; 14:113; 13:145; 13:141; and others with approval of adviser.
- B. Accounting: Required: 12:031; 12:129; 12:130; 14:012; 12 semester hours from other courses in accounting or 15:167.
 Electives totaling 7 hours from business law, marketing, management, finance, statistics, or 14:051 (Typewriting III—for those who wish departmental approval to teach typewriting).
 Students who wish to sit for the C.P.A. examination in Iowa must include: 12:131,
 - 12:132, and 12:134 and must have credit in four of the following six areas: economics, management, finance, law, marketing, statistics.
- C. Secretarial: Required: 14:012; 14:051; 14:156; 14:054; 14:151; 14:152. Electives chosen from 14:053; 14:117; 14:154; 14:055; 15:167; 12:031; 17:113; 17:114; 17:118; 17:119; 17:190 (micro-teaching); 17:140; 14:113.
- D. Distributive Education Teacher-Coordinator: (provides additional certification as teacher-coordinator)

Required: 13:040; 13:041; 13:141; 13:145; 17:113; 17:114; 17:118; 17:119; 17:190 (Distribution I, Distribution II, and micro-teaching).

Students must elect 6 hours from the following: 13:142; 13:143; 13:150; 13:151; 13:162.

3000 hours of approved work experience in a distributive occupation.
(1000 hours is earned for each semester of Coordinated Occupational Experience, 17:111, to a maximum of 2000 hours.)

Student teaching in distributive education or an approved substitute.

All majors with emphasis in distributive education are encouraged to participate in co-curricular activities planned to enhance student's knowledge of the values and procedures in the vocational club movement. This would include D.E.C.A. state conferences and other participative activities of the Distributive Education Club at UNI.

E. Office Education Teacher-Coordinator: (provides additional certification as teacher-coordinator)

Required: 14:051; 14:054; 14:151; 14:152; 14:156; 14:012; 17:113; 17:114;

17:119; 17:190 (typewriting, shorthand, and micro-teaching).

(Students released from any business education requirements should elect courses from the following: 12:031; 14:154; 15:167; 17:111; 14:117; 14:053; 14:055; 17:118; 14:113; 17:140.)

3000 hours of approved work experience in an office occupation. (1000 hours is earned for each semester of Coordinated Occupational Experience, 17:111, to a maximum of 2000 hours.)

Student teaching or an acceptable substitute in Office Education.

All majors with emphasis in office education are encouraged to participate in cocurricular activities planned to enhance student's knowledge of the values and procedures in the vocational club movement. This would include O.E. state conferences and other participative activities of the O.E. Club at UNI.

BUSINESS EDUCATION MINOR - Teaching

BUSINESS EDUCATION SUBJECT FIELD-Junior High School Major

Required:12:030;	14:051; 15:010 or 15:1	42; 14:012; 15:101;	17:190 15 hours
Electives			

30 hours

It is recommended that electives be chosen from the following: 12:031; 12:132; 13:040; 14:151; 15:102; 15:116; 15:160.

It is recommended that consideration be given to the completion of a major in business education on which all of the above courses may be counted.

BUSINESS EDUCATION

17:111(g). Coordinated Occupational Experience - 2 hrs.

Job analysis and job training techniques, principles of supervision and human relations principles applied to the student's own jobs. May be repeated, once in fall and once in spring, for a maximum of 4 hours. Corequisite: Employment in an approved occupation.

17:113(g). Organization and Administration of Vocational Programs – 4 hrs.

Objectives, operation, and coordination of vocational programs; emphasis on office and distributive occupations.

17:114(g). Philosophy of Career Education -2 hrs.

Historical development and status of vocational education. Emphasis on principles, practices, and organization of vocational programs.

17:118(g). Continuing Business Education Programs - 3 hrs.

Business teacher's role in continuing business occupations programs. Methods and materials appropriate for adult learners.

17:119(g). Individual Instruction Techniques -2 hrs.

Learning systems and techniques for business occupations instruction.

17:140(g). Post-Secondary Business Education Programs - 3 hrs.

Planning, organization, and administration of post-secondary business education programs in community college or area vocational school settings. Teaching techniques and resources appropriate for such programs.

17:170(g). Problems in Business Education -1-3 hrs.

Credit determined at registration. Offered in areas indicted in the Schedule of Classes. May be repeated for a total of 6 hours. Designed for 9 weeks or one semester individualized study program. Prerequisite: consent of instructor.

17:180. Principles of Business Education -2 hrs.

Open to majors and minors in Business Education: others should consult the head of this department.

17:190. Methods - 1 hr.

Student may earn credit in more than one area as indicated in the Schedule of Classes. Not over 3 hours may be used as credit on major in Business Education.

17:193(g). Individual Instruction Laboratory -2 hrs.

Supervised practice in designing individualized learning experiences for students with varied occupational objectives. Prerequisite: 17:119 or consent of instructor.

17:203. Foundations in Business Education -2 hrs.

Trends objectives, curicula, principles, and philosophy of business education.

17:207. Curriculum Development in Business Education - 2 hrs.

History, present status, philosophy, trends, and factors of curriculum development in business education for junior high school, senior high school, and post-high school curriculums, including vocational and non-vocational programs.

17:245. Current Topics in Business Education -2 hrs.

May be offerd in different areas as indicated in the Schedule of Classes. Prerequisite: Teaching experience in area selected or consent of instructor.

17:280. Seminar in Business Education —2 hrs.

May be repeated for a maximum of 6 hours.

17:282. Comparative Shorthand Theory -2 hrs.

Principles underlying shorthand systems as related to learning and teaching. Prerequisite: instructor's approval.

17:284. Vocational Interdisciplinary Seminar – 2 hrs.

Intended primarily for those who teach or administer vocational programs, particularly at the post-secondary level. Explores correlation and cooperation of efforts among the vocational disciplines. May be repeated for a maximum of four hours of credit.

17:285. Individual Readings - 1-2 hrs.

Directed readings and reports. May be repeated for a maximum of 4 hours. Prerequisite: consent of department head.

- 17:290. Improvement of Basic Business Instruction - 2 hrs.
- 17:291. Improvement of Bookkeeping Instruction 2 hrs.
- 17:292. Improvement of Typewriting Instruction 2 hrs.
- 17:293. Improvement of Shorthand Instruction - 2 hrs.

17:297. Practicum-2 hrs.

Prerequisite: consent of department head.

17:299. Research - 1-3 hrs.

Prerequisite: consent of department head.

SECRETARIAL

14:012. Business Machines I-2 hrs.

Introduction to the operation and application of business machines including data processing techniques using manual, electro-mechanical, and electronic machines. Recommended: ability to type. Discussion, 2 periods; lab., 3 periods arranged.

14:047. Typewriting I-2 hrs.

Beginning course for students with little or no previous typewriting instruction. Class, 2 periods; lab., 3 periods arranged.

14:050. Typewriting II-2 hrs.

Basic course, satisfies departmental requirements. Techniques, speed, and control; office-type problems. Class, 2 periods; lab., 3 periods arranged. Prerequisite: 14:047 or one semester of high school typewriting or equivalent.

14:051. Typewriting III-2 hrs.

Development of typing skills in specialized fields such as legal, medical, technical, government, and military; special work on executive-type problems. Required for approval to teach typewriting. Class, 2 periods; lab., 3 periods arranged. Prerequisite: 14:050 or one year of high school typewriting or equivalent.

14:053. Beginning Shorthand-4 hrs.

For students with no previous training in shorthand. Corequisite: Registration in a typewriting course unless already a good typist. Daily. 14:054. Advanced Shorthand-4 hrs.

To build skill in taking dictation and to perfect knowledge of shorthand theory. Required for state certification as a shorthand teacher. 14:152 and 14:156 may be substituted for certification only if officially excused from 14:054 on the basis of performance. Students should take dictation at a minimum rate of 60 words a minute at the beginning of the course. Prerequisite: 14:053 or one year of high school shorthand. Daily.

14:055. Forkner Shorthand-4 hrs.

A complete course in a combination alphabetsymbol shorthand for either vocational or personal use.

14:113(g). Office Communications - 3 hrs.

Communication theory as basis for understanding of the principles of oral and written communication. Emphasis on administration of the communications function.

14:117(g). Office Administration - 3 hrs.

Fundamentals of office organization and administration, office equipment, supplies, layout, cost control, personnel problems, job analysis, and job specifications. 14:151(g). Business Machines II-3 hrs.

Designed for the preparation of office workers and business teachers. Includes operation and supervision of duplicating, transcribing, and dictating machines. Prerequisite: 14:051.

14:152(g). Executive Secretarial Procedures - 3 hrs.

Secretarial duties, responsibilities, and procedures. Finishing course for those planning careers in teaching or in secretarial work. Includes practical application of secretarial skills and knowledges. Prerequisite: 14:51 or equivalent.

14:154(g). Touch Shorthand-3 hrs.

A beginning course for students wishing to learn machine shorthand. Basic theory; dictation speeds up to 80 words a minute or better. A complete course in shorthand. Corequisite: good typewriting ability or enrollment in Typewriting II or III.

14:156(g). Transcription - 3 hrs.

Develops greater competence in taking dictation, but places the major emphasis on the development of a high-level sensitivity to transcription techniques and procedures for the executive secretarial level. Prerequisite: 14:51 and 14:54.

Economics

B.W. Anderson, Head. Abraham, Cummings, Gillette, Mukhoti, Pratt, *Strein, Tulasiewicz.

ECONOMICS MAJOR-TEACHING

Required: 90:190; 92:053; 92:054; 92:139; 92:141	hours
Electives in economics, which may include 6 hours from 80:045 or 80:060; 80:172; 96:134; 97:183	hours
33	3 hours

A minor is required.

ECONOMICS MAJOR

Required: 92:053; 92:054; 92:139; 92:141	12 hours
Electives in economics, which may include 6 hours from 80:045 or 80:060; 80:172; 96:134; 97:183	21 hours
	33 hours

No minor is required.

^{*}on leave

ECONOMICS MINOR-Teaching and Liberal Arts

Note: 92:053 and 92:054 are prerequisites for all 100(g) economics courses.

92:024. Economics for General Education -3 hrs.

No credit for student who has credit in 90:024, 92:053, or 92:054. May not be used for credit on major or minor.

92:053. Principles of Macro-Economics -3 hrs.

Determining and measuring the level of national product; monetary and fiscal policies to stabilize the economy. Sophomore standing recommended.

92:054. Principles of Micro-Economics -3 hrs.

Determination of price by demand and supply; distribution of income. Prerequisite: 92:053.

92:113(g). Money and Banking - 3 hrs. Money, commercial banking, the Federal Reserve System and monetary policy.

92:116(g). Labor Economics – 3 hrs. Labor economics, union-management relationships, and public policy toward employer-employee relationships.

92:117(g). Public Finance – 3 hrs.

Taxation and government expenditures; fiscal policy.

92:135(g). The Organization of American Industry - 3 hrs.

Structure, conduct and performance of firms, industries and market. Policies to maintain competition.

92:136(g). International Economics -3 hrs.

Comparative advantage, exchange rates, balance of payments, and trade policies.

92:137(g). Comparative Economic Systems - 3 hrs.

Examination of the capitalistic and socialistic economies through the works of their defenders and critics.

92:139(g). Intermediate Micro-Economic Theory - 3 hrs.

Intermediate level micro-economics. The theory of consumer choice, of the business firm and of resource allocation.

92:141(g). Intermediate Macro-Economic Theory - 3 hrs.

Intermediate level macro-economics. The determinants of aggregate demand, national product and employment; macro-economic objectives and policies.

92:143(g). Economic Development -3 hrs.

Theories of underdevelopment; approaches and proposals for development; factors influencing development.

92:170(g). History of Economic Thought -3 hrs.

Development of economic theory from the early Greeks to the present time.

92:220. Economic Growth - 3 hrs.

Comparison and explanation of growth rates of advanced economics. Policies to increase growth. Benefits and costs of growth.

92:224. Economic Fluctuations - 3 hrs.

Nature, sources and treatment of economic fluctuations. Theories of economic fluctuation and policies to reduce economic fluctuations.

92:232. Soviet Economy - 3 hrs.

Soviet economic institutions; operation and performance of the Soviet economic system.

92:234. International Finance - 3 hrs.

International financial theories, institutions and policies; analysis of the balance of payments, capital flows, disequilibrium and international monetary adjustments.

92:280. Seminar in Economics - 3 hrs.

92:285. Individual Readings-1-3 hrs.

92:299. Research.

Geography

Nijim, Head. Austin, *Chung, R. Clark, L. Goodman, Lu, M. Miller, Terrell.

*on leave

GEOGRAPHY MAJOR-TEACHING

Required: 97:101; 90:190	urs
and from 97:170 to 97:193	
28 ho	

Minor required, preferably in another social science area.

GEOGRAPHY MAJOR

Required: 97:101	ours
Geography, systematic courses numbered 97:101 to 97:139 and	
from 97:170 to 97:187	ours
Electives in geography16 ho	ours
25 hc	ours

Required: either a minor, or a program of electives approved by the geography department.

GEOGRAPHY MINOR - Teaching and Liberal Arts

Required: 97:025 3 hours
Electives in geography (at least 6 hours must be in systematic
courses: those numbered from 97:101 to 97:139 and from
97:170 to 97:193)

18 hours

97:010. Human Geography -2 hrs.

Interaction between man and his environment. Spatial patterns of: population distribution, population characteristics, population movement, livelihood, economics.

97:025. World Geography - 3 hrs.

97:031. Elements of Physical Geography -4 hrs.

Major elements of the natural environment: weather and climate, oceans, landforms, vegetation, and soils; analysis of relationships and of patterns. Lecture, 3 hours; lab., 2 hours.

97:050. Communicating Through Maps

Use and evaluation of maps; understanding and reading of maps; map symbols and design studied in terms of cultural and physical phenomena.

97:101. Cartography, Design and Production - 3 hrs.

Cartographic drawing and map symbolism. Use and evaluation of maps. Field mapping and airphoto interpretation. Lecture, 2 periods; lab., 2 periods. Prerequisite: 97:010 or 97:025 or 97:031, or consent of instructor.

97:105(g). Advanced Cartography - 3 hrs. Elements of map reproduction, map design, representation of landforms and the use of color in maps, Map projections. Mapping and charting quantitative relationships. Lecture, 2 hours; lab., 2 hours. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:107(g). Use and Interpretation of

Aerial Photographs – 3 hrs.
Introduction to the basic principles of photogrammetry and air photo interpretation. Emphasis on interpretation and mapping of surface features. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:109(g). Quantitative Methods in Geography - 3 hrs.

Application of selective mathematical models and statistical techniques (descriptive and inferential) to the analysis of areal problems. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:110. Climatology - 3 hrs.

The elements and controls of climate and their world distribution; climatic classification and distribution of climatic types. Prerequisite: 97:010 or 97:025 or 97:031, or consent of instructor.

97:112(g). Landform Analysis - 3 hrs.

Landforms — their development, world distribution of major types, and association with other natural phenomena. Major characteristics of the oceans. Emphasis on descriptive analysis. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:130(g). Cultural Geography - 3 hrs.

A systematic study of cultural geography, with emphasis on the cultural elements of the land-scape, their processes, area association and differentiation. Prerequisite: either 97:010 or 97:025 or, 97:031 or consent of instructor.

97:132(g). Urban Geography - 3 hrs.

The association of the activities in urban areas as expressed in characteristic associations of land use and occupance features. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:140(g). Historical Geography of the United States - 3 hrs.

Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:143(g). Geography of Anglo America -3 hrs.

Major regions of the United States and Canada. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:145(g). Geography of Middle America -2 hrs.

Mexico, Central America, and the West Indies. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:147(g). Geography of South America -3 hrs.

Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:149(g). Geography of Europe – 3 hrs.
Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:163(g). Geography of the Middle East -3 hrs.

Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:165(g). Geography of East and South Asia - 3 hrs.

Survey of Asia with detailed analysis of Japan. China, Indonesia, India, and Pakistan. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:167(g). Africa South of the Sahara -3 hrs.

Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:169(g). Geography of the Soviet Union -2 hrs.

Emphasis on interregional and international relations. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:170(g). Political Geography – 3 hrs.
Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor. Junior standing recommended.

97:182(g). Conservation of Natural Resources - 3 hrs.

Natural resources of the United States and their exploitation. Problems in their conservation. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:183(g). Economic Geography - 3 hrs.

Analysis of the location and spatial structure of economic activities in major world regions. May provide credit in Economics. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:185(g). Population Geography - 3 hrs. Regional variations in population characteristics with emphasis on the world's modernizing areas. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:189(g). Reading in Geography -1-3 hrs.

Prerequisite: approval of the head of the department. A total of 3 hours can be applied on the geography major.

97:193(g). The Nature and Scope of Geography - 3 hrs.

Analysis of the various currents of thought concerning the nature, scope, and methodology of geography. Strongly recommended for those declaring an emphasis or major in geography. Prerequisite: either 97:010 or 97:025 or 97:031 or consent of instructor.

97:203. Field Methods - 3 hrs.

A survey of geographical field procedures and problems, including measurement techniques, observations, and mapping based on field trips. Prerequisite: Departmental approval. Lab., 2 three-hour sessions.

97:210. Theoretical Geography - 3 hrs. The philosophy and major theories of modern

geographical science. Emphasis on quantitative analysis, model building, and location theory. Prerequisite: 97:193 and consent of instructor.

97:280. Seminar - 3 hrs.

Offered in specially designated areas as indicated in Schedule of Classes. If 6 hours of seminar are taken in the M.A. program, 3 hours must be in systematic geography.

97:285. Readings in Geography -1-3 hrs.
Prerequisite: Approval of the head of the department.

97:288. Research and Bibliography
-2 hrs.

Introduction to methods of geographical analysis. Scholarly use of source materials and effective presentation of research findings.

97:299. Research

History

Whitnah, Head. *E. Brown, Cheng, Eiklor, Howard, H. Jones, Kamerick, King, Lang, C. McIntosh, G. Riley McIntosh, *Newell, Pendergraft, Poage, Quirk, Ryan, Sandstrom, Shepardson, Sunseri, R. Talbott, H. Thompson, Wohl.

*on leave

Note:

Students other than majors or minors in history or majors in economics, geography, political science, sociology-anthropology, or social science must take fifteen (15) semester hours each in Unites States history and European (world) history for approval to teach in these fields.

Note:

Neither 96:070 nor 96:123 may be counted toward history majors or minors.

HISTORY MAJOR - TEACHING

Required: 68:021; 68:022	8 hours
Required: 90:190	3 hours
Required: 96:014, 96:015; 96:193	8 hours
Electives in history: a minimum of 22 hours (to include at	
least 9 hours of European history and 3 hours of	
non-Western history)	22 hours
	41 hours

Students satisfactorily completing this major will be approved to teach in United States history or in world history; or in both, if at least 12 hours are taken in each.

The history major may consider a minor in at least one other social science discipline.

Courses used to meet the General Education requirements or requirements of other majors or minors may not be used to meet requirements of this major.

Reading proficiency in a foreign language is strongly recommended, particularly for students planning to do graduate work.

HISTORY MAJOR

Required: 68:021; 68:022 8 hours
Required 96:014; 96:015; 96:154; 96:155; 96:193
Electives in history
Department of History 9 hours
49 hours

49 nours

Courses used to meet General Education or other degree requirements may not be used to meet requirements of this major.

Reading proficiency in a foreign language is strongly recommended, particularly for those planning to do graduate work.

HISTORY MINOR-Teaching

Required: 96:014; 96:015; 96:154; 96:155	hours
Required: 90:190 (unless already taken on major)	hours
Electives: in history 9	hours
21-24	hours

Students whose emphasis is American history must include one course in Latin American history. Students whose emphasis is world history must include one course in one of the following: Middle Ages, Ancient, Near East, or non-Western history.

Students satisfactorily completing this minor will be certified to teach in American history or in world history, or in both, if at least 12 hours are taken in each.

HISTORY MINOR

Electives in history excluding courses used to meet general education requirements.... 96:015 and 96:155 are strongly recommended.

96:014. United States History to 1877 -3 hrs.

96:015. United States History since 1877 -3 hrs.

96:070. Latin American Civilization

Historical, political, social, and cultural elements that form the civilization of Latin America. No credit if student has credit in 78:140. May not be taken for credit on history majors or minors.

96:101(g). History of Ancient Greece-3 hrs.

96:103(g). History of Ancient Rome-3 hrs.

96:107(g). War and Society in the Modern World -3 hrs.

An historical study of the causes and conduct of war and the impact of war on society since the 17th century with emphasis on the 19th and 20th centuries.

96:116(g). Recent United States History -3 hrs.

A history of the American people since 1929 with emphasis on domestic affairs.

96:122(g). The Black in United States History -3 hrs.

From the African background to the present.

96:123. Problems in American Civilization

Problems facing the United States in its world relationships. May not be taken for credit on history majors or minors.

96:124(g). The City in United States History -3 hrs.

Urbanization in America from the early 17th century to the present.

96:130(g). History of Iowa-2 hrs.

96:134(g). United States Economic History -3 hrs.

Credit may be counted as economics.

96:136(g). American Colonial History -3 hrs.

96:138(g). United States Foreign Relations -3 hrs.

Three hours of American history should precede this course.

96:140(g). History of the West-3 hrs.

The westward-moving frontier and its influence. Three hours of American history should precede this course.

96:142(g). United States Constitutional History - 3 hrs.

Three hours of American history should precede this course.

96:143(g). Dissent In United States History - 3 hrs.

A systematic study of dissent in general, and of specific protest movements, with emphasis on post-Civil War period, including both radical and reactionary movements — Women's rights and Women's Liberation, Old Left and New Left, Ku Klux Klan, Radical Right, Socialism and Communism.

96:144(g). History of American Thought -3 hrs.

Junior standing required.

96:146(g). History of Women in the United States -3 hrs.

Survey of the social, cultural, and economic roles of women in the United States from founding to the present, with some comparative analysis of women's roles in other areas of the world.

96:151(g). The Ancient Near East - 3 hrs.
The artistic, literary, political, religious, and social accomplishments of Near Eastern people of ancient times.

96:152(g). Medieval Civilization - 3 hrs. From the Fall of Rome to the 15th century.

96:153(g). The Renaissance and Reformation - 3 hrs.

The intellectual, artistic, economic, and political developments of the Italian and Northern Renaissance, culminating in an examination of the 16th century Reformation.

96:154. Modern Europe to 1815-3 hrs. France, Spain, England, Prussia, Russia, Austria, the Netherlands, and the Italian States to 1815.

96:155. Modern Europe since 1815-3 hrs. Continuation of 96:154.

96:157(g). European Diplomacy since 1870
-3 hrs.

Modern European and global diplomacy with emphasis on the ideological factors underlying relations among the various states and the methods of the men who pursued these.

96:158(g). Age of Absolutism-3 hrs. History of the emerging nations of Europe with emphasis upon the age of absolutism and Louis XIV.

96:160(g). Twentieth Century Europe
-3 hrs.

Seeks the reasons for an age of conflict; political philosophies and personalities of the period.

96:162(g). European Thought Since the Enlightenment - 3 hrs.

Selected ideas and men in the 19th and 20th centuries. Prerequisite: junior standing.

96:164(g). English History to 1688-3 hrs.

96:165(g). English History since 1688
-3 hrs.

96:168(g). European Imperialism—3 hrs.
Motivations, institutions, and policies of
European expansionism in Asia, Africa, and
Latin America.

96:169(g). History of Imperial Russia -3 hrs.

96:170(g). History of Soviet Russia - 3 hrs.

The political, social, and economic history of Russia and its world relationships with emphasis on the Near East.

96:171(g). History of Germany to 1870 -3 hrs.

Social, political, and intellectual history of Germany, with emphasis on 16th, 17th, and 18th centuries; 19th century to 1871.

96:172(g). History of Germany since 1871 -3 hrs.

Social, political, and intellectual history of Germany with emphasis on the 19th and 20th centuries.

96:174(g). History of France — 3 hrs. Surveys the cultural, economic and political history of France with emphasis on the period 1760 to the present.

96:177(g). History of Mexico and the Caribbean Area - 3 hrs.

Mexico and the major Caribbean countries, the United States in the Caribbean, with emphasis on the 20th Century.

96:179(g). Colonial Latin American History - 3 hrs.

Discovery, exploration, conquest and development of Colonial Latin America.

96:180(g). Latin American History
- 3 hrs.

Modern development of the Latin American States and their relations to the United States.

96:181(g). Pre-Modern South Asia – 3 hrs.
The culture and institutions within the Indian subcontinent from antiquity through the Hindu and Islamic periods.

96:182(g). Modern South Asia - 3 hrs.

The influence of the West upon the cultures and institutions within the Indian sub-continent; response to changing conditions in the Anglo-Indian Empire; rise of movements leading to the establishment of India and Pakistan.

96:183(g). Pre-Modern Chinese History -3 hrs.

Cultural and institutional developments in China from earliest times to ca. 1800 A.D.

96:184(g). East Asia to 1850-3 hrs. Religion, philosophy, literature and the arts of East Asia.

96:185(g). East Asia since 1850-3 hrs. History of China, Japan, and Korea in modern times.

96:187(g). Modern Chinese History - 3 hrs. Political, social, economic, and intellectual developments in China with special emphasis on the period from the Revolution of 1911 to the present.

96:188(g). South Asian Intellectual History - 3 hrs.

Intellectual developments in the Indian subcontinent.

96:189. Readings in History - 3 hrs.

Student will choose one of the following areas at registration: (1) Ancient; (2) Medieval; (3) English; (4) French; (5) German; (6) Russian; (7) United States; (8) Latin American; or (9) Asian (India, China, Japan). Prerequisite: approval of head of department: for the field of U.S. history, 9 semester hours in U.S. history; for each of the other fields, 9 hours in history other than U.S., which must include 3 hours related to the particular field to be studied.

96:192. Junior-Senior Seminar - 3 hrs.

Seminar in history offered as indicated in Schedule of Classes. For history majors only. May be repeated for credit in different fields. Prerequisite: junior standing; must have 9 semester hours in history including 3 hours in field of the seminar.

96:193(g). Historians and Philosophy of History -2 hrs.

A study of the methodology and philosophy of history, illustrated by the history of historical writing. Prerequisite: junior standing.

96:194. Historiography and Methods -3 hrs.

Analysis of the nature of history, development of the historical profession, historiography, and the techniques of historical research and writing. Prerequisite: junior standing.

96:198. Independent Study.

96:238. United States Diplomacy - 3 hrs.
Combines the lecture and readings-seminar approach in studying concepts and policies involved in the nation's diplomacy since the late nineteenth century.

96:280. Seminar in History: Offered in specially designed areas as indicated in Schedule of Classes—3 hrs.

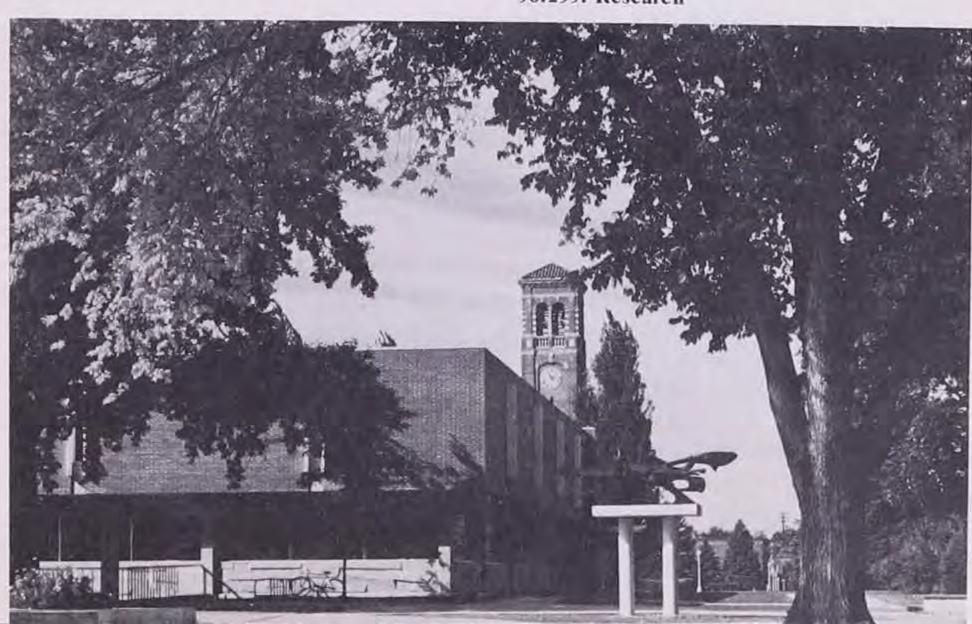
96:285. Individual Readings – 1-3 hrs.

May be repeated. Prerequisite: approval of department head.

96:290. Historical Methods – 2 hrs.
Investigation into the problems confronting the historian and an analysis of the methods and techniques employed by the historian.

96:292. Historical Analysis - 2 hrs.

96:299. Research



Home Economics

Sands, Acting Head. Adams, Alberg, P. Conklin, Franken, Freed, Holliday, McKinsey, Megivern, Morgan, Oslund, *Story, Wiksell.

*on leave

	on leave
- 1	VOCATIONAL HOME ECONOMICS MAJOR – TEACHING Required: 31:010; 31:015; 31:035; 31:037; 31:038; 31:060; 31:062; 31:065; 31:070; 31:110; 31:150; 31:182; 31:190
	No minor is required. Students who wish a notation on their papers that they are qualified to teach family life education should take both 31:051 Personal Relationships and 31:152 Family Relationships plus 98:105 The Family.
	HOME ECONOMICS MAJOR – TEACHING
	Required: 31:010; 31:015; 31:035; 31:037; 31:038; 31:060; 31:062; 31:065; 31:070; 31:110; 31:150; 31:190
	A minor (minimum of 15 hours) is required.
	HOME ECONOMICS MAJOR
	Required: 31:010; 31:035; 31:060; 31:065; 31:070; 31:051 or 31:152
	HOME ECONOMICS IN BUSINESS - Clothing and Textiles
	Required: 31:010; 31:015; 31:060; 31:065; 31:070; 31:110; 31:111; 31:112; 31:114; 31:051 or 31:152; 31:115; 31:195
	Recommended: 92:024 and 98:058. 45-51 hours

HOME ECONOMICS IN BUSINESS - Food and Nutrition
Required: 31:010; 31:035; 31:037; 31:038; 31:062; 31:070; 31:142; 31:145; 31:051 or 31:152; 31:177; 31:195
55-59 Hours
HOME ECONOMICS IN BUSINESS - Housing and Interior Design
Required: 31:010; 31:051; 31:060; 31:062; 31:065; 31:070; 31:110; 31:152; 31:163; 31:164; 31:165;
31:166; 31:167; 31:195
or 13:162
51-57 hours
HOME ECONOMICS MINOR
Required: 31:010; 31:030; 31:070; 31:065; 31:051 or 31:152
20 hours
FAMILY LIFE EDUCATION MINOR
*Required: 29:102; 31:051; 31:055; 31:152; 31:070
19 hours
*Other courses in guidance, home economics, psychology, and/or sociology and approved by the adviser must be substituted to make a total of at least 15 hours if courses listed are already counted on the student's major.
SOCIAL WORK MAJOR
This major is offered cooperatively by the departments of Home Economics and Sociology and Anthropology, with the emphasis in Home Economics under the jurisdiction of the Department of Home Economics.
Required: 45:181; 45:182; 45:183; 45:184
31 hours
Home Economics Emphasis:
Required: 31:010; 31:035; 31:037; 31:070; 31:163;
31:051 or 31:152; 31:055 or 31:150
(See page 105 for additional amphases of the second
(See page 105 for additional emphases under this major.)

31:005. Introduction to Home Economics -1 hr.

History, philosophy, and trends in home economics careers.

TEXTILES AND CLOTHING

31:010. Clothing Selection - 2 hrs.
Problems in clothing decisions. Discussion, 2 periods. Prerequisite: 31:060.

31:015. Clothing Construction - 2 hrs. Clothing, construction using commercial patterns. Discussion and lab., 4 periods.

31:110(g). Textiles – 3 hrs.

Effect on fiber content, construction, and finish on the serviceability and cost of fabrics. Identification tests. Discussion and lab., 3 periods. Recommended 86:063 be taken prior to 31:110.

31:111(g). Costume Design — 3 hrs. Flat pattern making. Prerequisite: 31:010 and 31:015. Discussion and lab., 4 periods.

31:112(g). Tailoring – 3 hrs.
Tailoring of suits and coats. Prerequisite: 31:010 and 31:015; 31:111 recommended.
Discussion and lab., 4 periods.

31:114(g). Socio-Psychological Aspects of
Textiles and Clothing—3 hrs.
Origins and functions of clothing and textiles
for the individual and society. Hypotheses
concerning clothing among cultures and implications for clothing consumption patterns
for individuals and families from personal

31:115(g). Patterns in Clothing Consumption - 3 hrs.

value systems.

Current theories of clothing consumption factors affecting family clothing expenditures; production and distribution of textile and clothing products for the consumer market. Principles of merchandising as applied to clothing and household textiles.

31:118(g). Problems-1-4 hrs. (1) Textiles, (2) Clothing

FOODS AND NUTRITION

31:030. Family Nutrition - 2 hrs. For non-majors. 2 periods.

31:035. Foods – 3 hrs.
Basic principles of food selection, preparation, and service. For majors and minors; also open as an elective.

31:037. Principles of Nutrition -2 hrs.
Relation of foods and nutrition to growth, development, and maintenance of health. A study of development of good nutritional habits for children and adults. 86:063 or equivalent and 31:035 should precede this course.

31:038. Meal Management – 3 hrs.

Problems involved in the planning, selection, preparation, and serving of meals. Emphasis on management of time, energy, and money. Prerequisite or corequisite: 31:037. No credit if have taken 31:036.

31:135. Food for the Family –4 hrs.

No credit for students with credit in 31:035, 31:036, or 31:142. For students who do not plan a major in home economics, 6 periods.

31:137(g). Advanced Nutrition—3 hrs.
Nutritive value of food—its relation to chemistry and the physiological aspects of digestion and metabolism, including each phase of the life cycle. Dietary planning and analysis for normal and abnormal nutrition. Discussion, 2 hrs., lab., 2 hrs. Prerequisites: 31:035, 31:037, 31:038, 86:061, 86:063; recommended, 2 hours of 86:150.

31:142(g). Experimental Foods - 3 hrs.
31:038 and 86:063, or equivalent, should precede this course. Functions of ingredients, factors affecting quality of food products, taste panels, food preference survey, and elements of food industry. Independent projects under controlled conditions. Discussion and lab., 4 periods.

31:143(g). Special Food Problems – 2 hrs.
Influence of food on cultural and social relationships of family, community, and world.
Racial and national food patterns. 4 periods.

31:145(g). Quantity Food Production and Purchasing –4 hrs.

Study of various aspects of and laboratory experience in quantity food production and purchasing. Prerequisite: 31:037.

31:148(g). Problems – 1-4 hrs. (1) Foods; (2) Nutrition.

FAMILY RELATIONSHIPS AND CHILD DEVELOPMENT

31:051. Personal Relationships - 2 hrs.
Understanding relationships in life situations; recognizing and accepting our problems as normal through use of group discussion.

31:055. Human Growth and Development -4 hrs.

Psychological, emotional, social, and physiological factors affecting the human developmental pattern from conception through old age. Prerequisite: 40:008.

31:057. Human Relationships and
Sexuality - 3 hrs.

Male and female identity; establishment of meaningful interpersonal relationships, and

Male and female identity; establishment of meaningful interpersonal relationships, and definition and role of human sexuality in human relationships. 31:150(g). Child and the Home-4 hrs.

The infant through pre-school age; experience with children through a play-school situation. 20:014 should precede this course. Discussion and lab. 6 periods.

31:152(g). Family Relationships - 2 hrs.

A functional course dealing with relationships within the family, emphasizing problems of courtship, marriage, and parenthood. Credit may also be counted as social science.

31:158(g). Problems – 1-4 hrs. Related to the Family.

31:250. Family Life and Sex Education Programs - 3 hrs.

Exploration of methods, content, and recommendations for teaching family life at K-12 levels. Survey of current literature, films, and research findings. Special problems in developing teaching plans and materials. Prerequisite: 31:152. Highly recommended to precede: 31:051, 31:055; 98:105.

HOUSING, HOME FURNISHINGS AND EQUIPMENT

31:060. Related Design - 3 hrs.

Study of and creative experiences with design and its application to everyday living. One lecture, 2 labs.

31:062. Household Equipment - 3 hrs.

Selection, use, and care of home appliances. Application of basic physical science principles. 2 lectures, 1 lab.

31:065. Housing and Home Furnishings -3 hrs.

Psychological, social, and physical factors affecting housing for families; beginning study of interior design. Discussion and lab., 5 periods. Prerequisite: 31:060.

31:160(g). Decorative Textiles - 3 hrs.

Textile printing, weaving, dyeing and other decorative processes. Discussion and lab., 4 periods. Prerequisite: 31:060.

31:163(g). Contemporary Housing Problems - 3 hrs.

Analysis of current U.S.A. housing needs, urban and rural housing problems, roles of private citizens, business and government, and remedial measures. Exploration of housing solutions and trends in other countries. Field trips and individual studies. Discussion, 2; lab., 1 hr. Prerequisite: 31:065 (may be waived for non-majors).

31:164(g). Professional Practice of Interior Design - 2 hrs.

Survey of field opportunities; future professional role, business ethics and responsibilities of the designer, client-designer and trade relationships.

31:165(g). Interior Design - 3 hrs.

Individual and group analysis of interior design problems to find various creative solutions to spatial treatment and meeting needs of people; further study of effects of lighting, window treatments, furniture, and accessories; experiences in abstract design and display. I lecture, 2 labs. Prerequisite: 31:065,

31:166(g). Presentation Techniques - 3 hrs.

Methods of perspective drawing and rendering of interiors in various media; emphasis on design problems related to commercial interiors. Develop portfolio. Prerequisite: 31:167. Prerequisite or corequisite: 31:165.

31:167(g). Heritage of Interior Design -4 hrs.

Study of period styles of housing and furnishings, ancient through modern, and their use in contemporary homes; current trends and designers. Prerequisite: 31:060; prerequisite or corequisite: 31:065(may be waived for non-majors).

31:168(g). Problems - 1-4 hrs.

Sec. 1. Housing

Sec. 2. Interior design.

Sec. 3. Household Equipment.

FAMILY ECONOMICS AND HOME MANAGEMENT

31:070. Home Management and Family Finance – 3 hrs.

Significance of the management process in achieving family goals. Consideration of management problems unique to the various stages in the family life cycle. No credit if have taken 31:170 or 31:176. Prerequisite: at least sophomore standing.

31:172. Home Management House-3 hrs.

Experience in applying the principles of management to family resources. Residence in the house integrates the understandings, knowledge, and skills gained from the various phases of home economics: 31:070 should precede this course. To accompany student teaching. Prerequisite: 31:038.

31:176(g). Family Economics-2 hrs.

31:177(g). Consumer Problems - 2 hrs.

The consumer's role in marketing. Regulations, standards, sources of information, and detailed study of a few products.

31:178(g). Problems - 1-4 hrs.

(1) Family economics, (2) home management, (3) home management laboratory experience. Experience in applying the principles of management to family resources. Supervised work in student's own home integrates the understanding, knowledge, and skills gained from the various phases of home economics. (Sec. 3 recommended for married students.) 31:070 should precede this course. No credit if have had 31:172.

HOME ECONOMICS EDUCATION

31:182(g). Adult Education - 2 hrs.

Survey of scope and need for adult education. Materials and techniques suited to group work with adults. Observation and participation in organizing and teaching an adult class. 31:190 should precede this course.

31:188(g). Problems - 1-4 hrs.

(1) Home Economics Education; (2) Curriculum Planning.

31:190. Methods in Home Economics—3 hrs. Credit also as a course in education for a major in Home Economics. Planning and organizing programs; teaching techniques; equipping and managing a department; selection and use of teaching aids and evaluation procedures.

31:195. Pre-Professional Experience—2-8 hrs. Supervised experience in approved work situation. Transfer students must complete one full semester in residence before being approved for pre-professional experience.

Sec. 1. Clothing and textiles. Sec. 2. Foods and nutrition.

Sec. 3. Housing and interior design; prerequisite: 31:166.

31:198. Independent Study.

31:280. Methods and Curriculum in Home Economics - 3 hrs.

Clarification and use of a rationale in curriculum development in home economics. Special problems in application.

31:281. Research in Home Economics -3 hrs.

Evaluation of current research in home economics and development of research proposals.

31:282. Supervision in Home Economics -2 hrs.

Objectives, techniques, and organization of supervised teaching in teacher-training and in city and area schools.

31:283. Techniques of Evaluation - 2 hrs. Construction and use of different types of instruments for evaluating educational outcomes. Guided study of the available measuring instruments in home economics.

31:284. Current Issues and Trends in Home Economics – 3 hrs.

Examination of current issues faced by home economists and current trends in subject matter, methods, and facilities.

31:297. Problems in Home Economics Education - 1-4 hrs.

Graduate seminars in various areas according to student's needs.

Political Science

Ross, Head. Alberts, Bonham, Krogmann, Metcalfe, N. Talbott, Vajpeyi, VanMetre, Winter.

POLITICAL SCIENCE MAJOR - Teaching

Required: 94:011; 94:014; 92:053; 98:058; 90:190	15 hours
Required: either 94:124 or 94:135 and either 94:131 or 94:134	5-7 hours
Required: 94:160 or 94:161 or 94:167	3 hours
Elevtives in political science	. 11-13 hours
	36 hours

A minor is required in one of the following: history, sociology, economics, or geography.

POLITICAL SCIENCE MAJOR

Required: 94:011; 94:014; 98:058; 92:053	2 hours
Required: 94:124 or 94:135 and 94:131 or 94:1345	-7 hours
Required: 94:160 or 94:161 or 94:167	
Electives in political science	
	40 hours

No minor required.

POLITICAL SCIENCE MINOR - Teaching and Liberal Arts

Required: 94:011; 94:014	rs
Required 94:124 or 94:135	re
Required: 94:160 or 94:161 or 94:167	re
Electives in political science	13
10u	IS

18 hours

94:010. Survey of American Government -2 hrs.

Survey of American government and the Constitution to meet teacher certification requirements. Political Science majors may not take this course for credit. Student may not receive credit for this course and also for 94:014.

94:011. Introduction to Political Science - 3 hrs.

Not limited to American government.

94:014. Introduction to American Government -3 hrs.

The processes and functions of American government in relation to concepts of American democracy and to practices of other governments. Sophomore standing recommended.

94:024. Politics: Conflict and Cooperation —3 hrs.

No credit for student with credit in 90:024.

94:026. World Politics - 3 hrs.

Conflict and cooperation in world politics. Current international problem areas and area problems. The Atlantic Community; Soviet Union; Eastern Union; Far East; Southeastern Asia; Africa; Latin America. Not open to students who have had 94:124.

94:112(g). Political Parties - 3 hrs.

Origin, organization, and operation of political parties in the United States.

94:124(g). International Relations-4 hrs.

94:127(g). United States Foreign Policy - 3 hrs. Factors influencing the formation and execution of United States foreign policies and specific instruments of foreign policy.

94:128(g). Foreign Policies of Communist Countries – 3 hrs.

The formulation and implementation of communist foreign policy.

94:131(g). State and Local Government -3 hrs.

An analysis of the organization, functions and operation of state and local governments.

94:132(g). Municipal Government – 3 hrs. Structure and functions of city government. Relation of the city to the state.

94:134(g). National Government and Administration - 3 hrs.

Legislative, executive, and judicial powers and procedures of the national government.

94:135(g). Modern European Governments – 3 hrs.

The dynamics of political decision making in England, France, Germany, and the Soviet Union with emphasis on contrasts between democratic and totalitarian regimes.

94:141(g). Constitutional Law-3 hrs.

The Constitution of the United States as fundamental law.

94:143(g). International Law-3 hrs.

Legalistic rules studies in the context of a case-by-case analysis and synthesis.

94:144(g). International Organizations - 3 hrs. The forms and functions of the international organizations, with special reference to the

organizations, with special reference to the United Nations system and its activities.

94:146(g). Law and the Courts I-2 hrs.

Study of the courts in America today with particular emphasis on trial courts and their impact on the community.

94:147(g). Law and the Courts II-2 hrs.

Study of judicial law making, private influences on court-expanded rights, and law school methods.

94:148(g). Public Administration - 3 hrs.

The place of public servants in thefunctioning of government and recent trends in the expansion of administration.

94:149(g). Comparative Administration – 3 hrs. Analysis of models and theories of comparative administration by adopting "idiographic" approach and explanation of differences in administrative behavior of different administrative systems.

94:150(g). Political Opinion and Public Policy - 3 hrs.

The formation and development of political opinion by interest groups and mass media in the shaping of public policy.

94:152(g). Government and Business - 3 hrs. The dynamics and legalities of regulatory ad-

ministration.

94:154(g). Legislative Process - 3 hrs.

An analysis of the functions, powers, organization, processes, and problems of legislative systems in a comparative framework.

94:160(g). Western Political Thought -3 hrs.
The development of political thought from Plato to the present, with primary emphasis upon the relationship between man and the state.

94:161(g). Political Thought - Marx to Easton - 3 hrs.

94:162(g). Latin American Governments -3 hrs.

The evolution of political institutions in Central and South America. Through an examination of personality, political parties and issues, insight into the nature of contemporary society in the western hemisphere is given.

94:164(g). Government of the Soviet Union - 3 hrs.

The Soviet political system with emphasis upon the institutions and groups involved in the determination and implementation of public policy.

94:165(g). East Asian Governments and Politics - 3 hrs.

The political structures and institutions of China, Japan, and Korea, with emphasis on the modernization process since the middle of the 19th century.

94:167(g). Political Thought of South and East Asia – 3 hrs.

Comparative study of the political thought of leading thinkers of India, China, and Japan from earliest times to the present.

94:168(g). Politics of South Asia - 3 hrs.

Parliamentary institutions and politics; political movements and independence; the parties; the politics of language, caste, and tribe; democracy and economic change; goals and styles of political leadership; religion and politics; problems of nation building; and current trends in the countries of this area.

94:170(g). Politics of Modernization in Developing Areas – 3 hrs.

Theories of political development and modernization in relation to political systems of developing countries of Africa, Asia, and Latin America.

94:175(g). Comparative Revolutions and Political Change - 3 hrs.

A comparative study of revolutionary change in Europe and in the developing areas of Asia, Africa, and Latin America in historical and analytical contexts.

94:180. Orientation to Fieldwork in Politics - 2 hrs.

Discussion with government officials, analysis of relations between the press and government, and experience using reference materials in law, administration, politics, and economics. Prerequisites: departmental approval; 15 hours of political science including 94:014 and 94:131.

94:181. Internship in Politics - 4-8 hrs.

Student serves as intern with government official or in public or private agency. Required: junior standing, political science major. Prerequisite: departmental approval; 94:180.

94:182. Post-Intern Seminar - 3 hrs.

Debriefing for interns in politics emphasizing comparison of scholarly writings on politics with the intern's practical political or administrative experience. Departmental approval required. Prerequisite: 94:181.

94:189(g). Readings in Political Science -1-3 hrs.

Prerequisite: 12 hours in Political Science and departmental permission. May be repeated only with permission of the department.

94:198. Independent Study.

94:211. Major Political Philosophers — 2 hrs.
Origin and development of the State as reflected in the writings of political philosophers.

94:213. Politics and Democracy – 3 hrs.
A seminar focusing on political thought and behavior.

94:224. International Politics - 3 hrs.
Prerequisite: 94:124 or consent of instructor.

94:275. Political Science Methodology - 3 hrs. Basic methods for gathering and presenting knowledge of the discipline. Application to teaching will be stressed.

94:280. Seminar in Political Science - 3 hrs.

94:285. Individual Readings - 1-3 hrs. May be repeated.

94:292. Research and Bibliography - 3 hrs.

94:299. Research.

Psychology

Gilgen, Head. Bogartz, G. Harrington, Hellwig, M. Jones, Rogers, Semler, Yio.

PSYCHOLOGY	MAJOR-Teaching
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Required: 40:030; 40:049; 90:190	
Required: 40:188 and/or 40:189	
Required: 40:193 and/or 40:180	
Electives in psychology (excluding 40:188, 4	40:189, 40:193, 40:180) 15 hours
	33 hours

Note: Students are advised to qualify for approval to teach in an additional subject area.

PSYCHOLOGY MAJOR

Re	equired: 40:030; 40:0499	hours
Re	equired: 40:188 and/or 40:189 3	hours
Re	equired: 40:193 and/or 40:180	hours
Ele	ectives in psychology (excluding 40:188, 40:189, 40:193,	
	and 40:180)	hours
	30	hours

PSYCHOLOGY MINOR-Teaching

Required: 40:030; 40:049	hours
Electives in psychology	hours

PSYCHOLOGY MINOR

Required: 40:030; 40:049.	 	S
Electives in psychology	 9 hours	S
	18 hours	S

40:008. Introduction to Psychology - 3 hrs. To provide a foundation for psychological understanding.

40:009. Elements of Psychology - 1 hr.

A series of independent, half-semester sections in the fundamental areas of psychological knowledge. Any three sections are equivalent to 40:008. Credit may be earned up to a maximum of 5 hours, but not in the same section. Sections for any semester to be listed in the Schedule of Classes.

40:030. Psychological Processes - 5 hrs.

Examination of basic perceptual and response processes common to behavior; the modes of contact with the environment and internal representations thereof; and the organism's attempts to cope and, in higher organisms, to master environment. Prerequisite: 3 hours of psychology.

40:040. Instrumentation in Psychological Experiments - 2 hrs.

Introduction to basic signal display, response registration and experiment control techniques and principles in psychological experimentation control techniques and principles in psychological experimentation with animals and humans. Economics and methodological factors in apparatus design and selection; experience with apparatus manufacture and operation.

40:049. Psychological Statistics - 4 hrs.

An introduction to the basic methods of collecting, organizing, and analyzing psychological data. Emphasis is placed on statistical inference, e. g., t tests, F tests, and selected non-parametrics. The course is designed to provide the student with the basic statistical concepts and skills necessary for laboratory and survey work and to provide

20 hours

adequate quantitative background for understanding psychological literature. Prerequisite: 40:008.

40:060. Psychology and Contemporary Issues -2 hrs.

May be repeated once for credit.

40:106(g). Psychology of Human Differences -3 hrs.

The nature and extent of human differences as they apply to an understanding of general psychology of the individual and group differences in a social setting, Prerequisite: 40:008 and 40:049.

40:118(g). History and Systems of Psychology -3 hrs.

Prerequisite: One course in psychology or departmental approval.

40:130. Computer Programming for Psychological Applications - 2 hrs.

FORTRAN programming and utilization of library programs and systems. Statistical analysis and related problems common in psychological applications. Prerequisite: one course in statistics recommended. Laboratory. No credit for student who has credit in 80:070.

40:132. Psychological Applications of Real Time Computers - 2 hrs.

Responsive, interactive, and process control applications of the computer in psychological settings. Prerequisite: 40:130, or programming experience in any computer language.

40:142(g). Abnormal Psychology - 3 hrs. Causes of abnormal behavior. Characteristics of major abnormalities. Classification of organic and functional disturbances.

40:150(g). Conditioning and Learning –3 hrs. Basic concepts and processes in learning. Five periods per week. Prerequisite: 40:049 and 40:030 or graduate standing.

40:151(g). Psychological Measurement—3 hrs. Provides a basic knowledge of measurement methods as they apply to the areas of psychology; a variety of quantitative methods to aid in the understanding of research literature and psychological theories; ways of gathering or evaluating quantitative measurement data. Introduces the student to fundamental concepts and problems relating empirical phenomena to an organized body of theory and knowledge in psychology. Prerequisite: 40:008; 40:049; or permission of the instructor.

40:153(g). Complex Psychological Processes -3 hrs.

A study of complex human behavior with emphasis on cognitive variables intervening between the observable stimulus and response.

Includes the topics of language, thinking, concept formation and problem solving with related motivational constructs. Prerequisite: 40:150 or graduate standing with permission of the instructor.

40:154(g). Principles of Perceptual Learning and Development —3 hrs.

Study of progressive changes in perception in human and animal sub-adults resulting from maturational processes and learning experiences. Prerequisite: 40:030 or permission of instructor.

40:155(g). Physiological Psychology - 3 hrs.

The psychology of man as a biological organism possessing high adaptability to a variable and changing environment; the response mechanism and the internal environment of the body; the relationship of the brain to sensory and motor functioning. Prerequisite: 40:008 and the permission of the instructor. 84:038 or the equivalent recommended.

40:156(g). Psychology in Industry - 3 hrs.

Principles and technique of job specification; productivity assessments and personnel selection, classification, and evaluation. Prerequisite: assumes some background in psychology.

40:161(g). Psychology of Personality - 3 hrs.

40:162(g). Social Psychology - 3 hrs.

Prerequisite: 40:049 or permission of the instructor.

40:163(g). Developmental Psychology -3 hrs. Research and theories on the processes of development. Prerequisite: 40:030 and 40:049.

40:170(g). Drugs and Individual Behavior -3 hrs.

Effects of psychoactive drugs on behavior; legal and ethical aspects of studying drug effects and regulating drug use discussed with drug abuse as a psychological phenomenon. Prerequisite: junior standing or permission of instructor.

40:180(g). Senior Thesis - 1-6 hrs.

hours of credit.

Written report based on the analysis of a psychological problem, supervised by faculty committee. Prerequisite: senior standing and approval of department.

40:188(g). Readings in Psychology -1-3 hrs. May be repeated for up to 3 hours of credit.

40:189(g). Seminar in Psychology -1-3 hrs. Provides opportunity to correlate previous course work and knowledge in field of psychology. Prerequisite: 15 hours in psychology. May be repeated for up to 6

40:193(g). Research Experience in Psychology -1-3 hrs.

Research participation and/or independent supervised research including experience in each of the following: Search of the literature; analysis of theoretical issues; design, instrumentation, and conduct of one or two major experiments; analysis of results; and preparation of research reports. Prerequisite: 15 hours in psychology and permission of the department. A total of six semester hours of credit may be allowed.

40:198. Independent Study.

Social Science

There is no social science department as such. The programs and the general courses in social science are offered under the jurisdiction of the Social Science Education Committee and the general supervision of the Dean of the College of Business and Behavioral Sciences. Students will be advised by committee members from the departments of Economics, Geography, History, Political Science, and Sociology and Anthropology.

SOCIAL SCIENCE MAJOR - TEACHING

Required: 97:025*; 92:053; 94:024; 98:058	urs
Required: 90:190 3 hor	urs
Required: 3 hours from 96:014 or 96:015	
or from 96:154 or 96:155 3 hor	urs
Required: minimum of 9 hours in each of any 3 social science	uis
disciplines (only one field of history-European or	
American—may be selected)	urs
45 ho	urs

*97:031 may be substituted for 97:025.

- A minimum of 12 hours in each of any three social science disciplines is required for approval to teach. Any course taken to meet General Education requirements in the social sciences may not be used to meet the course requirements of the major. General Education courses in the social sciences may not be used to qualify for approval to teach social science subjects.
- Geography certification 2 systematic courses and one regional course are required (see pp. 88-90 for description of these courses).
- Only one field of history (European or American) may be selected as one of the three areas of the major.

American history certification: 96:014 and 96:015 required plus six (6) additional hours in American history.

World history certification: 96:154 and 96:155 required plus six (6) additional hours in European history. One 3-hour course in Asian history may be used.

 Political Science certification—one 3-hour course in comparative government or international relations. Junior High Teaching—students desiring to teach at the junior high level are urged to complete areas in American history, geography, and political science. The following courses are also recommended: 20:116, 21:178, and 23:130.

6. Anthropology courses do not count toward certification in the sociology area.

SOCIAL SCIENCE SUBJECT FIELD-Junior High School Major

Highly recommended electives are 96:130; 96:136; and 96:140

It is strongly urged that students wishing to teach social science in the Junior High School complete the Social Science Teaching Major. The student is advised that individual departmental requirements for certification as listed in the Social Science Teaching Major must be fulfilled by the Junior High Majors.

GENERAL COURSES IN SOCIAL SCIENCE

90:010. Contemporary Affairs A-1 hr. May be repeated for credit.

90:110. Contemporary Affairs B-1 hr. May be repeated for credit.

90:190. The Teaching of the Social Studies -3 hrs.

Prerequisite: 12 hours in social science. Ordinarily should precede student teaching.

90:199(g). Study Tour, Europe - 6 hrs.
Residence study at leading European universities, followed by study tour of the Continent, including visits to historical and cultural centers.

90:199(g). Study Tour, Latin America – 6 hrs. Six weeks' study in Latin America with emphasis on the social aspects of countries visited.

90:280. Social Science Seminar — 3 hrs.
May be repeated for a maximum of 6 hours.
Prerequisite: departmental approval.

90:291. Problems in Teaching the Social Studies - 2 hrs.

90:297. Practicum 90:299. Research.

Sociology and Anthropology

Stockdale, Head. Amundson, R. Anderson, Chadney, Claus, Dohrman, M. Greene, Hill, T. Keefe, Kramer, Lutz, J. Martin, Noack, Roberts, Wernimont.

SOCIOLOGY MAJOR - TEACHING

Three hours of anthropology (in addition to 99:011) may be applied on this major. 80:172 or 40:049 may be applied on this major.

A minor is required, and it is strongly recommended that the minor be in another social science discipline (economics, geography, political science, or history).

SOCIOLOGY MAJOR	
Required: 99:011; 98:058; 98:060; 98:170; 98:161; 92:053; 94:014 Electives in sociology and anthropology	21 hours
	40 hours
Three hours of anthropology (in addition to 99:011) may be applied on th 80:172 or 40:049 may be applied on this major. No minor is required.	is major.
SOCIOLOGY MINOR-Teaching and Liberal Arts	
Required: 99:011; 98:058; 98:060 Electives in sociology and anthropology to total	15 hours
Three hours of anthropology (in addition to 99:011) may be applied on this	24 hours
the second of th	5 minor.
SOCIAL WORK MAJOR	
Required: 45:181; 45:182; 45:183; 45:184	. 19 hours 12 hours
	31 hours
Plus one of the following emphases:	
EMPHASIS 1—Sociology Required: 98:120	4.1
Required: 98:120	
20:142; 20:189; 20:193; 20:194; 22:170	6 hours
	18 hours
EMPHASIS 2—Social Psychology	
Required: 20:139; 20:118; 20:142 Electives from 20:100; 20:116; 20:140; 20:187;	
20:194; 22:170; 31:055 (strongly recommended)	. 10 hours
EMBILLACIC 2 II - E	18 hours
EMPHASIS 3—Home Economics	
Required: 31:010; 31:035; 31:037; 31:070; 31:163;	10.1
31:051 or 31:152; 31:055 or 31:150	. 19 hours
	24 hours

(NOTE: 98:058 is a prerequisite to all courses in Sociology except 98:060 and those courses indicated as Social Work.)

SOCIOLOGY

98:058. Principles of Sociology – 3 hrs. A scientific approach to the analysis and understanding of culture, human groups and institutions, personality, self, and social control.

98:060. Social Problems - 3 hrs.

An analysis of the nature and range of social problems arising in modern industrial society. Consideration given to the conditions creating them and the methods by which society seeks to cope with them.

98:100(g). Individual Behavior - 3 hrs.

The development of individual conforming behavior; a systematic analysis of the individual socialization process through human interaction among persons, within primary groups, institutions, and the human community as a communication process. Prerequisite: 98:058.

98:101(g). Collective Behavior - 3 hrs.

The development of collective, non-conforming behavior; a systematic analysis of collective deviant, non-normative behavior in panic situations, crowds, masses, publics. The organization and behavior of sects, cults, interest groups. Social movements. The analysis of fads, fashions, crazes. The development of public opinion and propaganda. Prerequisite: 98:058.

98:105. The Family -2 hrs.

The institutional aspects of family life. Prerequisite: 98:058.

98:110. Urban Sociology - 3 hrs.

An analysis of the nature, causes, and consequences of urbanization throughout the world; the growth and structure of metropolitan areas; social characteristics of urban populations. Prerequisite: 98:058.

98:111. Rural Sociology - 3 hrs.

Rural peoples; their communities and social institutions; relationship between country and city; the tide of social change, its problems and promises; world-wide perspective but with special emphasis on the United States. Prerequisite: 98:058.

98:114(g). The Sociology of Work-3 hrs.

The study of individual and organizational behavior in work and production. The structure and function of work groups and formal work organizations in changing industrial society. Prerequisite: 98:058.

98:120(g). Crime and Delinquency - 4 hrs.

Types and causes of crime and delinquency; criminal behavior systems in American culture; correctional treatment and crime prevention. Prerequisite: 98:058.

98:121(g). The Sociology of Mental Illness -3 hrs.

A study of the social factors associated with mental illness; its onset, the organizational context of its care and treatment, and its effect on various societal institutions. Prerequisite: 98:058.

98:130(g). Minority Group Relations - 3 hrs.

A study of the interpersonal and social relations of minority groups within the larger American society, with special reference to Black-White relations. Prerequisite: 98:058.

98:135(g). Social Stratification-3 hrs.

Origin, development, and characteristics of social class and caste systems. Indices of class position, interaction between classes, social mobility, and theories of stratification. Prerequisite: 98:058.

98:144(g). Population - 3 hrs.

Comparative study of population composition, growth, and major trends throughout the world; includes fertility, migration, and mortality. Introduction to techniques of population analysis; theories of population change, and problems of population policies. Prerequisite: 98:058.

98:156(g). Social Movements - 3 hrs.

Sociological and socio-psychological conceptualizations of the genesis, dynamics, and demise of modern social movements. Stress is given to reformist, utopian, nativistic, and totalitarian organizations. Prerequisite: 98:058.

98:161. Research Methods in Sociology -3 hrs.

An examination and application of the methods of collecting, analyzing, and publishing sociological data. Prerequisite: 98:058.

98:170. The Development of Modern Social Theories - 3 hrs.

Summary and critical appraisal of the growth of sociological thought; historical consideration of social philosophy; introduction of leading sociological thinkers and their theories of society. Prerequisite: 98:058.

98:171(g). Contemporary Sociological Theory -3 hrs.

A study of the main currents in contemporary sociological thought; principle sociological theorists, major schools and trends in theory; social causation, social evolutionism, social change, and structural-functional analysis. Prerequisite: 98:170 or consent of instructor.

98:172(g). Sociology of Religion-3 hrs.

Examination of the social bases of religious institutions; factors in religious evolution and change; comparative analysis of religious organizations and religious behavior; functions of religion in the social structure. Prerequisite: 98:058.

98:176(g). Social Change - 3 hrs.

Nature of social change and its implications for personality and society. Prerequisite: 98:058.

98:198. Independent Study.

98:280. Seminar in Sociology - 3 hrs.

Seminars are offered in special topics; such as Sociological Theory, Deviant Behavior, Social Psychology, Social Stratification, Population, Sociological Research, Sociology of Religion,

and others. The topic to be used for a specific semester will be listed in the Schedule of Classes. An advanced course in the specific area scheduled will be considered a prerequisite to that seminar. Enrollment in different topics is not limited, but a student should not enroll in two seminars on the same topic.

98:291. Individual Readings - 1-3 hrs.

98:297. Practicum.

98:299. Research.

SOCIAL WORK

Note: Courses in Social Work may not be applied on Sociology majors or minors.

45:181. Introduction to Social Welfare - 3 hrs. Historical development of social welfare services and the values which underlie them. A general survey of types of social welfare services; issues and controversies in social welfare.

45:182. Social Work Services - 3 hrs.

How social work seeks to deal with human problems and effect social change; ways in which social work addresses itself to social problems. Prerequisites: 98:058; 98:060; 45:181.

45:183. Social Work Methods - 3 hrs.

Analysis of the principal social work methods—casework, group work, and community organization. Administration and research problems in social work. Prerequisite: 45:182.

45:184. Field Experience - 10 hrs.

A semester experience of three days a week working in a welfare agency under supervision; will include weekly seminar in the welfare agency. Prerequisite: 45:183.

ANTHROPOLOGY

99:010. Physical Anthropology and Archaeology - 3 hrs.

Introduction to the physical and prehistoric development of man, including primate and human evolution, modern races, and the archaeological cultures of the world.

99:011. Social and Cultural Anthropology -3 hrs.

Introduction to the anthropological analysis of man's cultures, including a brief survey of the cultures of the world and theoretical approaches anthropologists use in order to study them. Also a brief introduction to anthropological linguistics.

99:130. North American Indian—3 hrs.

An examination of the tribes of North America, including northern Mexico, covering both archaeology and ethnology.

99:140(g). High Civilizations of Middle and South America – 3 hrs.

An archaeological examination of the Maya, Aztec, and Inca civilizations and their predecessors.

99:174(g). Anthropology of South Asia – 3 hrs. The social and cultural organization of India and Pakistan with particular reference to contemporary village life.

99:175(g). Psychological Anthropology — 3 hrs. Psychological dimensions of sociocultural systems considered in a comparative perspective. Includes historical development and logical status of the field, personality in sociocultural contexts, cognitive anthropology, and other issues in ethnopsychology and ethnopsychiatry. Prerequisite: 99:011 or consent of instructor.

99:180(g). Seminar in Anthropology - 3 hrs. Selected problems within one of the subfields of anthropology (cultural, physical, archaeology, or anthropological linguistics). Topic for a specific semester to be listed in the Schedule of Classes. Prerequisites will vary with the topic. May be repeated for credit.

99:198. Independent Study.

College of Education

The College of Education has seven departments, each concerned with some aspect of professional education. Several departments include more than one field of study or service. The departments and subsidiary divisions include:

Curriculum and Instruction — (1) Early Childhood Education, Elementary Education, and Junior High School Education, (2) Reading, (3) Special Education, (4) Safety, and (5) Educational Media. The department also operates a Reading Clinic and an instructional laboratory for special education.

Educational Psychology and Foundations — (1) Educational Psychology, (2) Measurement and Evaluation, and (3) Social Foundations of Education. The department also operates an Educational Clinic.

Library Science

Physical Education for Men

Physical Education for Women

— The physical education departments have separate undergraduate majors in physical education and health education, joint majors in health and recreation, and a joint master's degree program in physical education.

School Administration and Personnel Services — (1) School Administration, and (2) Student Personnel Services.

Teaching — This department is responsible for the operation of the Malcolm Price Laboratory School and for the supervision of all student teaching.

Since its establishment in 1876 as the Iowa State Normal School, the University of Northern Iowa has maintained its prime committment to the support of excellence in teacher education. This commitment was recognized by the Iowa General Assembly in 1967 when the function of the university was redefined to include as its primary responsibility the preparation of "...teachers and other educational personnel for schools, colleges and universities...." It is also acknowledged by the university in organizing and defining teacher education as an all-university function.

The College of Education, however, has a particular responsibility for teacher education. Most of the graduate and undergraduate majors within the college are teaching program majors, but the most widespread influence on teacher education stems from the fact that all students seeking teacher certification take their professional preparation in the College of Education. This professional preparation consists of a required professional sequence common to all majors and a culminating student teaching experience, under university supervision, in one of the schools of the state.

The college is deeply involved in continuing education, working closely with school personnel throughout the state on curriculum projects, surveys, and other types of consultative activities, as well as sponsoring conferences and offering classes, institutes, and workshops both on and off campus. These activities illustrate the college's commitment to its service obligations, but the college also recognizes the critical importance of such involvement for insuring the vitality and relevance of its graduate and undergraduate programs of teacher education.

Departmental faculty members within the College of Education are also engaged in research activities. For example, the Malcolm Price Laboratory School is engaged in a continual series of experimental and innovative projects, and these projects are open for

observation and participation. Other research activities are carried on by faculty and students.

In addition to programs leading to the Bachelor of Arts degree, graduate programs are available for the Master of Arts, the Master of Arts in Education, and the Specialist in Education degrees. All of the programs offered in the College of Education have a career orientation. Most of the programs are preparatory to a career in education as a teacher, school librarian, counselor, administrator, or supervisor; the exceptions are in closely related fields: a physical education major with a recreation emphasis, and graduate majors in counseling and in communications media.

Curriculum and Instruction

Schnur, Head. Abbott, Aldridge, Ardren, Brady, Broeren, Courtnage, *Eakin, Eland, Euchner, Hampton, Harms, Healy, Heller, Hosier, Kueter, Kuse, Little, Ratekin, Schmid, R. Selwa, Sparrow, Suroski.

EARLY CHILDHOOD EDUCATION MAJOR

This major leads to certification for teaching in nursery school and kindergarten only. The student will complete the General Education requirements, the Common Professional Sequence, the specified major requirements, a Professional Semester, plus electives to complete a minimum of 130 hours. The prescribed program is as follows:

Within the student's total program (including General Education) at least one course in each of these fields should be included: art, mathematics, music, science, sociology or anthropology, speech or speech pathology. A student must take a course in American history or American government for certification.

The student should include, also, a concentration of at least 15 semester hours in one of the following areas: art and industrial arts, English and speech, health and physical education, mathematics, a modern foreign language, music, science, or social science.

A student who wishes to be certified for elementary grades above the kindergarten should include the following work in addition to the required work listed above;

a course in geography, one in English, an elective in reading, and 21:152, 80:134, and 4 hours of 28:134.

ELEMENTARY EDUCATION MAJOR

The student will complete the General Education requirements, the Common Professional Sequence, a Professional Semester, the major requirements, the Emphasis requirements, as indicated, and electives to complete a minimum of 130 hours. The prescribed program is as follows:

The student should plan his total program (including General Education) to include some course work in each of these fields: art, English, geography, mathematics, music, science, and speech or speech pathology. A student must take a course in American history or American government for certification.

Students with an emphasis in Lower or Upper Elementary will include a concentration of at least 15 semester hours in one of the following areas: art and industrial arts, English and speech, health and physical education, mathematics, a modern foreign language, music, science, or social science.

EMPHASES:

The student will choose one of four emphases, indicating the area in which he would like to teach, and take work appropriate to this emphasis.

- UPPER GRADES: The student will enroll in sections of courses marked (z) in the schedule of classes when available, and do student teaching at the upper grade level. There are no specific emphasis requirements.
- LOWER GRADES: The student will enroll in sections of courses marked (y) in the schedule of classes when available, and do student teaching at the lower grade level. There are no specific emphasis requirements.
- SPECIAL EDUCATION: This emphasis is further subdivided into three areas of specialization with appropriate requirements indicated for each as follows:

	Special Education: Required: 22:170; 22:171; 22:174; 22:185; 22:192
	19 hours
	Gifted: Required: 22:154; 22:192; 24:132 or 35:132
	Visually Impaired: Required: 22:161; 22:163; 22:164; 22:165; 22:166
-	READING: This emphasis satisfies the state requirement for approval as an elementary reading teacher. Required: 23:147; 23:148; 50:130; 23:192; 23:193; 62:162 or a course in linguistics; additional elective in reading

JUNIOR HIGH SCHOOL EDUCATION MAJOR

Course patterns in each subject field for the junior high school major will be found with the departmental listings, pp. 79-200. A methods course in teaching the subject field at the secondary level is required. A significant segment of the course will emphasize teaching programs unique to the junior high school. In addition to the work in general education, the common professional sequence, and physical education, this major shall consist of the following:

Required: 20:116; 21:178; 23:130	10 hours
Recommended electives: 25:181: 29:102	6 hours

SUBJECT FIELDS -One subject field chosen from the following:

Art Business Education

English
Foreign Language
Industrial Arts
Mathematics

Physical Education (Women) Science Social Science

Physical Education (Men)

Speech

GENERAL, ELECTIVES OR ADDITIONAL SUBJECT FIELD-

The student may complete a secondary minor in an area other than his subject field. He may also utilize his electives to strengthen his academic preparation in one field, or to strengthen his preparation in general education, professional education, or psychology.

EDUCATION OF THE HANDICAPPED - SECONDARY LEVEL MINOR

Required: 22:150; 22:174; 22:170; 22:171; 22:181; 22:182; 22:185	S
Required: 28:135	S
Required: 22:192 (two hours each of tutorial and secondary experience)4 hour	S
25 hour	S

EDUCATIONAL MEDIA MINOR - Liberal Arts

Required: 24:031 or 24:131 3 ho	ours
24:137	ours
Electives: 11 hours in Educational Media courses	ours
16 hc	ours

GENERAL, ELEMENTARY, AND EARLY CHILDHOOD EDUCATION

21:044. Children's Literature - 3 hrs.

Literature materials for the elementary grades; emphasis on goals, scope, and methods. To develop ability to evaluate library materials.

21:101(g). Elementary Methods and Materials -10 hrs.

This fused course deals with the methods and materials used in the elementary school in

relation to the development of the child. It embodies the content of such courses as the teaching of elementary social studies, science, art, and music. Prerequisite: 20:14, 20:16.

21:105(g). Learning Experiences of Young Children - 10 hrs.

Experiences, methods, and materials for teaching young children. Prerequisite: 20:014, 20:016.

21:142(g). Methods in Elementary Science -2 hrs.

Investigation and implementation of commercial and teacher-constructed materials and appropriate instructional strategies for contemporary elementary school science programs.

21:143(g). Social Studies in the Elementary School - 2 hrs.

Methods and materials for teaching the knowledge, attitudes, and skills in social studies.

21:144(g). Literature for Elementary Children - 3 hrs.

An advanced course in children's literature. An elementary course in children's literature should precede this course.

21:145(g). Storytelling -2 hrs.

Art and techniques of storytelling to enrich the elementary classroom learning experiences, 21:044, 21:144 or 35:132 should accompany or precede this course.

21:148(g). Parent Education - 3 hrs.

Methods, materials, and responsibilities for informing parents of the goals and programs of the school for an understanding that will lead to stronger cooperation and support.

21:149(g). Parent and Community Relationships - 2 hrs.

Procedures for developing home-communityschool relationships to promote the education of each child in reaching his maximum potential. Emphasis on preschool-kindergarten level.

21:151(g). Early Childhood Curriculum -3 hrs.

Current trends in curriculum for preschool children. No credit for student with credit in 21:105.

21:152(g). Elementary Curriculum -3 hrs.

Recent trends in the curriculum for children in grades K-6. No credit allowed for a student who has received credit in 21:101.

21:154(g). Nursery School and Kindergarten-2 hrs.

Background for establishing and administering a preschool facility; investigates equipment, supplies, staffing, financing, policy statements, and curriculum planning for day care, nursery school, and kindergarten.

21:178(g). The Junior High School -5 hrs.

Rationale and development of both the junior high and middle school; stresses organization, curriculum, and instructional strategies to meet the needs of the early adolescent. 21:192(g). Experience - 2-4 hrs.

Offered in various specialized fields as listed in the Schedule of Classes, but may be taken only twice for credit in the same area.

21:289. Seminar in Education - 2 hrs.

Special topics listed in Schedule of Classes.

21:290. Practicum in Education and Psychology - 2 hrs.

21:299. Research - 3 hrs.

SPECIAL EDUCATION

22:150(g). The Exceptional Child-3 hrs.

Introduction to education of the handicapped and gifted child; the exceptional child in the regular school setting; development of proper understanding and attitudes. Emphasis on needs, curriculum, and special education program.

22:152(g). The Physically Handicapped -2 hrs.

Educational and psychological needs of children with physical and/or health problems in regular educational programs. Attention to the severely orthopedically, health impaired, or multiply handicapped child; special adaptations and programs.

22:154(g). The Gifted Child-4 hrs.

The educational needs of the gifted and talented child. Emphasis on characteristics, identification, underachievement, counseling, and motivation. Attention to curriculum and organization adaptations.

22:161(g). Braille I-3 hrs.

Braille reading and writing for the education of blind children. Use of Braille writing equipment. Reading problems; observation of blind children; Braille in mathematics and music.

22:162(g). Braille II-3 hrs.

Advanced applications of Braille I, leading to Library of Congress certification for Braille transcribers; introduction to Nemeth code, Cranmex abacus, and teaching materials and equipment. Prerequisite: 22:161.

22:163(g). Educational Provisions for Visually Handicapped - 3 hrs.

Basic introduction to the field, including historical perspective, medical terminology, educational programs and utilization. Observation required. Prerequisite: 22:150.

22:164(g). Medical Aspects of Vision -3 hrs.

Seminar course utilizing medical lecturers on measurement of vision, medical causes of visual loss, and psychological and educational problems arising from visual impairment. Prerequisite: 22:163.

22:165(g). Orientation and Mobility I -2 hrs.

Teaching topographical orientation to congenitally blind children; simulation of sightless travel employed in teaching the Hoover long-cane method of travel. Prerequisite: 22:163; 22:164.

22:166(g). Classroom Procedures for Visually Handicapped-4 hrs.

Applications of curriculum alterations, materials, and methodological adaptations. Prerequisites: 22:161, 22:165; 22:164.

22:170(g). Educational Management of the Handicapped I-3 hrs.

Prescription, implementation, and evaluation of educational solutions for students manifesting learning and behavorial disorders. Prerequisite: 22:150. Corequisite: 22:192 (Tutorial).

22:171(g). Educational Management of the Handicapped II-3 hrs.

Educational management of the handicapped in group settings. Stress upon discipline and management techniques. Prerequisite: 22:170; corequisite: 22:192.

22:174(g). Teaching the Handicapped -2 hrs.

Overview of instructional programs for the handicapped from preschool through secondary levels. Lab. experience in the selection and evaluation of curriculum methods and materials. Prerequisite: 22:150.

22:180(g). Teaching the Handicapped: Primary - 3 hrs.

Instructional methods and materials for handicapped functioning at primary level. Emphasis on social and beginning academic skills. Includes teaching of retarded, learning disordered, and/or behaviorally handicapped individuals. Prerequisite: 22:174.

22:181(g). Teaching the Handicapped: Secondary - 3 hrs.

Emphasis on individual instruction programmed materials, and other techniques to improve academic, social, and vocational skills. Includes teaching of mildly retarded, learning disordered, and/or behaviorally handic. Ded pupils. Prerequisite: 22:174.

22:182(g). Teaching the Handicapped: Intermediate — 3 hrs.

Instructional methods and materials for the handicapped functioning at intermediate level. Emphasis on acquisition of social and academic skills. Includes teaching the mildly retarded, learning disordered, and/or behaviorally handicapped individuals. Prerequisite: 22:174.

22:183(g). Teaching the Handicapped: Preacademic - 3 hrs.

Instructional methods and materials for the handicapped functioning at the preschool or preacademic level. This may include teaching the trainable mentally retarded, severely brain injured, psychotic, and other handicapped pupils. Prerequisite: 22:174.

22:184(g). Home-School Relationships for Special Education - 3 hrs.

Utilization and coordination of special education services with the home and school to maximize the potential of the handicapped. Communication techniques and patterns of cooperation with parents and school personnel; guidance and counseling of the handicapped child and his parents. For seniors and graduate students only.

22:185. Readings in Special Education -1 hr.

Reading and discussion of current methodological developments and innovations in special education. Recommend concurrent enrollment with 22:170, 22:174, and 22:192 (individual instruction).

22:192(g). Experience in Special Education – 2-4 hrs.

Supervised teaching and experience in specialized areas of reading or special education as listed in the Schedule of Classes. May be repeated with consent of the instructor. Prerequisites vary with the specific experience.

22:251. Vocational Programs for the Handicapped - 3 hrs.

Development and implementation of work study and other vocational programs for handicapped adolescents and adults. Prerequisite: 22:174.

22:252. Community Resources for Special Education - 3 hrs.

Study of cooperation and coordination of the school and other agencies serving the handicapped, including various programs and services provided by governmental and private organizations.

22:260. Orientation and Mobility II-2 hrs.

Advanced applications to residential and business area cane-travel techniques, experience provided in working with blind child. Prerequisite: 22:165.

22:261. Teaching of Special Systems -3 hrs.

Introduction to Nemeth Code; use of Cranmex abacus and Braille musical notation. Prerequisites: 22:161; 22:162; 22:163; 22:166.

22:278. Administration of Special Education - 3 hrs.

Prepares administrators to plan programs for various areas of special education, to select personnel, provide instructional materials, interpret the program to the community, and be informed concerning legal provisions for special education.

22:289. Seminar - 2 hrs.

22:290. Practicum - 2-4 hrs.

22:299. Research.

READING

23:110(g). Reading and Language Arts -5 hrs.

Introductory course in the teaching of reading and other communication skills. Survey of recent literature and research in the field.

23:112(g). Issues and Trends in Elementary Reading - 3 hrs.

Recent methodological developments, new materials, and innovations in organization of the elementary curriculum.

23:113(g). Teaching Expressive Language Arts - 3 hrs.

Creative and practical aspects of oral and written language in the elementary school. Survey of recent literature and research in the field; includes experiences with individual children and with small groups.

23:114(g). Materials and Techniques for Reading -2 hrs.

Analysis and evaluation of reading materials, including technological innovation. Adaptation and creative utilization of materials to meet specific needs of children. Prerequisites: 23:110 or 23:130.

23:130(g). Reading in the Secondary Schools - 3 hrs.

Introduction to the reading process, materials and methods of instruction, evaluation of reading achievement, and study of reading demands in the secondary curriculum. Recognition of characteristics of current secondary reading programs.

23:132(g). Reading in Content Areas - 2 hrs. Evaluation of reading demands in school subjects. Suggestions for content area teachers and developmental reading teachers at secondary and upper elementary levels.

23:140(g). Diagnostic Teaching of Reading -3 hrs.

Instructional needs of individual children within the classroom. Includes group and individual evaluation; selecting materials. methods, and activities for special problems; recognizing and referring students with specific learning disabilities. Prerequisite: 23:110 or 23:130.

23:147(g). Remedial Reading - 3 hrs.

Introductory course in remedial reading in public schools; theory, methods, and materials currently used. Prerequisite: a methods course in reading. Corequisite: 23:192.

23:148(g). Diagnosis of Reading Problems -2 hrs.

Experience in administering and interpreting diagnostic reading tests. Survey of correlate and causal areas including introduction to tests frequently used by specialists. Prerequisite: 23:147.

23:192(g). Experience in Reading: Tutoring - 2-4 hrs.

Supervised tutoring in the University Reading Center or in a public school Reading Center. Prerequisite: instructor's approval.

23:193(g). Experience in Reading: Field - 3-4 hrs.

One half day teaching in a school reading program. Prerequisites: 23:147 and 23:148 or instructor's approval.

23:210. Recent Research in Reading -3 hrs.

Research in reading with its implications for the classroom teacher and supervisor. Prerequisite: one course in the teaching of reading.

23:212. Psychology of Reading - 3 hrs.

An investigation of behaviors significantly related to the reading process, including visual and auditory perception, cognition, language, maturational, physiological and neurological factors, and personality.

23:240. Reading Disability - 3 hrs.

Exploration of factors in reading disability, causes of severe disability, development of remedial programs, and the roles of specialists and parents in remediation. Prerequisite: 22:147 and 22:148.

23:242. Case Studies in Reading Disability - 3 hrs.

The case study method designed to assist the student to develop the skills and techniques in writing case studies and to provide experience in utilizing case studies in planning and evaluating individualized remedial programs.

23:244. Research Design in Reading -2 hrs.

The evaluation of research designs in reading and construction of a research design for a selected problem.

23:289. Seminar - 2 hrs.

23:290. Practicum - 2-4 hrs.

23:299. Research.

EDUCATIONAL MEDIA

24:031. Audio-Visual Communications - 3 hrs.

Role of educational media in the teachinglearning process. Selection, preparation, utilization and evaluation of instructional materials for specific communications. Discussion, 3 periods; lab., as arranged.

24:131(g). Resources for Communications -3 hrs.

Selection, utilization, and implementation of multisensory materials in the preparation and design of messages.

24:132(g). Materials of Instruction - 3 hrs.

Laboratory work in the Curriculum Laboratory with all types of materials in the student's field. Especially for students interested in supervision; others should have departmental approval.

24:135(g). Media Administration-2 hrs.

An advanced course to prepare a media graduate to administer any one or all of the specific areas of media.

24:137(g). Preparation of Instructional Materials - 2 hrs.

Content and laboratory practice in construction of projected and non-projected instructional materials such as slides, films transparencies, dry mounting, lettering, and displays. Designed to acquaint school personnel with the role of educational media in teaching and learning. Prerequisite: 24:31, 24:131 or equivalent.

24:140(g). Instructional Communications Systems - 2 hrs.

Motivation, perception, and learning theory in the communication and learning processes, and the contribution of audio-visual communications and materials in teaching situations.

24:145(g). Film: History and Appreciation -3 hrs.

Historical and aesthetic growth of the motion picture medium, and the evolution of its role as a media of mass communication.

24:150(g). Instructional Television Production -2 hrs.

Techniques of instructional television production as applied in the classroom and the studio. Practical experience in planning and producing instructional television programs.

24:151(g). Fundamentals of Motion Picture Production - 2 hrs.

Production and planning, visual continuity, shooting, animation, editing, sound recording, titling, and other technical problems of production as applied to individual student films.

24:152(g). Advanced Motion Picture Production - 2 hrs.

Techniques of 16 mm. instructional sound motion pictures applied to group projects; technical problems of production. Prerequisite: 24:151.

24:160. Media Projects - 1-4 hrs.

Specialized study in independent media projects. Credit to be determined at time of registration; project, credit, and evaluation criteria require advance approval of instructor.

- Sec. 1. Television. Prerequisite: 24:150.
- Sec. 2. Graphics. Prerequisites: 24:031 or 24:131; 24:137.
- Sec. 3. Film. Prerequisites: 24:151; 24:152.
- Sec. 4. Photography. Prerequisite: 24:137. Sec. 5. Multi-Media Communications.

Prerequisites: 24:031 or 24:131; 24:137. May be repeated for credit to a maximum of 4 hours for any section.

24:205. Programmed Instruction - 3 hrs.

Evaluation, selection and utilization of programmed materials and machines; research and construction of programmed materials. Useful for educational media directors and administrators.

24:232. Selection and Integration of Materials - 3 hrs.

Individual experiences providing an overview of curricular resource materials.

24:260. Advanced Media Projects - 1-4 hrs.

Credit to be determined at time of registration; project, credit, and evaluation criteria require advance approval of instructor.

- Sec. 1. Television. Prerequisite: 24:150.
- Sec. 2. Graphics. Prerequisites: 24:031 or
- 24:131; 24:137.
- Sec. 3. Film. Prerequisites: 24:151; 24:152. Sec. 4. Photography. Prerequisite: 24:137.
- Sec. 5. Multi-Media Communications. Prerequisites: 24:031 or 24:131; 24:137.

May be repeated for credit to a maximum of 4 hrs. for any section.

24:289. Seminar -2 hrs.

24:297. Practicum - 2-3 hrs.

24:299. Research.

Safety Education

SAFETY EDUCATION MAJOR - TEACHING

SAFETY EDUCATION MINOR-Teaching

Approval to teach driver education will be recommended on the basis of completion of 30:030; 30:130; and 30:131.

30:030. Principles of Safety Education - 4 hrs. Methods and materials of teaching safety education in elementary and secondary schools.

30:130(g). Driver and Traffic Safety I-3 hrs. Classroom and practice driving units; safety education as a social problem; development of safety skills, habits, attitudes, and ideals; accident causes; study of research.

30:131(g). Driver and Traffic Safety II-3 hrs. Deals with classroom and in-the-car techniques of imparting instruction to high school students taking driver education.

30:132(g). Directing the Safety Program -2 hrs.

Organization and administration of safety programs through the entire school system.

30:140(g). Traffic Law Enforcement – 3 hrs.

Designed to acquaint safety and driver education teachers with the purposes of traffic law enforcement and traffic engineering.



Educational Psychology and Foundations

Froyen, Head. Ball, Baty, Berg, Bishop, L. Brown, Dedrick, *Dunbar, Erickson, *Hash, Hewett, Hoobler, Lattin, Lee, Porter, Przychodzin, Reppas, Romack, Rozendaal, Rutkowski, Scott, Seifert, J. Smith, Spinelli, Taylor, Trout, Uselmann, B. Wilson,

*on leave

EDUCATIONAL PSYCHOLOGY

20:014. The Teacher and the Child-5 hrs. Appraisal of the teaching profession; introduction to the field of teaching; psychology of child growth and development from birth through young adult age level. Prerequisite: 40:008.

20:016. Psychology of Learning - 5 hrs. Exploration of teaching strategies for learning and significant change in students. Prerequisite: 20:014.

The following five courses are a part of the Common Professional Sequence and should be taken according to the pattern on page 69.

Field Experience:

20:017. Interpersonal Interaction Patterns -1 hr.

Direct and indirect experiences focused on the dynamics of classroom groups.

20:018. Teacher as Change Agent – 1 hr. Identification of institutional mechanisms for instituting change in classroom organization and/or curricular departure which require collaboration of teacher with colleagues and interpretation to parents. Students work in teacher-involved experience.

Value Clarification Seminar:

20:020. Interpersonal Influence Preferences -2 hrs.

Consideration of the use of authority and power in classroom management/guidance functions. Emphasis upon leadership styles as an interaction of personal needs and varied interpretations of authority and power.

Developmental Psychology Core:

20:030. Dynamics of Human Development -2 hrs.

Introduction to behavorial characteristics of individual development; basic developmental principles, age-stage characteristics, and provisions community, family, and school make in the development of children and youth.

Learning and Instruction Core:

20:040. Nature and Conditions of Learning -3 hrs.

Cognitive, affective and psychomotor learning processes; including behavior, modification, concept learning, problem solving, creativity, attitude formation and skill learning. Corequisite: 25:050.

20:100(g). Child Psychology - 2 hrs.

Factors influencing the child's behavior, attitudes, and understanding from standpoint of current psychological theory. Prerequisite: 40:008 or 20:014 or equivalent.

20:109(g). Development of Young Children - 3 hrs.

The growth and development of the young child with emphasis on research having important implications for the education of young children.

20:116(g). Psychology of Adolescence -2 hrs.

Growth attitudes, and concepts from age eleven to maturity. Prerequisite: 40:008 or 20:014 or equivalent.

20:118(g). Mental Hygiene - 2 hrs.

Introduction to the study, evaluation, and improvement of personal adjustment and mental health.

20:138(g). Psychology of Accident Prevention – 2 hrs.

A foundation for psychological understanding in the field of accident prevention and behavorial problems.

20:139(g). Psychology of Personality, Education – 3 hrs.

A thorough investigation of the dynamics of personality, with emphasis on the principles of normal personality structure. Designed for those who seek an understanding of the structure, development and function of personality. Prerequisite: 40:008.

20:140(g). Social Psychology, Education -3 hrs.

An intensive study of the behavior of man as affected by, and when interacting in, groups. Areas of discussion include prejudice, propaganda, anti-intellectualism, leadership, social perception, group dynamics, game theory, and student protest. Prerequisite: 40:008 and 20:016 or the equivalent.

20:142(g). Abnormal Psychology, Education - 3 hrs.

This course deals with psychodynamics. The development of both normal and abnormal personalities is traced with an emphasis on application of sound developmental principles. Prerequisite: 40:008. 20:118 recommended to precede.

20:187(g). Educating Disadvantaged Children and Youth - 3 hrs.

Definition and extent of cultural deprivation in the United States. Sociological and psychological factors that interfere with the intellectual development of the disadvantaged child. Programs designed to provide experiences essential for intellectual growth.

20:189(g). Seminar in Educational Psychology - 1 hr.

Provides the opportunity of correlating previous course work and knowledge in the field of educational psychology. For senior psychology majors and minors. Must be taken twice, one semester hour each during the senior year. May be taken by graduate students with permission of the department. (May be repeated once for credit.)

20:191(g). Supervision of Student Teaching -3 hrs.

Designed primarily for those presently or potentially involved in the supervision of student teachers. Covers the selection and preparation of student teachers; readiness for student teaching; principles of supervision, including the identification and analysis of good classroom procedures desirable experiences for the student teacher in the total school program; professional responsibilities of the student teacher in the school and community; evaluation of student teachers, and the supervising teacher's role in the selection of teachers for the profession. It also covers the selection and preparation of student teaching centers, qualifications of supervising teachers, and the role of the coordinator of student teaching.

20:193(g). Research Experience in Educational Psychology -2 to 6 hrs.

Research participation, and/or independent

supervised research including experience in each of the following: Search of the literature; analysis of theoretical issues; design, instrumentation, and conduct of one or two major experiments; analysis of results; and preparation of research reports. Prerequisite: 15 hours in educational psychology or in some other field of psychology and permission of the department. A total of six semester hours of credit may be allowed.

20:194(g). Clinical Experience - 1-4 hrs.

Practice in educational testing, mental testing, interviewing, guidance and counseling, remedial educational procedures; and formulation of follow-up procedures. Prerequisite: department approval.

20:198. Independent Study.

See pp. 58 and 76.

20:214. Advanced Educational Psychology -2 hrs.

Application of selected psychological models as alternative solutions to educational problems.

20:230. Theories of Personality - 3 hrs.

Critical examination of the nature of personality theory, and a detailed analysis of the major contemporary theories of personality. Prerequisites: 20:118; 20:139 or 20:142; 25:180.

20:270. Diagnosis of Learning Problems -3 hrs.

Emphasis will be placed on the diagnosis of the nature and cause of learning difficulties and the methods by which developmental and corrective measures of various kinds can be adjusted to meet the needs of the individual learner. Emphasis is placed on providing the counselor with the techniques of diagnosis and treatment which can be effectively applied by the classroom teacher. Prerequisite: 25:181.

20:289. Seminar in Education and Psychology -2 hrs.

Prerequisite: instructor's consent.

20:290. Practicum in Education and Psychology - 2-4 hrs.

Prerequisite: instructor's consent.

20:291. Internship in School Psychology -2-6 hrs.

Supervised off-campus field experience.

20:299. Research-1 hr.

SOCIAL FOUNDATIONS OF EDUCATION AND TESTS AND MEASUREMENTS

The following three courses are a part of the Common Professional Sequence and should be taken according to the pattern on page 69.

Socio-Cultural Core:

25:020. Educational Purposes and Practices -2 hrs.

Critical analysis of educational problems and issues, potential solutions; the examination of contemporary positions on education purpose and form. Offered first half semester only; to be taken in the same semester as 25:030 (The Community and Curriculum).

25:030. The Community and the Curriculum -2 hrs.

Socio-political forces which shape school policy and curriculum. Offered second half semester only; to be taken in the same semester as 25:020 (Educational Purposes and Practices). Prerequisite: 25:020.

Measurement and Evaluation Core:

25:050. Classroom Evaluation Instruments -2 hrs.

Preparation and use of objective and subjective assessment devices. To be taken concurrently with 20:040.

25:118. Social Foundations of Education —4 hrs.

The school as a social institution; organized and informal community controls; current philosophies of education; the history of education; teacher responsibilities for the curriculum and professional ethics. Prerequisite: 20:014. To accompany student teaching.

25:134(g). History of Education - 3 hrs. Education as a formal institution; emphasis on the historical antecedents which have affected

education in Western culture and America.

25:138(g). Comparative Education - 3 hrs.

A panoramic view of the educational systems of various nations of the world compared with the education of the United States of America.

25:180(g). Statistical Methods in Education and Psychology - 3 hrs.

Introduction to statistical methods. Includes graphing techniques, measures of central tendency and variability, correlation, t-tests, one way ANOVA, and chi-square. 2 hr. lab. arr.

25:181(g). Group Evaluation Techniques -3 hrs.

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.

25:189(g). Seminar in Education - 2-3 hrs.

25:234. Philosophy of Education-2 hrs.

Analytical study of major philosophical viewpoints of modern education, emphasis on professional problems of education and the development of educational principles.

25:280. Theory and Construction of Tests - 2 hrs.

An advanced course in the theory of test construction and practical application of the theory to actual construction and validation processes. Prerequisite: 25:180 and 25:181.

25:281. Topics in Statistical Analysis -3 hrs.

Application of statistical principles to research in education and psychology. Topics selected from: correlational analysis; analysis of variance; sampling in education research; chi square, t, and F distributions. Emphasis on statistical inference. Prerequisite: 25:180 or the equivalent.

25:282. Psychodynamics I-3 hrs.

Standardization, crossvalidation, administration, scoring, and elementary interpretation of: Stanford-Binet Scale, Wechsler Preschool and Primary Scale, Wechsler Intelligence Scale for Children, Wechsler Adult Intelligence Scale.

25:283. Psychodynamics II-3 hrs.

Assessment of quantitative and qualitative potentialities of basic IQ tests (Stanford-Binet and Wechsler instruments), and use of projective instruments (House-Tree-Person test, TAT, CAT, Rorschach) to complement findings from conventional cognitive measures.

25:284. Psychodynamics III-3 hrs.

Use of test studies to understand behavioral styles of individual students; includes interpreting tests and observational data in discussion with parents and school and community personnel.

25:294. Educational Research - 3 hrs.

Methods and evaluation of educational research. Individual exploration of a possible thesis or research project in cooperation with student's adviser or director of the study.

Library Science

E. Martin, Head. Adams, Hiland, McGrew.

LIBRARY SCIENCE MAJOR - TEACHING

This baccalaureate major is being phased out. No new declarations for this major have been accepted since May 31, 1970, and a B.A. degree with this major will not be awarded after August 31, 1975.

4,8	ded after rugust of 1770		
	Required: 35:113; 35:115; 35:118; 35:121; 35:190; 24:131;		
	35:132 or 35:134	22-23	hours
	Electives in Library Science or from the following:		
	24-135: 24:137: 21:145: 22:112: 22:130	4-3	hours

26 hours

LIBRARY SCIENCE MINOR-Teaching

Required: 35:110: 35:1	13; 35:115; 35:118; 35:121; 35:132 or 35:134;	
24:131	22 hou	rs

LIBRARY SCIENCE-Teaching Endorsement

Students who already hold a valid Iowa certificate may earn an Endorsement in Library Science for Teacher Certification in Iowa without completing either a graduate or undergraduate major in Library Science upon the successful completion of the following courses: (This may be a combination of graduate and undergraduate credit.)

Required: 35:110; 35:113; 35:115; 35:118; 35:121;	
35:225: 24:131	S
Required: 35:132 or 35:134; and 27:220 or 27:227	S
30 hour	

35:010. Library Orientation-1 hr.

Practical working knowledge of the library and its resources.

35:110(g). Introduction to Librarianship -2 hrs.

Survey of history and development of libraries, administration and services of all types of libraries, library professional organizations and literature of librarianship.

35:113(g). Media Selection - 3 hrs.

Selection of many types of media, based on fundamental principles and objectives. Development of skill in using reliable selection aids and evaluating materials.

35:115(g), Cataloging and Classification -3 hrs.

35:118(g). Basic References-3 hrs.

Basic reference books and sources. Prerequisite: 35:113 or consent of instructor.

35:121(g). Introduction to the Instructional Materials Center - 4 hrs.

An examination of what constitutes the services and program of the instructional materials center.

35:132(g). Library Materials for Children -4 hrs.

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.

35:134(g). High School Library Materials -4 hrs.

Selection and evaluation of materials for junior and senior high school students. Reading interests, habits, and needs of young people.

35:190(g). Teaching the Use of Libraries -3 hrs.

Credit also as a course in education for a student whose major is library science. Methods course for library science majors and minors.

35:223. Readers' Services - 3 hrs.

Survey of services available to the patrons of an instructional materials center, and techniques used in interpreting services to the patron. Prerequisite: 35:118.

35:225. Administration of the Instructional Materials Center - 3 hrs.

Special problems in organization and administration of instructional materials centers. Prerequisite: 35:113; 35:121; and at least one other library science course.

35:234. History of Books-2 hrs.

Development of the book in various forms. History of the alphabet and writing; early writing materials; development of printing; and book publishing.

35:235. Imaginative Materials - 3 hrs.

Survey of novels, short stories, poetry and drama read in junior and senior high school. Prerequisite: 35:113 or consent of the instructor.

35:236. History of Children's Literature -3 hrs.

Traces development of literature for children. Emphasis on significant authors, illustrators, and titles. Prerequisite: 35:132 or consent of instructor.

35:285. Individualized Readings - 1-3 hrs.

Directed study of specific issue or problem based on student's need or aspirations. Prerequisite: consent of department head.

35:289. Seminar in Librarianship - 2-3 hrs.

Critical assessment of the elements of school library service at the building and system levels. Prerequisite: 35:125 or consent of instructor.

35:290. Practicum in School Librarianship-1-4 hrs.

Experience in the function and services of the instructional materials center. Prerequisite: consent of the department head.



Physical Education

HEALTH EDUCATION MAJOR – TEACHING

This major is under the joint jurisdiction of the Departments of Physical Education for Men and Physical Education for Women, and is open to all students.

Required: 31:035; 37:010; 37:015; 37:110; 37:113; 37:115; Electives as approved by the appropriate department from a selected list in which two courses must be chosen from 50 hours

PHYSICAL EDUCATION MAJOR: Recreation Emphasis

This major is under the joint jurisdiction of the Departments of Physical Education for Men and Physical Education for Women, and is open to all students.

Required for men: 37:060; 37:010; 37:015; 37:113; 37:131; 37:132; 37:138; 38:004; 38:006; 38:008; 38:009; 38:012; 38:016 or

Required for women: 39:080; 37:010; 37:015; 37:113; 37:131; 37:132; 37:138; 4 hours (to include at least two team sports) from 39:003, 39:021, 39:022, 39:024, 39:025, 39:026, 39:029, 39:032; one hour from 39:023, 39:027, 39:003 (Square Dance and

Electives (for both men and women): at least two courses from 19-20 hours the following three groups for a total of Group I: (for men) 30:030; 37:152; 37:155; 38:150; 84:138

(for women) 30:030; 37:152; 37:155; 37:050; 37:151; 84:138 Group II: 24:131; 21:145; 50:030; 50:130; 50:139; 50:154; 60:050; 60:080; 60:055

Group III: 20:140; 20:142; 98:058; 98:060; 98:110; 98:144

45 hours

COURSES OFFERED TO BOTH MEN AND WOMEN

All students taking a PE activity course must wear the uniform or apparel which has been approved by the department.

37:001 or 37:003. Physical Education - 1 hr. Games, recreational games, beginning folk dance, intermediate folk dance, advanced folk dance, American country dance, modern dance.

37:010. First Aid to the Injured - 2 hrs. Combined Standard and Advanced Red Cross course. Leads to certificates.

37:011. Water Safety-1 hr. Leads to American Red Cross Water Safety Instructor's certificate. Prerequisite: current Red Cross Life Saving certificate.

37:013. Physical Education for the Elementary Grades - 2 hrs.

No credit for a student with credit in 39:014 or 37:014. Teaching methods and experience in activities, 3 periods. Prerequisite: sophomore standing.

37:014. Activities in the Elementary School -2 hrs.

No credit for a student with credit in 37:013, Materials, methods, and participation. Discussion, 1 period; lab., 2 periods. Prerequisite: sophomore standing.

37:015. Personal Health - 2 hrs.

Designed to develop the understandings, attitudes, and practices which contribute to better individual health.

37:018. Participation with Children-1 hr.

Experiences in working with elementary children in activities of a physical nature. Prerequisite or corequisite: 37:014.

37:050. Anatomy - 3 hrs.

Gross anatomy of the osseous and muscular system; joint structure. Prerequisite: 84:024. No credit for a student with credit in 38:150.

37:060. Introduction to Health, Physical Education and Recreation -2 hrs.

History, philosophy, trends, issues, and opportunities in the health, physical education, and recreation professions.

37:110. Health Instruction -2 hrs.

Methods of health instruction through the health examination; health needs of the individual child; hygiene of the environment; cooperation of the home and community; evaluation of literature and devices of health instruction. Prerequisite: 37:015. No credit for person with credit in 37:141.

37:113(g). Community Health-2 hrs.

Study of community health problems such as disease control, water supply, sewage disposal, etc. The role of the community school health council.

37:115. Curricular Materials in Health Education - 2 hrs.

The evaluation, selection, and development of materials in school health as they relate to specific methods.

37:117(g). Administration of School Health -3 hrs.

An overview of the school health program to acquaint the student with concepts, policies, and practices of administration necessary for organization and maintenance of healthful school living, health instruction, and health services in the school and for the school and community to work together.

37:131. Recreational Leadership—2 hrs. Principles and problems. Program materials.

37:132(g). Community Recreation and the School - 2 hrs.

Development of school-community programs. Problems of leadership, facilities, and organization.

37:135. Activities in the Elementary School II

Designed for the individual with special interest in elementary physical education. Program building and organization. Also concerned with activities and materials not included in 37:014. Prerequisite: 37:013 or 37:014.

37:138. Field Work in Recreation -4 hrs.

Field experience to learn full role and meaning of being a recreational leader. May be repeated for a total of 8 hours. Prerequisite: 37:131 and approval of head of appropriate department of physical education.

37:141. Health Instruction in the Elementary School - 2 hrs.

Consideration of concepts upon which an effective elementary program is structured. Identification of instructional techniques and materials and the function of the teacher in the elementary program. No credit for the person with credit in 37:110. Prerequisite: 37:015.

37:151(g). Kinesiology - 3 hrs.

Application of principles of mechanics to body movement. No credit for a student with credit in 38:150. Prerequisite: 37:050.

37:152(g). Adapted Physical Education – 3 hrs. Recognition of postural deviations; individual and group screening techniques; exercises for specific body parts; understanding specific disabilities; and the modification of physical education activities to meet limitations found in school population. 4 periods. Prerequisites: 37:050; 37:151; 84:138.

37:153(g). Physiology of Exercise - 2 hrs. Effects of exercise upon the organic functions of the body. Prerequisite: 37:050, 37:151, or equivalent, and 84:138.

37:155(g). Physical Education for the Mentally Retarded - 2 hrs.

The role of physical activity in the education of the mentally retarded. Problems in motor development peculiar to this group and techniques for working with them. Programs of activity and their organization.

37:174. Testing in Physical Education - 2 hrs. Credit also as a course in education for a student whose major is Physical Education.

37:176. Organization and Administration of Physical Education - 2 hrs.

School and community relationships; budget, supervisory problems. Administration of programs, facilities, curriculum problems.

37:181(g). History and Philosophy of Dance -2 hrs.

From primitive ritual to the art forms of the twentieth century.

37:182(g). Developmental Aspects of Movement Performance - 2 hrs.

How motor skills change with time; nature of factors effecting change; relationship of motor development to total human development; principles of motor development related to teaching of motor skills.

37:183. History and Principles of Physical Education - 2 hrs.

Physical education in ancient and modern times. Principles basic to program development in elementary and secondary schools. No credit for person with credit in 37:190.

37:190. Methods and Principles of Physical Education - 3 hrs.

Credit as a course in education for a student whose major is Physical Education. No credit for person with credit in 39:191 or 37:183.

37:198. Independent Study.

See pp. 58 and 76.

37:251. Advanced Kinesiology - 3 hrs.

Analysis of motion with special emphasis upon application of mechanical and anatomical principles in the performance of physical activities. Relates laws of physics and develops principles from these laws that explain fundamental movements that are successful to various techniques. Prerequisite: 37:050 and 37:151, or 38:150.

37:253. Advanced Exercise Physiology - 3 hrs.

Process of scientific inquiry into exercise physiology and the identification of basic principles to be applied for maximum performance without injury. Discussion, 2 periods; lab., 2 periods.

37:273. Physical Education in the Public Schools – 3 hrs.

Principles, movements, leaders, trends, purposes, methods, and techniques of structuring the school program in physical education.

37:274. Measurement and Evaluation in Physical Education — 3 hrs.

Historical background of measurement in physical education; evaluation as a part of teaching; statistical techniques; construction and use of motor and knowledge tests; criteria for test selection; administering a testing program; interpretation and use of test results. Prerequisite: 25:180 or 80:172.

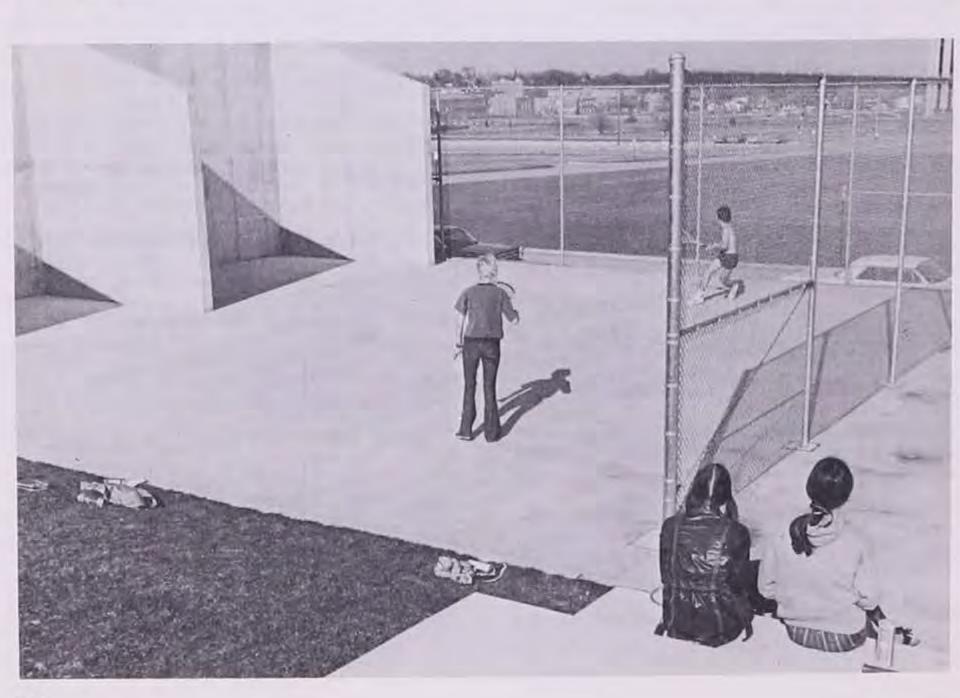
37:276. Supervision of Physical Education —2 hrs.

Analysis of current supervisory practices and problems of teaching in physical education. Prerequisite: 27:141.

37:280. Physical Education Seminar - 1-3 hrs.

One section may be drawn each session from (1) health problems, (2) problems of facilities and equipment, (3) problems of teaching, and (4) motor learning. May be repeated for a maximum of 7 hours of credit. Prerequisite: departmental approval.

37:299. Research.



Physical Education for Men

Thrall, Head. J. Anderson, Berry, Boals, Erusha, E. Green, K. Green, Henry, Hogeland, Jennett, Kortemeyer, Patten, Remmert, Schwarzenbach, Sheriff, Stych.

A student who desires to coach either intramural or interscholastic athletics must be approved for certification. The minimum requirement is a minor in coaching, and the recommendation of the university.

All men students are required to take from 2 to 4 hours of 38:001. Men may use only one semester hour credit in courses open to both men and women in fulfilling the 38:001 requirements.

Not more than 4 hours of physical education activity credit will apply toward graduation requirements. Only one hour of activity credit may be earned each semester, although a student may take more than one course. The registration card must indicate the course in which credit is desired.

PHYSICAL EDUCATION FOR MEN MAJOR-TEACHING

48 hours

PHYSICAL EDUCATION AND HEALTH FOR MEN-TEACHING

The Physical Education and Health Major-Teaching should also complete a minor for placement purposes.

49 hours

HEALTH EDUCATION FOR MEN MINOR - Teaching

This minor may not be used as first minor by a Physical Education for Men Major. Required: 37:010; 37:015; 37:110; 37:113; 37:115; 37:117;

24 hours

ATHLETIC TRAINING MINOR

27 hours

COACHING MINOR-Teaching

This minor carries certification to coach for grades 7-12. It does not qualify the student for certification to teach physical education.

20 hours

The student should have a directed or supervised laboratory experience in coaching; ordinarily this would be done during the time of student teaching.

PHYSICAL EDUCATION FOR MEN SUBJECT FIELD— Junior High School Major

Students declaring this subject field will have the requirements of the physical education major modified to suit the individual student. The department will prepare upon request the individual program and provide copies for the student, his adviser, and the Registrar.

38:001. Physical Education.

Work in 38:001 is required of all men students and may be selected from a variety of activities as listed in the Schedule of Classes.

38:004. Minor Team Sports-1 hr.

Team activities for junior and senior high schools, physical education and recreational programs, 2 periods.

38:006. Minor Individual Sports-1 hr.

Individual activities for junior and senior high schools, physical education and recreational programs. 2 periods.

38:008. Coaching Activities 1-1 hr.

Development of fundamental skills and instructional techniques in tennis, basketball and track and field. 2 periods. 38:009. Coaching Activities II-1 hr.

Development of fundamental skills and instructional techniques in golf, wrestling, and weight training. 2 periods.

38:010. Coaching Activities III-1 hr.

Development of fundamental skills and instructional techniques in baseball and football. 2 periods.

38:012. Rhythmic Activities-1 hr.

For elementary, junior, and senior high school, 2 periods.

38:015. Gymnastics-1 hr.

Elementary exercises on bars, horse, mats, and other apparatus. 2 periods.

38:016. Swimming -1 hr.

Teaching swimming and diving. Opportunity for Red Cross Senior Life Saving Certificate. Prerequisite: ability to swim. 2 periods.

38:101. Football - 3 hrs.

Individual and team offense and defense. 4 periods. Prerequisite: 38:010.

38:102. Basketball - 3 hrs.

Fundamentals of offensive and defensive tactics with individual and team formations, 4 periods. Prerequisite: 38:008.

38:103. Baseball - 2 hrs.

Fundamentals, individual position play, offensive and defensive team strategy and management. 3 periods. Prerequisite: 38:010.

38:104. Track and Field-2 hrs.

Rules and techniques in standard track events. Demonstration and coaching of each event required. Meet management stressed. 3 periods. Prerequisite: 38:008.

38:114. Sports Officiating -2 hrs.

Rule interpretation and mechanics of officiating for football, basketball, baseball, and wrestling. Discussion, 1 period; lab., 2 periods.

38:115(g). Care and Prevention of Athletic Injuries I-2 hrs.

Demonstration and work in the prevention and treatment of athletic injuries; diet, care of equipment, physiotherapy.

38:116(g). Care and Prevention of Athletic Injuries II – 3 hrs.

Continuation of 38:115. Prerequisite: 38:115 and instructor's approval.

38:125. Wrestling -2 hrs.

Fundamentals, elementary and advanced skills, conditioning, strategy, and administration of wrestling. 3 periods. Prerequisite: 38:009.

38:150(g). Anatomy and Kinesiology - 3 hrs.

Attention to the skeleton, the muscular system, and to joint construction. Application to analysis of skills and techniques used in teaching physical education. No credit for a student with credit in 37:50 or 37:151.

38:155(g). Conditioning Theory and Practice - 2 hrs.

Theory and practice in the training and conditioning of athletes. 2 periods.

38:160(g). Advanced Sports Theory -2 hrs.

Advanced methods courses on coaching concepts in specific sports: (1) baseball, (2) basketball, (3) football, (4) gymnastics, (5) swimming, (6) track, (7) wrestling. May be repeated for a maximum of six (6) hours of credit. Prerequisite: department head approval for undergraduates.

38:171(g). Curriculum of Physical Education for Boys-2 hrs.

Experience in building a curriculum in physical education for junior and senior high school boys.

38:172. Group Leadership-1 hr.

Group leadership of different activities. Prerequisite, or corequisite: 37:190.

38:175(g). Organization and Administration of Competitive Sports-3 hrs.

A study of the organization, administration, and management of interscholastic, inter-collegiate, and intramural sports programs.



Physical Education for Women

McFee, Head. Beitel, Cathey, Crawford, Darling, Ferguson, W. Green, Huddleston, Mertesdorf, Moon, Poe, J. Potter, Ramsay, Sevy, Swanson, *Winsberg, Yager.

*on leave

NOTE: Except for students majoring or minoring in Physical Education for Women, only one hour of activity credit may be earned each semester although a student may take more than one course in a semester.

PHYSICAL EDUCATION FOR WOMEN MAJOR-TEACHING

Required: 37:014; 37:015; 37:050; 37:110; 37:151; 37:152;	
37:174; 37:176; 37:183; 29:080; 39:191; 39:193;	
84:138; and 84:025 or 86:044 or 88:052 or 99:011	35-36 hours
Required activities: 39:021 through 39:034	13 hours
Electives and emphasis*	
	54 hours

^{*}Emphases available in swimming, dance, elementary, sports, and generalist.

PHYSICAL EDUCATION FOR WOMEN MINOR-Teaching

R	equired: 39:191; 39:193; 37:1838 he	ours
R	equired: 39:021; 39:022; 39:023; 39:024; 39:027; 39:030;	
	39:032; 39:034	iours
E	lectives: 6 hours from: 37:010; 37:013 or 37:014; 37:015;	
	37:110; 37:151; 37:152; 37:153; 37:155; 37:174; 37:176	iours
	22 h	ours

PHYSICAL EDUCATION FOR WOMEN MINOR

quired activities: from 39:021 through 39:039	.8-10 hours
alth and Safety from: 37:010; 37:011; 37:015; 37:113	
quired from 37:013; 37:050; 37:131; 37:132; 37:151; 37:181;	
39:131; 39:194; 84:138	. 8-10 hours
_	22 hours

PHYSICAL EDUCATION MINOR-Elementary Teaching

Required: 3/:015; 3/:115 or 3/:141; 3/:135 or 3/:182; 39:023;	
39:028; 39:030; 39:037	ours
Electives from: 37:018; 37:050; 37:115 or 37:141; 37:135 or	
37:182; 39:029; 39:034; 82:120; 82:122; 84:138	ours
18 h	ours

This minor is open to both men and women.

HEALTH MINOR-Teaching

Required: 20:118; 37:010; 37:015; 37:110; 37:113; 37:115; 37:117	rs
Electives: 22:150; 31:030; 98:105 or 31:152; 84:138; 84:033 or	
84:151; 84:140; 99:011	

HEALTH MINOR

Required: 20:118; 31:030 or 31:035; 37:010; 37:015; 37:113; 84:138;	
84:033 or 84:151	
Electives: 22:150; 98:105 or 31:152; 84:140; 99:011	hours
20	hours

DANCE MINOR - Teaching and Liberal Arts

Required activities: 39:023; 39:027; 39:035; *39:037; *39:111	5 hours
Required: 37:181; 39:125; 39:193; 37:198; 50:023	12-13 hours
Electives: 4 or 5 hours from:	
50:034; 50:130 or 62:070; 24:131 or 24:137; 60:001 or 60:003	
or 60:095 or 60:141; 52:020 or 54:xxx(Applied Music)	4-5 hours
	22 Hours

^{*}Student may test out of these courses.

Required 37:198 must be relevant to dance minor.

PHYSICAL EDUCATION FOR WOMEN SUBJECT FIELD— Junior High School Major

Required activities: 39:022; 39:023; 39:027; 39:028; 39:029;	
39:030; 39:034; 39:003(Softball)	hours
Health and First Aid: (choose two) 37:010; 37:015; 37:110	
Required theory and sciences: 37:014; 37:050; 37:151;	
39:191; 39:193	
Electives: 37:174; 37:176; 37:183; 39:194; 84:138	hours
3(hours

It is recommended that the student confer with the head of the Department of Physical Education for Women in selecting activities, and that an outlined program be prepared for the student, her adviser, the department, and the Registrar.

39:001. Physical Education -1 hr.

3 class periods. An activity in conjunction with work in basic physical education concerned with total fitness, indidivual problems, daily living skills, and the values inherent in physical activity.

39:002. Physical Education - 1 hr.

3 class periods. An activity in conjunction with work in basic physical education concerned with principles of movement and the development of awareness of the qualities involved in efficient movement.

39:003. Physical Education -1 hr.

2 class periods. Physical education activities (two 9-week periods). (Some of these sections will be offered as 37:3.)

Following courses primarily for physical education majors, minors, subject fields. Beginning, intermediate, advanced activities:

39:021. Archery-Badminton-1 hr.

39:022. Basketball-Volleyball - 1 hr.

39:023. Folk Dance-1 hr.

39:024. Golf-1 hr.

39:025. Gymnastics-1 hr.

39:026. Hockey - 1 hr.

39:027. Modern Dance-1 hr.

39:028. Movement Fundamentals-1 hr.

39:029. Soccer-Speedball - 1 hr.

39:031. Swimming - 1 hr.

39:032. Tennis-1 hr.

Following two courses primarily for majors, minors, subject fields. Combination of activity fundamentals and organization of materials for teaching.

39:030. Stunts-Tumbling -1 hr.

39:034. Track and Field-1 hr.

39:035. Advanced Modern Dance-Advanced Folk Dance-I hr.

39:036. Officiating and/or Assisting - 1 hr.
Primarily for majors, minors, subject field.
May be repeated for a maximum of four hours credit.

39:037. Fundamentals of Rhythm-1 hr.
Basic experience within the structure of music and rhythmic response. For students with little experience in either area.

39:038. Advanced Swimming — Speed Swimming — 1 hr.

39:039. Conditioning and Massage - 1 hr.
Primarily for majors, minors, subject fields.
Conditioning; prevention, recognition, care of athletic injuries; basic techniques of massage.

39:080. Introduction to Physical Education -1 hr.

Orientation to the fundamentals of movement education and physical education as a profession. Meets 1 hour weekly.

39:111. Rhythmic Form and Analysis – 1 hr. Planned to reinforce understandings of structure of rhythmic patterns in music and in movement. For individual with experience in both areas.

39:112(g). Sports Techniques - 2 hrs.

Experience in analysis of skill, elementary strategy, and problems of teaching specific team and individual sports. For the teacher in the field. Two or more sports included each session. Offered summer only. May be repeated once for credit.

Following technique courses primarily for majors, minors, subject fields. Provide opportunities for improving personal skill and indepth understanding of the sport as a student and prospective teacher.

39:113. Techniques: Aquatics-1 hr.

39:114. Techniques: Archery - Badminton -1 hr.

39:115. Techniques: Basketball - Volleyball 1 hr.

39:116. Techniques: Golf - Tennis-1 hr.

39:117. Techniques: Hockey - Soccer-1 hr.

39:118. Techniques: Recreational Games - Softball - 1 hr.

39:125.(g). Educational Dance-2 hrs.

Place of dance in the school curriculum; relationships, progressions, and curriculum building, Prerequisite: 39:193.

39:131. Camp Leadership-3 hrs.

The camping movement. Leadership techniques and laboratory experience. Discussion, 2 periods; lab., 2 periods.

39:191. Methods and Materials in Physical Education - 3 hrs.

Credit as a course in education for a student whose major is physical education. 4 periods. Prerequisite: 6 hours in sports activities. No credit for students with credit in 37:190.

39:193. Methods in Dance - 3 hrs.

Methods and materials in the elementary and secondary school. 4 periods.

39:194. Teaching of Swimming and Aquatics -2 hrs.

Prerequisite: Lifesaving or approved equivalent. 3 periods.



School Administration and Personnel Services

D. Hanson, Head. Brimm, Frank, Funke, Kimball, McCumsey, A. Smith, Truesdell.

SCHOOL ADMINISTRATION AND HIGHER EDUCATION.

27:102(g). Introduction to Educational Administration - 2 hrs.

Introduction to the administration of schools in the United States.

27:141(g). Instructional Leadership-3 hrs.

Techniques for teacher improvement in the elementary and secondary schools. Before enrolling in this course the student should have had teaching experience.

27:198. Independent Study.

27:204. School and Community Relations -3 hrs.

27:210. School Personnel Administration -3 hrs.

Teacher selection and placement, promotion, tenure, and retirement; administration of pupil personnel facilitating services. Prerequisite: 27:102.

27:212. Supervision of the Elementary School -2 hrs.

Prerequisite: 27:141.

27:220. Curriculum Development in the Elementary School - 3 hrs.

27:221. Administration of the Elementary School - 3 hrs.

Prerequisite: one year of teaching experience and departmental approval. Should have had 27:102 and course work in elementary education.

27:226. Supervision of the Secondary School -2 hrs.

Prerequisite: 27:141.

27:227. Curriculum Development in the Secondary School - 3 hrs.

27:228. Administration of the Secondary School – 3 hrs.

Prerequisite: one year of teaching experience and departmental approval. Should have had 27:102.

27:230. School Laws-2 hrs.

Legal structure for education; powers and duties of boards of education; rights and responsibilities of school personnel; rights of parents and students; and related topics. Emphasis on judicial decisions and common law with practical application for school personnel.

27:240. School Finance - 3 hrs.

Financial support for education, business administration, and budgeting. Prerequisite: 27:102.

27:241. School Buildings and Sites-2 hrs.

Problems of school building planning, operation, and maintenance. Prerequisite: 27:102.

27:250. Teaching in College - 3 hrs.

Methods and materials of college teaching to help the college instructor become a better teacher. Useful to junior and senior college personnel.

27:252. Current Issues in Higher Education —3 hrs.

A seminar-type course organized around the major issues confronting vocational-technical schools, community colleges, senior colleges, and universities in contemporary society.

27:260. History and Philosophy of Higher Education — 3 hrs.

Overview of the historical development, issues, philosophies, and cultural backgrounds of higher education in America.

27:289. Seminar in Education - 2 hrs.

Seminars are offered on special topics as indicated in the schedule of classes.

27:290. Practicum in Education -2-4 hrs.

27:299. Research.

STUDENT PERSONNEL SERVICES

29:102(g). Introduction to Guidance and Counseling - 3 hrs.

29:104(g). Guidance in Elementary School -2 hrs.

29:110(g). Educational and Occupational Information - 2 hrs.

The orientation of guidance workers to the

needs of junior and senior high school students in investigating educational and occupational possibilities; the organization of occupational ideas and materials.

29:198. Independent Study.

29:203. Analysis of the Individual – 3 hrs. Prerequisite: 25:180; and 29:102 or 25:181.

29:205. Techniques of Counseling - 3 hrs. Prerequisite: 29:102.

29:207. Counseling Techniques with Children - 3 hrs.

This course will emphasize the specialized counseling and guidance approaches applicable to the elementary school child. The course will place prime emphasis on individual counseling of the elementary school child through the use of play media and verbal techniques. The course involves classroom lectures, assigned readings, classroom discussion and actual counseling experience under supervision. Prerequisite: 29:102 or 29:104 or permission of the instructor.

29:210. Organization and Administration of the Guidance Program-2 hrs.

Prerequisite: one year of teaching experience and departmental approval.

29:220. Group Procedure in Guidance and Counseling - 3 hrs.

Prerequisite: 29:205 or 29:207.

29:225. Vocational Development-2 hrs.

A course oriented toward the foundation of vocational development theory. Emphasis is placed on the significance of occupational preference and choice. The sociological, psychological, and economic determinants of choice will be examined. An awareness of the theoretical concepts of vocational choice will be stressed. Prerequisite: 29:102 or 29:104, and 29:110 or permission of instructor.

29:227. Counseling Theory and Methodology -3 hrs.

Theoretical approaches to counseling. Function and present status of counseling theory. A study of each of the predominant theories. Prerequisite: 29:207 or 29:205.

29:230. Student Personnel Programs in Higher Education — 3 hrs.

An introduction to the field of college student personnel services with applications of theory to practice.

29:235. Supervision of Counseling Services - 2 hrs.

Didactic instruction in the methods and techniques of counselor supervision. Approximately one-fourth of the course will be devoted to supervisory experience in the laboratory and in a regular school situation.

29:289. Seminar Student Personnel Services - 2 hrs.

Special topics as indicated in the schedule of classes.

29:290. Practicum in Student Personnel Services – 2 hrs.

Prerequisite: 29:205 or 29:207.

29:299. Research.



Teaching

Nielsen, Head. Ahrabi-Fard, Albrecht, Aldrich, F. Anderson, Andrews, Aurand, Bebb, *J. Becker, J. Beckman, Betterton, Boes, L. Brown, Bunting, K. Butzier, M. Butzier, Cacek, Charais, Darrow, J. Diamond, Doerzman, Doud, Jerry Duea, Joan Duea, Findlay, Finkelstein, Finsand, Fratianni, Geadelman, Gish, Gohman, Griffiths, Hale, Hantula, Harmon, Harper, Hawkes, Hohlfeld, Holt, Hornby, Immerzeel, Jackson, Kelly, Knuti, Kuehl, Lee, Lynch, Maricle, Mazula, J. McCumsey, McIntyre, Middleton, Mohn, P. Nelson, Parisho, Partridge, Paulson, Phillips, A. Potter, L. Potter, Powell, Price, Pries, Primrose, Redalen, Riechmann, Riess, Roberson, Roth, Schmitt, Schools, Schwandt, Scovel, Soy, Stahlhut, E. Strub, *R. Strub, Swan, Swartz, Swickard, Tarr, Teig, Tock, Vander Beek, Vargas, Vernon, Welch, *Wengert, Wiederanders, K. Williams, Wineke, Wolfe, Yoder.

*on leave

Completion of the present undergraduate teaching curriculum requires 8 semester hours of credit in student teaching. Student teaching credit earned in other colleges or universities does not meet the student teaching requirements of the University of Northern Iowa. A student who has completed 3 semester hours or more in student teaching in another college or university in the same area as his major at the University of Northern Iowa will be held for at least 4 semester hours of student teaching at this university. A student who completed either the old two-year curriculum or the two-year plan and desires to fulfill the teaching program requirements for a bachelor's degree is required to complete additional student teaching only if he majors in an area other than early childhood, lower, or upper elementary teaching.

Any student may elect more than the required eight hours of work in student teaching, but only twelve (12) hours of credit in student teaching may be applied toward the requirements for graduation. For the student who chooses to complete additional student teaching, an effort is made to provide specialized experiences most needed by the student, such as the teaching of reading, the preparation of instructional aids and materials, and the use of new instructional procedures and techniques. Approval of the Director of Student Teaching and the Registrar is required of any student seeking permission to take additional student teaching.

Undergraduates normally fulfill their student teaching requirements during their senior year although some juniors may be recommended for assignment.

Student teaching is offered in an 8-hour block requiring the full time of the student for a period of at least nine weeks (minimum of 320 clock hours). During the other half of the student teaching semester, the student will complete work remaining in professional education and other areas scheduled on a half-semester basis.

A student with a double major is urged to do some student teaching in both majors. Elementary majors who wish to major also in a subject for teaching at the secondary level are required to complete 8 hours of elementary student teaching and, in addition, 4 hours at the secondary level. A secondary double major (i.e. science and mathematics, etc.) is urged to complete some student teaching in both majors during the 8 hours of required student teaching. Special area majors (i.e., music, physical education, etc.) receive K-14 certification and must complete 8 hours in the special subject area with some student teaching experience at both elementary and secondary school levels. In the case of a double major, one being a special area, four (4) additional hours in the other major are strongly recommended.

Safety Education majors must complete a teaching minor and are urged to do some

student teaching in the minor in conjunction with the major student teaching assignment.

The primary purpose of student teaching is to provide the student opportunity to investigate in depth the full role and meaning of teaching in a real school setting. Specific emphasis is given to (1) the analysis of teaching and learning, (2) establishing the preconditions of learning, (3) the organization of instructional content, (4) adapting methods and techniques to organization and content, (5) the logical process of teaching, and (6) principles of self-evaluation. This broad pattern of experiences, provided in either the campus laboratory school or off-campus affiliated schools, includes planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program.

The scholarship average required before a student is permitted to register for student teaching is specified on p. 69 and is the same as that required for graduation (see p. 45). A student must also have been approved on a teacher-education program and must file application for student teaching no less than three months prior to the beginning of the semester in which the work is to be taken. Pertinent announcements are made through the university newspaper and bulletin board.

28:132. Early Childhood Teaching. Prerequisite: 20:014 and 20:016, 21:101.

28:134. Lower Elementary Teaching. Prerequisite: 20:014 and 20:016; 21:101.

28:135. Special Education Teaching. Limited to those who are approved for special education. Prerequisite: 20:014 and 20:016; 21:101.

28:136. Upper Elementary Teaching. Prerequisite: 20:014 and 20:016; 21:101.

28:137. Junior High School Teaching. 28:132. Early Childhood Teaching. Prerequisite: 20:014 and 20:016, 21:101.

28:134. Lower Elementary Teaching. Prerequisite: 20:014 and 20:016; 21:101.

28:135. Special Education Teaching.
Limited to those who are approved for special education. Prerequisite: 20:014 and 20:016; 21:101.

28:136. Upper Elementary Teaching. Prerequisite: 20:014 and 20:016; 21:101.

28:137. Junior High School Teaching.
Student should have completed the special methods course in his subject field before student teaching. Prerequisite: 20:014 and 20:016.

28:138. Secondary School Teaching.
Student should have completed the special methods course in his major field of preparation before student teaching. Prerequisite: 20:014 and 20:016.

28:139. Vocational-Technical Teaching.
Required to teach in area vocational schools and community colleges. Prerequisite: 20:014 and 20:016. Student should have completed special methods course in his major field.

28:140. Special Area Teaching (Art, Industrial Arts, Library Science, Librarian, ...

Music, and Physical Education).

Required to teach in kindergarten and grades

Required to teach in kindergarten and grades one through fourteen. Student should have completed special methods course in his major field. Prerequisite: 20:014 and 20:016.

28:150. Laboratory Practice-Elementary (*).

28:151. Laboratory Practice—Secondary (*).

(*) For experienced teachers (*elementary or secondary, as appropriate) who have not fulfilled the student teaching requirements for certification and to provide a depth in experience. Includes practice in modern teaching procedures, construction and use of classroom instructional materials, analysis of the teaching-learning process, meeting needs of exceptional children, classroom supervision, and school-parent relations. Special seminar arranged. Departmental recommendation and approval required.

28:250. Advanced Laboratory Practice -2-4 hrs.

Student may concentrate on any aspect of the school program, such as curriculum, methods, evaluation, remedial instruction, guidance, supervision, administration, public school relations, educational media and audio-visual aids, and extra-class activities. May be repeated for a total of 4 hours. Approval of Head of the Department of Teaching required.

College of Humanities and Fine Arts

There are seven instructional departments in the College of Humanities and Fine Arts. These are Art, English Language and Literature, Foreign Languages, Music, Philosophy and Religion, Speech, and Speech Pathology and Audiology. In addition to the seven departments, the division of Broadcasting Services is included in the collegiate organization and the director is responsible to the Dean of the College.

The college offers programs leading to the Bachelor of Arts degree and to the Bachelor of Music degree. There are graduate programs leading to the Master of Arts degree in all departments except Philosophy and Religion. Teaching majors and minors are available in all departments, except Philosophy and Religion where students may elect a Liberal Arts major.

The college administers an Interdisciplinary Program in Film including representatives from several departments within the college as well as personnel from other divisions throughout the university. Although there is no film major at the present time, it is possible for a student to take film courses offered in the Departments of Art, English Language and Literature, Foreign Languages, and Speech.

The College of Humanities and Fine Arts is also active in the Individual Studies Program and encourages interdisciplinary and experimental courses. One of the desires of the college is to appoint an artist in residence or a visiting lecturer who will function in a number of different departments to develop new study programs in the arts and humanities. The college is unique in the sense it accommodates work in the arts, humanities, as well as the sciences. The Department of Speech Pathology and Audiology, the newest department in the college, is heavily oriented to science yet maintains a distinct humanistic dimension in its clinical service to the university and community. The members of this department as well as the other departments of the college are also involved in research and scholarship.

The College of Humanities and Fine Arts states the following three objectives and goals:

- To provide students with professional training in the arts and suggest career opportunities for them to pursue.
- To provide students with a broad liberal arts education through appropriate general education and elective courses.
- To provide cultural opportunities for the university community and surrounding region.

Graduates from the College of Humanities and Fine Arts may participate in a number of diverse vocations and experience wide-ranging career opportunities. Some of the careers, in addition to teaching, which are available in most departments are: journalism, communication media, professional careers in music, community and regional theater, clinical careers in speech pathology and audiology, translators through work in the department of Foreign Languages, careers in art galleries and museums, and many other possible combinations of work in the arts and humanities. Departmental offices are excellent sources of information about careers.

The College of Humanities and Fine Arts is making every effort to realize its goals and objectives by relating its studies and career opportunities to the needs of modern civilization.

Art

Lash, Head. Behrens, Berger, J. Brown, Campbell, Carter, Cronin, Delafield, Echeverria, Finegan, Gogel, Guillaume, Harris, Haupt, Henderson, Herrold, Holzaepfel, Jennings, Kao, *Olds, Page, Shickman, Siddens.

*on leave

ART MAJOR - TEACHING

Required: 60:001; 60:003; 60:005; 60:095; 60:195	ırs
Required: art history electives*8 hou	urs
Required: at least four of the following: 60:018; 60:031 or	
60:032 or 60:035; 60:034; 60:037; 60:050; 60:055; 60:074	
or 60:075; 60:080	urs
Electives in art**	
50 hou	urs

Note: 60:005 should be scheduled prior to studio courses.

*60:040 highly recommended.

**65:143 recommended for elective.

60:001, 60:003, and 60:005 should be taken by art majors during the first year.

60:195 and 28:140 may not be taken during the same semester.

Each student is required to demonstrate competence in art by his junior year.

An art major may elect an emphasis in art history, ceramics, crafts, design, drawing, metal work, painting, photography, printmaking, or sculpture. A minimum of 9 hours should be completed in one area.

ART MAJOR

Required: 60:001; 60:003; 60:005	11 h	ours
Required: art history electives*		
Required: at least one of the following: 60:018; 60:031;		
60:032; 60:034; 60:080	3 h	ours
Required: at least one of the following: 60:035; 60:037;		
60:050; 60:055; 60:074; 60:075	3 h	ours
Additional electives in art, excluding 60:021; 60:095; 60:195		
	37 h	ours

Note: 60:005 should be scheduled prior to studio courses.

*60:040 highly recommended.

60:001, 60:003, and 60:005 should be taken by art majors during the first year.

An art major may select an emphasis in art, history, ceramics, crafts, design, drawing, metalwork, painting, photography, printmaking, or sculpture. A minimum of 9 hours should be completed in one area.

Each student is required to demonstrate competence in art by his junior year.

ART MINOR - Teaching and Liberal Arts

Note: 60:005 should be scheduled prior to studio courses.

60:040 highly recommended for elective.

ART SUBJECT FIELD-Junior High School Major

Note: 60:005 should be taken prior to studio courses.

60:040 recommended for elective.

60:001. The Visual World-3 hrs.

Introduction into the visual world, the world of art. Seeing, learning, doing with a team of teachers. Emphasis on the contemporary. 6 periods.

60:003. The Visual Arts: Current Trends - 2 hrs.

Concepts and modes of expression in contemporary art since 1945. Informal lecture with group project participation. 2 periods. Not for art history credit.

60:005. The Visual Process: Seeing Into Doing - 6 hrs.

For art majors and minors only. Greater emphasis on individual search, process, change. 12 periods. Prerequisites: 60:001; 60:003.

60:018. Drawing - 3 hrs.

Emphasis on growth in perception of visual form, Range of materials and subject matter. 6 periods.

60:021. Exploring Art - 3 hrs.

Experience with a variety of materials with implications for their adaption on the elementary school level. 6 periods. Prerequisite: 60:001.

60:031. Visual Design - 3 hrs.

Establishing understanding and application to the problems of communication through design. 6 periods.

60:032. Creative Photography - 3 hrs.

Heightening preceptual and conceptual awareness through the intermediacy of the camera and photosensitive emulsions. 6 periods.

60:034. Printmaking - 3 hrs.

Woodcuts, etchings, serigraphs, lithographs, and collographs. 6 periods.

60:035. Product Design - 3 hrs.

The application of aesthetics to the problems of useful objects. 6 periods.

60:037. Sculpture - 3 hrs.

Three dimensional materials with emphasis on modeling, carving, and casting plaster and concrete. 6 periods.

60:040. Survey of Art History - 5 hrs.

An introduction to the History of Architecture, Painting, Sculpture and minor arts.

60:050. Ceramics - 3 hrs.

Ceramic materials, design, forming, glazing, and firing, 6 periods.

60:055. General Crafts-3 hrs.

Textile design (loom weaving and printing), and work in other craft areas. 6 periods,

60:060. Film - 1-5 hrs.

An introduction to film: understanding the character and potential of film through film making.

60:074. Jewelry and Metalwork-3 hrs.

Forming, joining, decorating, and combining precious and non-precious metals with other materials. 6 periods.

60:075. Metalsmithing - 3 hrs.

Designing and forming metal objects by forging, 6 periods.

60:080. Painting - 3 hrs.

Experience in various painting media. 6 periods.

60:095. Philosophy and Materials of Art Education - 4 hrs.

Study of the philosophy, materials, and facilities of art education on the elementary and secondary school level. 8 periods. 3 hours will count as education.

60:111(g). Life Drawing - 3 hrs.

Drawing from the model using a variety of media. 6 periods.

*60:118(g). Advanced Drawing-1-8 hrs.

Credit to be determined at time of registration. May be repeated for credit.

*60:131(g). Advanced Design—1-8 hrs.

Credit to be determined at time of registration. May be repeated for credit. 1.

Visual Design; 2. Product Design; 3. Environmental Design; 4. Photography; 5. History and Theory of Design.

*60:134(g). Advanced Printmaking – 1-8 hrs. Credit to be determined at time of registration. May be repeated for credit.

*60:137(g) Advanced Sculpture - 1-8 hrs.

Credit to be determined at time of registration. May be repeated for credit.

60:141(g). Art History - 3 hrs.

May be repeated for credit but not in the same section. Students may select from the following sections: 1. Medieval; 2. Northern Renaissance; 3. Indian; 4. Japanese; 5. Ancient Orient; 6. Classical Ancient; 7. Chinese.

60:142(g). Italian Renaissance Art - 3 hrs. History of 14th, 15th, and 16th century Italian art.

60:144(g). Baroque and Rococo – 3 hrs. History of Baroque and Rococo art 17th and 18th century Europe.

60:146(g). 19th Century European Art
-3 hrs.

Napoleonic art to Art Nouveau.

60:147(g). Oriental Art-3 hrs.
Introduction to the arts of India, Southeast Asia, China and Japan.

60:148(g). Contemporary Art History
-3 hrs.

Studies in the nature and role of contemporary art.

*60:150(g). Advanced Ceramics — 1-8 hrs.

Credit to be determined at time of registration. May be repeated for credit.

*60:156(g). Advanced Crafts-1-8 hrs.

Credit to be determined at time of registration. May be repeated for credit.

*First registration for 3 hours only.

60:160(g). Puppetry - 3 hrs.

Design, construction, manipulation, and staging of puppets and marionettes. 6 periods.

*60:170(g). Advanced Metalwork-1-8 hrs. Credit to be determined at time of registration. May be repeated for credit.

*60:180(g). Advanced Painting -1-8 hrs.

Credit to be determined at time of registration. May be repeated for credit.

60:195(g). Artist-Teacher Seminar – 2 hrs. Evolution of contemporary art education philosophy and the dynamic role of the twentieth century artist-teacher. Place of the artist-teacher in society and in the community. Art demands of our present culture and implications for the art education program in terms of methods and materials. Prerequisite: 60:095.

60:198. Independent Study. See pp. 58 and 76.

60:275. Art Projects - 2-8 hrs.

Credit to be determined at time of registration. May be repeated for credit. Prerequisite: approval of graduate adviser. I. Drawing, 2. Ceramics, 3. Painting, 4. Printmaking, 5. Sculpture, 6. Crafts, 7. Metalwork, 8. Design.

60:292. Research and Bibliography
- 3 hrs.

60:293. Research in Art History -1-5 hrs.

May be repeated for credit. Prerequisite: 6 hours of Art History or proficiency and department approval.

60:295. Seminar in Teaching Art - 3 hrs.

Specific art education relating to public schools with emphasis upon continuity of art activity. Satisfies the special methods elective for the professional core.

60:296. The Supervision of Art - 3 hrs.
Teaching problems and practices relating to the curriculum and the supervision of art.

60:297. Practicum.

60:299. Research.

^{*}First registration for 3 hours only.

English Language and Literature

Cahill, Head. Baughman, Brooks, Callison, Cawelti, Day, DeHoff, C. Eblen, Ford, Forest, Gish, R. Goodman, Guenther, A. Hanson, Hearst, Hiduke, Hieke, *G. Hovet, T. Hovet, Hubly, Jewell, *V. Johnson, Kalmar, Klinkowitz, LaRocque, Lounsberry, McKean, Meade, L. Rackstraw, *R. Rackstraw, Rapinchuk, Remington, *Schmidt, F. Smith, L. Taylor, Tharp, R. Ward, Wheeler, R. Wilson, E. Wood.

*on leave

At least one semester before the degree is conferred, all candidates for degrees in English must demonstrate a basic competence in a foreign language. This requirement may be met in one of two ways: either by obtaining at least a C grade in the second semester of a language course at this university (or its equivalent at another institution) or by passing a proficiency examination. This requirement does not apply to a student whose native language is other than English.

ENGLISH MAJOR-TEACHING

Required: 62:034; 62:190
Required: two of the following: 62:002; 62:003; 62:004;
62:103; 66:040 6 hours
Required: a course in American literature before WWI; a course
in British literature before WWI; a course in literature
other than British and American
Required: 62:162 or 63:125; and one of the following: 62:166*;
62:184; 63:141*; 63:144; 63:147
Electives in English
42 hours
(*Especially recommended for this major.)
23:130(g), Problems in Reading in Secondary Schools, may be taken

for credit on this major.

ENGLISH MAJOR

Required: 62:034; at least one course in writing and one	
course in linguistics	9 hours
Electives in English	3 hours
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ENGLISH AS A FOREIGN LANGUAGE MAJOR - TEACHING**

Required:	: 62:034; 62:002 and one other writing course	9 hours
Required:	: 62:162; 63:141; 63:144; 63:147; 63:194	.15 hours
Required:	: one course each in American Literature before WWI,	
	sh literature before WWI, literature other than	
Britis	sh and American	9 hours
Electives	in English	9 hours

42 hours

42 hours

**Note: Foreign students must register for 63:105 in order to demonstrate their competence in English. At the end of the first week of the term the instructor may release a student from this requirement. May not be counted for credit on the TEFL program.

ENGLISH AS A FOREIGN LANGUAGE MAJOR**
Required: 62:002; 62:034
in literature
36 hours
ENGLISH MINOR-Teaching
Required: 62:034; 62:190
Electives in English
24 hours
This minor requires achievement of a minimum cumulative grade point average of 2.25 in English courses.
ENGLISH MINOR
Required: 62:034 and a course in writing
18 hours
ENGLISH AS A FOREIGN LANGUAGE MINOR-Teaching and Liberal Arts
Required: 62:162; 63:141; 63:144; 63:147; 63:194
ENGLISH SUBJECT FIELD-Junior High School Major
Required: 62:031 or 62:034; 62:162; 62:165; 62:190; and 62:103
or 66:40 or 66:141
British literature and American literature
30 hours
JOURNALISM MINOR-Teaching and Liberal Arts
Required: 66:032; 66:040; 66:104; 66:105
50:061; 50:062; 50:161; 60:032
*Recommended for students on the teaching program.

COMPARATIVE LITERATURE MINOR

This is an interdisciplinary minor administered jointly by the Department of English Language and Literature and the Department of Foreign Languages.

Required: 70:110; 70:105; 62:161 9 ho	ours
A 100-level course in English literature	ours
Electives:	
For Foreign Language Majors —	
70:180	ours
English literature at the 100-level (excluding 62:136; 62:144,	
62:147, 62:148)	ours
For Non-Foreign Language Majors —	
70:180	ours
7x:071 or 7x:072 (available in French, German or Spanish) 3 h	

19 hours

A reading knowledge of one foreign language is required.

This minor is designed for foreign language majors and students of English literature who demonstrate a reading knowledge of a foreign language. Other students who can demonstrate a reading knowledge of a foreign language may also enroll.

Note: 64:153; 68:165, and 68:168 may be taken for credit toward a major in English.



ENGLISH

62:001. Writing: Fundamentals - 3 hrs.

Development of basic skills in writing, with emphasis on organization, the use of details, effective word choice, and sentence patterns. Does not count for credit on English major.

62:002. Writing: Language - 3 hrs.

Writing based on readings about language and the student's language experience.

62:003. Writing: Exposition-3 hrs.

Exploring and communicating, in writing, ideas stressing various prose patterns and techniques.

62:004. Writing: Argument and Persuasion -3 hrs.

Writing on controversial issues with an emphasis on the development of evidence, the study of audience psychology, and the objective evaluation of others.

62:031. Introduction to Literature - 3 hrs.

Understanding and appreciating the basic forms of imaginative literature. May not be taken for major credit.

62:034. Analysis of Literary Forms – 3 hrs. Literary analysis and evaluation of the short story, novel, drama, and poetry.

62:040. The Short Novel - 2 hrs. May not be taken for major credit.

62:042. Survey of English Literature I —3 hrs.

Major trends and masterworks from the Early, Medieval, and Renaissance periods — 700-1660.

62:043. Survey of English Literature II −3 hrs. Major trends and masterworks from the Neo-Classical, Romantic, and Victorian periods − 1660-1900.

62:053. American Masterpieces - 3 hrs.

Selected works by major American writers from Colonial times to present. Does not count for credit on English major.

62:060. World Literature I-3 hrs.

Masterpieces of Western and non-Western literature from the beginnings to 1650.

62:061. World Literature II-3 hrs.

Masterpieces of Western and non-Western literature from 1650 to the present.

62:070. Creative Writing - 3 hrs.

Initial experiences in writing of fiction or poetry. May not be repeated for credit.

62:080. The Craft of Poetry - 3 hrs.

Forms, techniques, and problems in poetry writing; primarily for students interested in creative writing.

62:081. The Craft of Fiction-3 hrs.

Forms, techniques, and problems in fiction writing; primarily for creative writing.

62:103. Advanced Composition - 3 hrs.

62:112(g). Drama: Aeschylus to Ibsen-3 hrs.

62:113(g). British Drama to 1642-3 hrs. Major dramatists not including Shakespeare.

62:114(g). British Drama 1660 through Wilde -3 hrs.

62:115(g). Modern Drama - 3 hrs. American, British and Continental.

62:116(g). English Renaissance - 3 hrs. 1500-1642.

62:117(g). Dryden through Johnson – 3 hrs. 1660 to 1785. Emphasis on Dryden, Swift. Steele, Addison, Pope, and Johnson.

62:118(g). English Romantic Poets—3 hrs. Emphasis on Blake, Wordsworth, Coleridge, Byron, Keats, and Shelley.

62:119(g). Victorian Literature-3 hrs. Prose and Poetry.

62:120(g). 20th Century British Novel - 3 hrs.

62:121(g). The American Renaissance - 3 hrs. Major writers of the 1840's and 1850's: Hawthorne, Melville, Emerson, Thoreau, and early Whitman.

62:122(g). American Genteel Writers - 2 hrs. Nineteenth-century novel and such writers as Freneau, Irving, Cooper, Bryant, Lowell, Holmes, Lanier, and Timrod.

62:123(g). American Realism and Naturalism to WWI-3 hrs.

Fiction from 1870 through WWI.

62:124(g). 20th Century American Novel -3 hrs.

62:125(g). Contemporary Southern Literature -3 hrs.

1920 to the present.

62:126(g). The American Short Story - 3 hrs. From Poe to the present.

62:127(g). American Drama-3 hrs.
Developments in American drama; emphasis on works of Eugene O'Neill, Maxwell Anderson, Arthur Miller, and Tennessee Williams.

62:134(g). Modern British and American Poetry – 3 hrs.

Since 1914.

62:135(g). Continental Short Story - 3 hrs.

62:136(g). Faulkner-3 hrs.

62:144(g). Chaucer - 3 hrs.

62:147(g). Milton-3 hrs.
Milton's major English poetry and prose.

62:148(g). Shakespeare - 3 hrs.

62:153(g). Major American Poets to 1900
-3 hrs.

62:154. Afro-American Literature - 3 hrs. A study of Black writers in America.

62:155(g). Continental Novel through Tolstoy
-3 hrs.

62:156(g). British Novel through Hardy -3 hrs.

62:161(g). Literary Criticism - 3 hrs.
Twentieth-century literary criticism and its historical backgrounds.

62:162(g). The Structure of English -2 hrs.

Linguistic analysis of the major phonological, syntactic, and semantic properties of modern American English.

62:164(g). Semantics-3 hrs.

A study of language habits and how they affect society. To accompany student teaching.

62:165(g). Literature for Adolescents - 2 hrs. Reading and evaluation of literature suitable for adolescents.

62:166(g). History of the English Language - 3 hrs.

Developmental survey of the English language from its beginnings to the present as a product of linguistic change and variation, political history, and social attitude. Prerequisite: 62:162 or 63:125.

62:174(g). Poetry Workshop – 1-6 hrs.

May be repeated for credit. Prerequisite or corequisite: 62:080 and consent of instructor.

62:175(g). Fiction Workshop—1-6 hrs.

May be repeated for credit. Prerequisite or corequisite:62:081 and consent of instructor.

62:184(g). Old English – 3 hrs.

62:188(g). Senior Seminar in Literature
- 3 hrs.

For senior majors in English only. Topic to be announced in semester schedule of classes.

62:189. Independent Reading in English -1-4 hrs.

This course is not offered as a class. A student, with permission of the Head of the Department, secures a prepared reading list in one of four areas: ancient drama, modern

drama, fiction, poetry. After completing the readings he submits himself to a departmental examination. Credit and grade are assigned on the same basis as other courses taken for credit by examination. The same fee system operates, the student is entirely on his own, since no group or individual discussion sessions are provided, but the student is free to consult the instructor who prepared the reading list concerning its scope and intent. Prerequisite: 62:034. May be repeated for a maximum of 8 hours.

62:190(g). The Teaching of English - 3 hrs.

Credit also as a course in education for a student whose major is English.

62:193(g). The Teaching of Writing-3 hrs.

62:195(g). Teaching of Creative Writing
-3 hrs.

For English majors and minors, and elementary education majors with a language arts emphasis.

62:198. Independent Study.

See pp. 58, 76.

62:201. Bibliography and Methods of Research - 3 hrs.

62:204. Advanced Literary Criticism
-3 hrs.

62:207. The English Curriculum – 3 hrs.
Theories behind the teaching of English and trends in curriculum methods and materials, particularly in secondary English.

62:221. English Renaissance Literature.

-3 hrs.
(1485-1612)

62:222. 17th Century English Literature -3 hrs. (1612-1660)

62:223. 18th Century English Literature -3 hrs. (1660-1798)

62:225. 19th Century English Literature
-3 hrs.
Romantic or Victorian (1798-1900).

62:226. Modern English Literature - 3 hrs. (1900-1945).

62:231. American Romantic Literature -3 hrs. (1800-1870)

62:232. American Realistic and Naturalistic Literature — 3 hrs. (1870-1912)

62:234. Modern American Literature - 3 hrs. (1912-1945)

62:260. Contemporary Fiction -3 hrs. (1945-present)

62:261. Contemporary Poetry - 3 hrs. (1945-Present)

62:262. Contemporary Drama - 3 hrs. (1945-Present)

62:264. Continental Literature - 3 hrs.

62:284. Seminar in Literature - 3 hrs.

62:291. Seminar in the Teaching of English
-3 hrs.

62:297. Practicum
Graduate-level student teaching. See p.

62:299. Research.

LINGUISTICS

63:010. Language and Culture-3 hrs.

Fundamental concepts used in the study of language, culture, and their interrelationships. Discussion of ethnolinguistic variations and universals.

63:105(g). English Language for Foreign Students - 3 hrs.

The patterns and idioms of English for nonnative speakers with guided practice in speaking and writing.

63:120(g). Introduction to Historical and Comparative Linguistics — 3 hrs.

Theories of language change and diversification. Discussion of genetic and typological classification, reconstruction, dialect emergence, and linguistic universals, Prerequisite: 63:125 or 62:162.

63:125(g). Introduction to Linguistics - 3 hrs.

Examination of the major phonological syntactic, and semantic aspects of a variety of human languages.

63:141(g). Transformational Grammar – 3 hrs. Descriptive English syntax from a generative-transformational point of view. Prerequisite: 62:162 or 63:125.

63:144(g). Introduction to Phonology - 3 hrs.

The sound systems of human languages, including articulatory and acoustic phonetics, structural phonemics, distinctive features, and generative phonology. Prerequisite: 62:162 or 63:125.

63:147(g). Problems of English Grammar -3 hrs.

Sub-patterns, sub-classes, positions and finer structural distinctions. Prerequisite: 62:162 or 63:125.

63:194(g). Teaching English as a Foreign Language - 3 hrs.

Methods and materials. Classroom practices, textbooks, language laboratory, testing. Prerequisite: 62:162 or 63:125.

63:231. Dialectology - 3 hrs.

Techniques of collecting, analyzing, and presenting dialectic data. Characteristics of major English dialects, with emphasis on the American language. Prerequisite: 62:162 or 63:125.

63:235. Contrastive Analysis - 3 hrs.

Techniques of comparing the grammatical systems of a target and a native language, and the pedagogical applications of such analysis. Prerequisite: 62:162 or 63:125.

63:254. Phonology - 3 hrs.

Intensive investigation of phonological systems and the theories which attempt to explain them. Prerequisite: 63:144.

63:256. Linguistic Theory - 3 hrs. Prerequisite: 63:141.

63:285. Seminar in Language - 3 hrs.

63:289. Seminar in Linguistics - 3 hrs. Prerequisite: 62:162 and 62:166.

63:297. Practicum.

Graduate-level student teaching of English as a foreign language.

63:299. Research.

SCHOOL JOURNALISM

66:032. Introduction to Journalism—3 hrs.

Survey of modern American journalism and its application to high school courses and publications.

66:040. Reporting and News Writing - 3 hrs. News values; methods of obtaining, verifying, and presenting news.

66:102(g). Special Article Writing - 3 hrs. Writing different types of articles, slanting for publication; writing and marketing articles in such specialized fields as science, education, and religion.

66:103(g). High School Newspaper and Yearbook - 3 hrs.

Advising school publications; staff organization; methods of printing; policies, style, content, textbooks, business management. Prerequisite: 66:040 or consent of instructor.

66:104(g). Journalism Laboratory I-1 hr.

Production work on newspaper with emphasis on writing news and features. May be repeated for a total of 3 hours. Prerequisite: 66:040 or consent of instructor.

66:105(g). Journalism Laboratory II-1 hr.

Production work on newspaper or yearbook at editor's level. May be repeated for a total of 2 hours. Prerequisite: 66:040 or consent of instructor.

66:131(g). History of Mass Communications - 3 hrs.

Development of American newspapers and periodicals, from early beginnings in Europe to present day; rise of radio and television.

66:132(g). Mass Communications Law - 3 hrs. Origins and backgrounds of press law: Libel and its defenses, penalties, right of privacy; problems of fair trial. Law and self-regulation in advertising, in broadcast media.

66:141. Feature and Editorial Writing - 3 hrs. Writing feature articles and editorials for publication. Prerequisite: 66:040 or consent of instructor.



Foreign Languages

Hawley, Head. Chabert, Dubois, Febles, Franco. Jamosky, König, Koppensteiner, Műnoz, Nodarse, Oates, Odwarka, Parker, J. Schwartz, Vernon, Walther, Zucker.

A student who has previously been enrolled in the foreign languages at this institution will be advised by his instructor as to the sequence of succeeding courses.

A student who has never had the foreign language should enroll in the Elementary I course.

A student who has had prior work in the foreign language at another institution (high school or college) should register for the course numbered X (72:X, 74:X, 78:X). The student will then be assigned to the proper level by the Head of the Department of Foreign Languages.

The individual student's previous background and facility in acquiring basic skills may necessitate his taking additional work in lower division courses not specified in the major.

FOREIGN LANGUAGES SUBJECT FIELD-Junior High School Major

Required: 30 semester hours in one foreign language more advanced than those courses numbered 2 and including 70:190, The Teaching of Foreign Languages,

COMPARATIVE LITERATURE MINOR

This is an interdisciplinary minor administered jointly by the Department of English Language and Literature and the Department of Foreign Languages.

A reading knowledge of one foreign language is required.

This minor is designed for foreign language majors and students of English literature who demonstrate a reading knowledge of a foreign language. Other students who can demonstrate a reading knowledge of a foreign language may also enroll.

GENERAL FOREIGN LANGUAGE COURSES

70:050. Phonetic Theory and Practice-1 hr. Practical phonetic training. Work in language laboratory required.

70:105(g). Comparative Stylistics - 3 hrs.
Techniques of comparative literary analysis, emphasizes aesthetic aspects of literature.
Taught in English. Prerequisite: reading knowledge of one foreign language.

70:110(g). Comparative Study of Western Literature and Civilization - 3 hrs.

A comparative study of major literary movements and philosophical concepts and their impact on Western culture. A team-teaching approach will be used in order to present literary and cultural areas from different points of view and to show how the different countries, their literatures, languages and cultures are interlinked and how they

have influenced one another. I hour of credit earned may be counted toward a major in a foreign language. Taught in English.

70:180(g). Translation of Literary Texts -4 hrs.

Theories and techniques of literary translation. Prerequisite: reading knowledge of one foreign language.

70:190(g). The Teaching of Foreign Languages - 2-4 hrs.

Credit also as a course in education for a student whose major is foreign languages. This course ordinarily should precede student teaching. Corequisite: 72:180 or 74:180 or 78:180.

70:198. Independent Study. See pp. 58, 76.

French

FRENCH MAJOR - TEACHING

Required: minimum of 30 semester hours in French in courses more advanced than 72:002, including 72:071, 72:072, 72:101, 72:180, and 70:190, of which at least 20 hours must be in courses numbered 100 or higher.

FRENCH MAJOR

Required: minimum of 30 semester hours in French in courses more advanced than 72:002, including 72:071, 72:072, and 72:101, of which at least 20 hours must be in courses numbered 100 or higher.

FRENCH MINOR-Teaching and Liberal Arts.

72:001. Elementary French 1-5 hrs. For beginners.

72:002. Elementary French II-5 hrs. Continuation of 72:1. Prerequisite: 72:1 or equivalent.

72:051. Intermediate Composition – 2-3 hrs.
Progressive development of writing skill through a sequence of graded exercises on topics related to French civilization, with a review of basic structure. May be repeated once for credit with approval of instructor. (Combination of credits together with 72:061 may not total more than 5 hours in one semester.) Prerequisite: 72:002 or equivalent: corequisite: 72:061 or other intermediate course with approval of department head.

72:061. Intermediate Conversation – 2-3 hrs.

Develops oral fluency through pattern practice, systematically guided conversations on civilization topics using structures reviewed in the corresponding composition course and free conversation on subjects of current interest. May be repeated once for credit with approval of instructor. (Combination of credits together with 72:051 may not total more than 5 hours in one semester.) Prerequisite: 72:002 or equivalent; corequisite: 72:051 or other intermediate course with approval of department head.

72:071. Introduction to French Literature I -3 hrs.

Intensive study of some of the great pages from leading writers with the political and literary history of their time. Application of language skills to basic literary analysis will be a primary goal. Prerequisite: 72:051 and 72:061 or equivalent.

72:072. Introduction to French Literature II -3 hrs.

More advanced than 72:071. Prerequisite: 72:071 or permission of department head.

72:101(g). Advanced Composition—3 hrs. Analysis of the major morphological and syntactical structures of the French language, with a look at contrasting grammatical and linguistic approaches to problems of correct usage. Stress will be placed on the successful application of the principles learned. May be repeated once for credit with approval of instructor. Prerequisite or corequisite: 72:072 or equivalent.

72:103(g). Advanced Conversation - 3 hrs.
Develops and improves oral fluency through
free and guided conversation. May be

repeated once for credit with approval of instructor.

72:105(g). Stylistics - 3 hrs.

An introduction to sylistic analysis. Development of style in composition through study of excerpts from contemporary French works and literary translation into French. Prerequisite or corequisite: 72:072 or equivalent.

72:107(g). Listening and Comprehension -3 hrs.

Develops and improves ease with which one understands all types of standard speech including taped material, readings, radio and television broadcasts, and movies. Offered only on summer study tour.

72:118(g). Popular Prose Fiction — 3 hrs.
Novels from V. Hugo, A. Dumas, P. Benoit,
Maurois, Daninos, Druon and/or others:
Prerequisite or corequisite: 72:101 or
equivalent.

72:114(g). Short Stories—3 hrs.
Short stories from Vigny, Merimée, Daudet.
Maupassant, Aymé and others. Prerequisite or
corequisite: 72:101 or equivalent.

72:124(g). Contemporary France - 3 hrs.

A survey of recent developments and a description of the country, its people, customs and way of life, institutions, economy, and art. Prerequisite or corequisite: 72:101 or equivalent.

72:125(g). French Culture and Civilization — 3 hrs.

Includes historical, cultural and sociological background for the understanding of contemporary France. May be repeated in summer institute abroad for 2 hrs. credit. Prerequisite: 72:101 or equivalent.

72:128(g). Literature of Ideas - 3 hrs.

Montaigne, Pascal, La Rochefoucauld, Saint Simon, La Bruyère, Montesquieu, Voltaire, Chateaubriand, Rosseau, de Tocqueville and their modern successors. Prerequisite or corequisite: 72:101 or equivalent.

72:131(g). The Comedy from Molière to 1890-3 hrs.

Plays from Molière, Marivaux, Beaumarchais, Musset, Labiche, Augier, Prerequisite or corequisite: 72:101 or equivalent.

72:135(g). Poetry and Verse Drama-3 hrs.
Representative poems selected for their enduring appeal with classical and romantic dramas from Corneille, Racine. Victor Hugo.

Rostand. Prerequisite or corequisite: 72:101 or equivalent.

72:144(g). Novels of the 19th and 20th Centuries - 3 hrs.

Novels from Balzac, Stendhal, Flaubert, Proust, Robbe-Grillet and others. Prerequisite or corequisite: 72:101 or equivalent.

72:146(g). The Drama since 1890-3 hrs. Plays from Romains, Pagnol, Claudel,

Giraudoux, Anouilh, Sartre, Beckett, and others. Prerequisite or corequisite: 72:101 or equivalent.

72:160(g). Advanced Oral Practice -2-4 hrs.

Development of oral fluency and greater accuracy through structured oral exercises; free conversation dealing with civilization and topics of current interest. Structural, morphological and phonetic exercises designed to meet the needs of the individual participants. Prerequisite or corequisite: 72:101 or equivalent.

72:180(g). Applied Linguistics: French -2 hrs.

Basic linguistic concepts applied to learning the French Language. Prerequisite 72:101 or equivalent.

72:201. Advanced Composition and Stylistics - 3 hrs.

Study of stylistic devices; examination of principal morphological, syntactical and semantic problems.

72:203. Structure of French-3 hrs.

Phonology, morphology, and syntax of current French. Stress is placed on areas of French structure which cause problems for native speakers of English.

72:205. Explication of Text-3 hrs.

Analysis of the content and style of literary selections, studied in depth and used as models for guided composition.

72:231. Medieval Literature - 2 hrs.

History and civilization of the Middle Ages from 842 to 1515. Selections from medieval French in modern French translation.

72:281. Seminar - 2 hrs.

Various topics will be offered such as Medieval Literature. 16th Century Literature. 19th Century Prose, Contemporary Novel. Specific area to be announced on the Schedule of Classes for current semester. May be taken more than once provided it is on a different topic.



German

GERMAN MAJOR - TEACHING

Required: minimum of 30 semester hours in German in courses more advanced than 74:002, including 74:071, 74:072, 74:101, 74:105, 74:180, and 70:190, of which at least 20 hours must be in courses numbered 100 or higher.

GERMAN MAJOR

Required: minimum of 30 semester hours in German in courses more advanced than 74:002, including 74:071, 74:072, and 74:101 of which at least 20 hours must be in courses numbered 100 or higher.

GERMAN MINOR-Teaching and Liberal Arts

74:001. Elementary German 1-5 hrs. For beginners.

74:002. Elementary German II-5 hrs. Continuation of 74:001. Prerequisite: 74:001 or equivalent.

74:051. Intermediate Composition – 2-3 hrs. Progressive development of writing skill through graded exercises on topics related to German civilization, with a review of basic structure. May be repeated once for credit with approval of instructor. (Combination of credits together with 74:061 may not total more than 5 hours in one semester.) Prerequisite: 74:002 or equivalent; corequisite: 74:061 or other intermediate course with approval of department head.

74:06l. Intermediate Conversation - 2-3 hrs.

Develops oral fluency through pattern practice, systematically guided conversation on civilization topics using structures reviewed in the corresponding composition course and free conversation on subjects of current interest. May be repeated once for credit with approval of instructor. (Combination of credits together with 74:051 may not total more than 5 hours in one semester.) Prerequisite: 74:002 or equivalent; corequisite: 74:051 or other intermediate course with approval of department head.

74:071. Introduction to German Literature —3 hrs.

Selected major works of representative German authors from the beginnings to the end of the 29th century. Application of language skills to basic literary analysis will be a primary goal. Prerequisite: 74:051 and 74:061 or equivalent.

74:072. Introduction to Modern German Literature – 3 hrs.

Like 74:071, but dealing with the literature of the 20th century. Prerequisite: 74:051 and 74:061 or equivalent.

74:101(g). Advanced Composition—3 hrs. Analysis of the major morphological and syntactical structures of the German language, with a look at contrasting grammatical and linguistic approaches to problems of correct usage. Stress will be placed on the successful application of the principles learned. Prerequisite or corequisite: 74:071 or equivalent. May be repeated once for credit with approval of instructor.

74:103(g). Advanced Conversation – 4 hrs. Development of oral fluency through systematically guided conversations on civilization topics and free conversation on topics of current interest. Structural, morphological and phonetic exercises designed to meet the needs of the individual participant.

74:105(g). Stylistics - 3 hrs.

An introduction to stylistic analysis. Development of style in composition through study of excerpts from contemporary German works and literary translations into German. Prerequisite or corequisite: 74:072 or equivalent.

74:114(g). German Lyric Poetry - 2 hrs.
Selections from major periods before 1885.
Prerequisite or corequisite: 74:101 or equivalent.

74:116(g). Twentieth Century Prose Fiction - 2 hrs.

Representative works to 1950. Prerequisite or corequisite: 74:101 or equivalent.

74:118(g). Contemporary German Prose Fiction - 2 hrs.

Representative works since 1950. Prerequisite or corequisite: 74:101 or equivalent.

74:119(g). Modern German Poetry -2 hrs.

Selections from Naturalism, Expressionism, Impressionism, and Contemporary authors. Prerequisite or corequisite: 74:105 or equivalent.

74:123(g). German Civilization - 3 hrs.

An introduction to the culture, history and geography of Germany. Prerequisite or corequisite: 74:105 or equivalent.

74:127(g). German Classicism-3 hrs.

Prerequisite or corequisite: 74:105 or equivalent.

74:128(g). Literature to Enlightenment -2 hrs.

German Literature from the Beginnings to Enlightenment. Prerequisite or corequisite: 74:101 or equivalent.

74:143(g). Nineteenth Century Prose Fiction - 3 hrs.

Representative works from the Romantic Period to Naturalism. Prerequisite or corequisite: 74:105 or equivalent.

74:146(g). German Drama of the 19th Century - 3 hrs.

Prerequisite or corequisite: 74:105 or equivalent.

74:147(g). Twentieth Century German Drama – 3 hrs.

Prerequisite or corequisite: 74:105 or equivalent.

74:149(g). Applied Theater (German) -1 hr.

Participation in German theater.

74:150(g). Contemporary Germany and Austria – 3 hrs.

Introduction to the geography and contemporary cultural, political, and social institutions in German speaking countries. Prerequisite or corequisite: 74:105 or equivalent.

74:160(g). History of the German Language - 2 hrs.

An introduction to the historical development of German. Prerequisite or corequisite: 74:105 or equivalent.

74:180(g). Applied Linguistics: German -3 hrs.

Basic linguistic concepts applied to learning the German language. Prerequisite: 74:071 or 74:072 or equivalent.

74:201. Advanced Composition and Stylistics - 3 hrs.

Study of stylistic devices; examination of principal morphological, syntactical, and semantic problems. May be offered for 4 hours on the summer study abroad program.

74:203. Structure of German-3 hrs.

Description of Modern High German phonology, morphology, and syntax.

74:210. Middle High German-3 hrs.

Introduction to structure of Middle High German.

74:230. Middle High German Literature -2 hrs.

Prerequisite: 74:210.

74:280. Seminar - 2 hrs.

Various topics will be offered such as Baroque Poetry, Classical Drama, Contemporary Prose, Fiction, Faust, Romantic Poetry. Specific area to be announced on the Schedule of Classes for current semester. May be repeated, except when topic is identical.

Latin

LATIN MINOR - Teaching and Liberal Arts

76:001. Beginning Latin I-4 hrs.

A structural approach to Latin, implemented by oral-aural-visual stimuli. Subject matter consists of contrastive analyses of Roman and American society, with special emphasis on politics and religion. For beginners.

76:002. Beginning Latin II-4 hrs.

Continuation of Latin I, with greater emphasis on syntax, and special emphasis on figures of speech, expansions of basic sentence patterns. Prerequisite: 76:001 or equivalent.

76:061. Intermediate Latin I-4 hrs.

Concentration on ability to read and to think in Latin. Introduction to Latin composition by means of structural formulae, based on models of Cicero, Livy, and Caesar. Prerequisite: 76:002 or equivalent.

76:062. Intermediate Latin II-4 hrs.

Continuation of Intermediate Latin I. with over-all goal as the ability to read, write, think, and speak in Latin. Structural analysis of Latin grammar, contrasted with English structural grammar.

76:130(g). Caesar - 3 hrs.

DeBello Gallico; the nature of dictatorship; the nature of Gallic and 20th Century liberation movements. Prerequisite: 76:062 or equivalent.

76:131(g). Cicero - 3 hrs.

Excerpts from various works; emphasis on the character of the statesman. Ist century B. C. and 20th century; structural analysis of Cicero's style. Prerequisite: 76:062 or equivalent.

76:132(g). Livy - 3 hrs.

Ab Urbe Condita; an anthropological ap-

proach to Roman history which examines the illusions the Romans lived by. Examinations of theories of history, and methods of historical reporting. Prerequisite: 76:062 or equivalent.

76:134(g). Vergil-3 hrs.

Emphasis on nature of national identity, the nature of political propaganda, and the history of epic. Prerequisite: 76:062 or equivalent.

76:185(g). Individual Reading - 1-3 hrs.

May be repeated to a maximum of 9 credits. More intensive work on individual authors, genres and periods. Prerequisite: 76:062 or equivalent.

Russian

RUSSIAN MINOR - Teaching and Liberal Arts

Electives in Russian courses more advanced than 77:002 16 hours

77:001. Elementary Russian 1-5 hrs. For beginners.

77:002. Elementary Russian II-5 hrs. Prerequisite: 77:001 or equivalent.

77:051. Composition I-2 hrs.

Progressive development of writing, skill through a sequence of exercises on topics related to Russian civilization, with a review of basic structure. Prerequisite: 77:002 or equivalent; Corequisite: 77:061 or other intermediate course with approval of Department Head.

77:052. Composition II-2 hrs.

Continuation of 77:051, leading to free composition. Prerequisite: 77:051 or equivalent: Corequisite: 77:062 or other intermediate course with approval of Department Head.

77:061. Conversation I-3 hrs.

Develops oral fluency through pattern practice, systematically guided conversations on civilization topics using structures reviewed in the corresponding composition course and free conversation on subjects of current interest. Prerequisite: 77:002 or equivalent: Corequisite: 77:051 or other intermediate course with approval of Department Head.

77:062. Conversation II-3 hrs.

Like 77:061, with a wider range of subjects, vocabulary and structures. Prerequisite: 77:061; Corequisite: 77:052 or other intermediate course with approval of Department Head.

77:101(g). Advanced Grammar and Composition - 3 hrs.

Analysis of the major morphological and syntactical structures of the Russian Language, with a look at contrasting grammatical and linguistic approaches to problems of correct usage. Stress will be placed on the successful application of the principles learned. Prerequisites: 77:052 and 77:062 or equivalent.

77:102(g). Introduction to Russian Literature -3 hrs.

Selected major works of representative Russian authors from the Beginnings to the First World War, with the political and literary history of their time. Application of language skills to basic literary analysis will be a primary goal. Prerequisites or corequisites: 77:052 and 77:062 or equivalent.

77:103(g). Introduction to Modern Russian Literature - 3 hrs.

Like 77:102, but dealing with the Soviet period. Prerequisites or corequisites: 77:052 and 77:062 or equivalent.

77:105(g). Stylistics - 3 hrs.

An introduction to stylistic analysis. Development of style in composition through study of excerpts from contemporary Russian works and literary translation into Russian. Prerequisites: 77:052 and 77:062 or equivalent.

77:131(g). Russian Poetry - 3 hrs.

The leading Russian poets from Pushkin to the present time, with a preliminary study of Russian versification and early lyric poetry. The Golden Age of Poetry and leading nineteenth and twentieth century poets. Special attention will be given to works of Tyutchev, Fet. Nekrasov, Grigoriev, Balmont, Bryusov, Blok, Mayakovsky, Esenin, Pasternak.

77:132(g). The Nineteenth Century Russian Novel - 3 hrs.

The development and evolution of the novel in nineteenth century Russian Literature. Concentration will be on the short novels of Pushkin, Lermontov. Gogol. Turgenev. Dostoevsky, Tolstoy and Chekhov. Selections from some of the significant longer novels of Tolstoy and Dostoevsky will also be included.

77:134(g). Contemporary Soviet Literature -3 hrs.

Soviet literature from the year 1956 generally known as the year of the protest, to the present time. The significance of writing during this time, the changes from previous periods and factors affecting the output of Soviet writers, with emphasis on the "protest literature" and the appearance of the younger generation of poets.

77:141(g). Soviet Civilization - 3 hrs.

The culture of the Soviet Union as shaped by its geography, history and pre-history, and as revealed in its arts, sports, customs, traditions and economic, social and political institutions.

Spanish

SPANISH MAJOR - TEACHING

Required: minimum of 30 semester hours in Spanish in courses more advanced than 78:002, including 78:071, 78:072, 78:101, 78:105, 78:180, and 70:190, of which at least 20 hours must be in courses numbered 100 or higher.

SPANISH MAJOR

Required: minimum of 30 semester hours in Spanish in courses more advanced than 78:002, including 78:071, 78:072, 78:101, and 78:105, of which at least 20 hours must be in courses numbered 100 or higher.

SPANISH MINOR - Teaching and Liberal Arts

Electives in Spanish in courses more advanced than 78:002 16 hours

78:001. Elementary Spanish I−5 hrs. For beginners.

78:002. Elementary Spanish II-5 hrs. Continuation of 78:001. Prerequisite 78:001 or equivalent.

78:051. Intermediate Composition – 2-6 hrs. Progressive development of writing skill through a sequence of exercises on topics related to Hispanic civilization, with a review of basic structure. May be repeated once for credit with approval of instructor. (Combination of credits together with 78:061 may not total more than 5 hours in one semester.) Initial registration should be for 3 hours. Prerequisite: 78:002 or equivalent; corequisite: 78:061 or other intermediate course with approval of department head.

78:061. Intermediate Conversation — 2-6 hrs.
Develops oral fluency through pattern practice, systematically guided conversations on civilization topics using structures reviewed in the corresponding composition course and free conversation on subjects of current interest. May be repeated once for credit with

approval of instructor. (Combination of credits together with 78:051 may not total more than 5 hours in one semester.) Prerequisite: 78:002 or equivalent; corequisite: 78:051 or other intermediate course with approval of department head.

78:071. Introduction to Hispanic Literature I (Prose) - 3 hrs.

78:072. Introduction to Hispanic Literature II (Poetry) - 3 hrs.

78:101(g). Advanced Composition—3 hrs.

Analysis of the major morphological and syntactical structures of the Spanish language with a look at contrasting grammatical and linguistic approaches to problems of correct usage. Stress will be placed on the successful application of the principles learned. Recommended to be taken with 78:071. Prerequisite: 78:051 and 78:061 or equivalent.

78:103(g). Advanced Conversation—4 hrs.
Development of oral fluency through systematically guided conversations on civilization topics and free conversation on

topics of current interest. Structural, morphological and phonetic exercises designed to meet the needs of the individual participant.

78:105(g). Stylistics - 3 hrs.

An introduction to stylistic analysis. Development of style in composition through study of excerpts from contemporary Spanish works and literary translation into Spanish. Prerequisite or corequisite: 78:071 or equivalent.

78:112(g). Introduction to Latin American Literature - 3 hrs.

Trends in Latin American literature and representative authors. Prerequisite: 78:071 and 78:072.

78:117(g). Contemporary Spanish Poetry -2 hrs.

Peninsular poetry since the Generation of '98. Prerequisite or corequisite: 78:101 or equivalent.

78:118(g). Contemporary Spanish Prose -3 hrs.

Peninsular novel, essay and drama since the Generation of '98. Prerequisite or corequisite: 78:101 or equivalent.

78:119(g). Modern Essay - 2 hrs.

Peninsular and Latin American essay from the late 19th century to the present, with special emphasis on the essays of the Generation of '98. Prerequisite or corequisite: 78:101 or equivalent.

78:123(g). Spanish Civilization-3 hrs.

The Spanish cultural heritage as shaped by its geography and history, and as revealed in its arts, sports, customs, traditions, and economic, educational, social and political institutions. Prerequisite or corequisite: 78:101 or equivalent.

78:130(g). Golden Age Prose-3 hrs.

Stress will be placed on the Celestina, the picaresque novel, and Cervantes. Prerequisite or corequisite: 78:101 or equivalent.

78:132(g). Golden Age Drama and Lyric -3 hrs.

Study of the theater and poetry of the Spanish Renaissance and Baroque eras. Intensive reading of selected comedies of Lope de Vega, Tirso de Molina, and Calderon, and the poetry of Garcilaso de la Vega, Gongora, Quevedo, Fray Louis de Leon, and San Juan de la Cruz. Prerequisite or corequisite: 78:101 or equivalent.

78:134(g). Nineteenth Century Spanish Literature - 3 hrs.

Study of Romanticism, Realism, and Naturalism. Prerequisite or corequisite: 78:101 or equivalent. 78:139(g). Contemporary Theater - 2 hrs. Peninsular and Latin American theater from

Peninsular and Latin American theater from the Generation of '98 to the present. Prerequisite or corequisite: 78:101 or equivalent.

78:140(g). Latin American Civilization -3 hrs.

The culture of Latin America as shaped by its geography, history, and pre-history, and as revealed in its arts, sports, customs, traditions and economic, social and political institutions. Prerequisite or corequisite: 78:101 or equivalent.

78:142(g). The Latin American Novel -3 hrs.

The twentieth century will be stressed. Prerequisite or corequisite: 78:101 or equivalent.

78:144(g). Latin American Poetry - 2 hrs.

Modernism and Post-Modernism will be stressed. Prerequisite or corequisite: 78:101 or equivalent.

78:180(g). Applied Linguistics: Spanish —2 hrs.

Basic linguistic concepts applied to learning the Spanish language. Prerequisite: 78:071 or 78:072, or equivalent.

78:201. Hispanic Literature: A Stylistic Review - 3 hrs.

Study of stylistic devices characteristic of major periods in Spanish and Latin American literature.

78:203. Structure of Spanish-3 hrs.

A study of the phonology, morphology and syntax of current Spanish. The sound system and grammatical constructions of Spanish discussed in the light of modern linguistic procedures.

78:205. Advanced Grammar - 3 hrs.

Analysis and application of syntax theory in the teaching and learning of Spanish grammar.

78:220. Oral Translation - 3 hrs.

Techniques of oral translation including simultaneous translation.

78:231. Cervantes - 3 hrs.

Intensive study of Don Quijote.

78:232. Old Spanish-2 hrs.

A literary and linguistic study of the Poema de Mio Cid and other selected early works.

78:282. Seminar - 2 hrs.

Various topics will be offered such as Medieval Prose Fiction, Mexican Novel, Antillean Poetry, Renaissance Drama, Poetry of Federico Garcia Lorca. Specific area to be announced on the Schedule of Classes for current semester. May be repeated except when topic is identical.

Music

J. N. Smith, Head. Alexander, Barry, R. Baum, C. Becker, M. Beckman, Birkhead, Bock, Chidester, Gant, Gault, Gjerdingen, Graham, *P. Hahn, J. Hansen, Harlan, Hogancamp, Holstad, K. Holvik, M. Holvik, Jernigan, K. Johnson, Kennedy, Little, C. Matheson, M. Matheson, Mauck, Maxwell, Michaelides, Pritchard, Slavett, Smalley, Wendt.

Bachelor of Arts Degree Programs

MUSIC MAJOR - TEACHING

Required: applied music (includes required 4 hours numbered
over 100 in major area)
58:055; 58:056; 58:057; 58:058 and electives
Required music literature: 59:170; 59:171 6 hours
Required music methods (elementary and secondary) 8 hours
Required electives in music
Senior recital 0 hours
50 hours

MUSIC MAJOR

Required: applied music (includes required 4 hours numbered	
over 100 in major area)	16 hours
Required music theory: 58:050; 58:051; 58:052; 58:053;	
58:055; 58:056; 58:057; 58:058	12 hours
Required music literature: 59:170; 59:171	6 hours
Electives in music numbered 100 and above	8 hours
Senior recital (may take the form of a performance, an	
essay, or a composition)	0 hours
	10.1



^{*}on leave

MUSIC MINOR-Teaching and Liberal Arts

Required: applied music	8 ho	urs
	17 hc	ours

Credit for Participation in an Organization may not be used on the minor.

Bachelor of Music Degree Program

MUSIC MAJOR: V

Voice

Piano Organ

Orchestral Instruments Theory-Composition

Required: applied music (16 hours must be in major applied area) 24 ho	ours
Required: music theory	ours
Required: music history and literature 8 he	ours
Required: recital, paper, or composition 2 ho	ours
Required: music electives	ours
73 h	ours

Majors in theory-composition must present for graduation a paper in the field or an original composition in addition to the 24-hour requirement in Music Theory.

Applied Music Credit: beginning with the fifth semester of study, the Bachelor of Music major only may earn four (4) semester hours of credit for two half-hour lessons per week in his major area of applied performance per semester.

REQUIREMENTS FOR ALL UNDERGRADUATE MUSIC MAJORS:

Music majors on all degree programs must choose an area of applied music (54:xxx- known as the applied major field) for specialization and must meet the proficiency standards of the department.

Auditions: Admission to the Department of Music requires successful completion of an audition in the main performance area.

Piano Proficiency: Required of all majors.

Voice or Instrumental Proficiency: Required of all keyboard majors.

Foreign Language: Ten (10) hours in a foreign language is strongly recommended for a student whose applied concentration is voice.

Large Organizations: In addition to the applied music, all music majors must participate in at least one of the large organizations each semester that they are enrolled as a regular university student. Exceptions to this may be made by the head of the department.

 Wind and percussion students will elect either band or orchestra, and are required to participate in Marching Band for two semesters experience.

-String players will elect the orchestra.

-Voice majors will elect an appropriate choral group and/or music theater.

 Keyboard majors will elect a large organization for their participation requirement. Credit for Participation in an Organization: One hour of credit may be earned by a student who completes a semester in an organization. Credit is reported only at the close of each semester. Not more than two hours of such credit may be used in meeting Bachelor of Arts degree requirements, except for music majors. All music majors may earn up to a total maximum of six (6) semester hours toward the Bachelor of Arts or the Bachelor of Music degrees for organization participation.

Numbers in this group are assigned as follows based on the student's classification.

52:010, 52:110. Concert Chorale

52:011, 52:111. University Chorus.

52:012, 52:112. Ensemble.

52:013, 52:113. Women's Chorus.

52:014, 52:114. Varsity Men's Glee Club.

52:015, 52:115. Band

52:016, 52:116. Jazz Band.

52:017, 52:117. Orchestra.

52:018, 52:118. Music Theatre.

GENERAL COURSES IN MUSIC

52:020. Exploring Music - 2 hrs.

To introduce the art of music to non-performers.

52:102(g). Foundations of Music - 3 hrs.

Specifically designed to provide the classroom teacher with techniques for teaching music in his or her own classroom. Basic skills of guitar, piano, singing, and music theory explored. Study of appropriate music literature, records, tape, and film.

52:221. Music Research and Bibliography -2 hrs.

To help locate a thesis topic and acquaint the student with source materials in music. Should be taken during the first semester in residence by all graduate students in music.

52:299. Research.

See pp. 76, 211.

APPLIED MUSIC

All students enrolled for applied music will participate in a weekly seminar in their principal applied area.

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 3 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. Applied music taken opposite student teaching earns 1 hour of credit by taking 2 lessons per week in that nine weeks. The head of this department assigns all students to specific instructors.

Beginning with the fifth semester of study. Bachelor of Music majors may earn 4 hours of credit per semester for 2 half-hour lessons per week in courses numbered from 54:130 to

54:150 and in their major area of applied performance. In addition, I hour of credit may be earned for I half-hour lesson per week in any secondary area.

The appropriate area faculty will determine the level of the student's qualifications (54:0xx or 54:1xx) by audition and/or previous work in an instrument or voice. Upon the recommendation of the appropriate area faculty, the head of the department may authorize that a graduate student be enrolled for credit in applied music at the 200 level (54:2xx), a 200 number can be assigned only to a graduate student who has passed a satisfactory audition and is preparing for a graduate major in voice or an instrument.

54:030, 54:130(g). 54:230. Flute.

54:031, 54:131(g), 54:231. Oboe.

54:032, 54:132(g), 54:232. Clarinet.

54:033, 54:133(g), 54:233. Bassoon.

54:034, 54:134(g), 54:234. Saxophone.

54:035, 54:135(g), 54:235. French Horn.

54:036, 54:136(g), 54:236. Cornet-Trumpet.

54:037, 54:137(g), 54:237. Trombone.

54:038, 54:138(g), 54:238. Baritone.

54:039, 54:139(g), 54:239. Tuba.

54:040, 54:140(g), 54:240. Percussion.

54:041, 54:141(g), 54:241. Violin.

54:042, 54:142(g), 54:242. Viola.

54:043, 54:143(g), 54:243. Cello.

54:044, 54:144(g), 54:244. String Bass.

54:045, 54:145(g), 54:245. Harp. 54:046, 54:146(g), 54:246. Piano.

54:047, 54:147(g), 54:247. Group Piano.

54:048, 54:148(g), 54:248. Organ.

54:049, 54:149(g), 54:249. Voice.

54:050, 54:150(g), 54:250. Harpsichord.

54:154(g). Applied Advanced Composition -1-2 hrs.

For a student whose major applied area is composition. May be repeated for credit with permission of instructor. Prerequisite: 58:152 (Applied music fee applies.)

54:189. Senior Recital - no credit. Required of all seniors.

MUSIC METHODS

57:080. Basic Conducting - 2 hrs.

Baton technique, score reading, rehearsal technique, and practice in conducting. Required of all music majors on teaching degree.

57:081. Instrumental Conducting and Materials - 2 hrs.

Advanced training in instrumental conducting with emphasis on orchestral and band scores and literature for small and large ensembles. Required of all instrumental music majors on teaching program. Prerequisites: 57:080; 58:052.

57:082. Choral Conducting and Materials - 2 hrs.

Training in choral conducting, rehearsal technics, performance practices, and choral materials. Required on the teaching degree for voice majors and those keyboard majors who do not take 57:081. Prerequisite: 57:080; 58:052.

57:090. Instrumental Techniques - 2-8 hrs.

Areas: flute, clarinet and saxophone, double reeds, high brass, low brass, high strings, low strings, percussion-harp. Each area carries one hour of credit. Student may receive a maximum of 8 hours credit, but may not repeat any area for additional credit.

57:181(g). Vocal Ensemble Materials - 2 hrs.
Offered for vocal majors. To accompany student teaching.

57:182(g). Voice Repertoire - 2 hrs.

Vocal literature for all voices. Primarily for those interested in teaching singing.

57:183(g). Opera Production-2 hrs.

May be taken two times for credit; however, only two hours will apply toward the Bachelor of Arts degree and only four hours toward the Bachelor of Music degree. One semester the student directs a scene and the other the student participates as a performer.

57:184(g). Vocal Pedagogy - 2 hrs.

Techniques of diagnosing and discussing vocal problems as related to the singing voice, and a survey of pedagogic materials. Actual teaching experience under supervision. Prerequisite: junior standing music major or above.

57:185(g). School Stage Band-2 hrs.

Materials, procedures, and techniques of developing a stage band program in the schools.

57:188(g). Accompanying - 1 hr.

The art of accompanying, both vocal and instrumental literature. Practical experience as accompanist for student solists in public performance. May be taken twice for credit.

57:192. Music Methods-4 hrs.

Overview of the total music education program in public schools. Detailed consideration of the general music program in elementary and secondary schools.

57:193(g). Piano Methods-2 hrs.

Procedures and techniques of piano instruction, especially for the beginning and intermediate student. These include the study and techniques of piano playing, the literature of the instrument, and the styles of the various periods.

57:194(g). Band-Orchestra Methods -2 hrs.

Comprehensive study of role of band and orchestra conductor in public schools, covers areas of organization, personnel, budgets, scheduling, rehearsal procedures, program planning, and marching band arrangement.

57:195(g). Band and Orchestra Materials – 2 hrs.

Study of instruction and program materials for private and class instruction, and small and large instrumental groups.

57:197(g). Instrumental Upkeep and Repair -2 hrs.

A laboratory course where practical projects are undertaken. Offered for instrumental majors. To accompany student teaching.

57:198. Independent Study.

See pp. 58, 76.

57:250. Projects in Music - 1-3 hrs.

57:280. Planning and Supervision – 2 hrs. For the prospective supervisor of music.

57:281. Seminar in Chorus - 2 hrs.

Problems in the vocal program of junior and senior high schools.

57:283. Seminar in General Music - 2 hrs.

The study of practical situations in the general music program with special emphasis on grades one through nine.

57:290. Seminar in Band-2 hrs.

For the student with teaching experience. Practical situations studied and analyzed.

57:291. Seminar in Orchestra-2 hrs.

To implement the orchestral program in the elementary and secondary schools.

57:292. Psychology of Music-2 hrs.

The psychological basis of teaching music. May be used to satisfy the special methods elective in the professional core for the master's degree.

MUSIC THEORY

58:050. Harmony 1-2 hrs.

Elementary theory. Rhythmic dictation. Melodic dictation. Sight singing, part writing, and figured basses. Keyboard harmony.

58:051. Harmony II - 2 hrs. Continuation of 58:050.

58:052. Harmony III-2 hrs.

The contrapuntal-harmonic style of the eighteenth century. Continued ear training and keyboard drill, but more emphasis on written theory. Continuation of 58:051.

58:053. Harmony IV-2 hrs.

Continuation of 58:052 with the addition of some nineteenth century style practices.

58:055. Ear Training and Sight Singing I -1 hr.

58:056. Ear Training and Sight Singing II -1 hr.

58:057. Ear Training and Sight Singing III -1 hr.

58:058. Ear Training and Sight Singing IV -1 hr.

58:150(g). Eighteenth Century Counterpoint -2 hrs.

Contrapuntal techniques and instrumental forms of the eighteenth century. Prerequisite: 58:052.

58:151(g). Sixteenth Century Counterpoint -3 hrs.

The vocal polyphonic style of the sixteenth century. Analysis. Creative work in vocal forms: motet, madrigal, mass. Prerequisite: 58:052.

58:152(g). Composition - 3 hrs.

Creative work in the primary forms. Prerequisite: 58:052.

58:153(g). Instrumentation and Arranging -2 hrs.

Ranges, transpositions and functions of all instruments of the band and orchestra, and arranging for choir, band, and orchestra. Prerequisite: 58:052.

58:154(g). Applied Advanced Composition. See 54:154(g).

58:155(g). Form and Analysis - 2 hrs.

Simple homophonic forms, variation and rondo forms, sonata-allegro form and the various forms found in the symphony, concerto, and tone poem.

58:156(g). 20th Century Non-Tonal Music -2 hrs.

Style and structure analyses of representative compositions of the 20th Century with emphasis on the more recently composed works.

58:180. Theory Survey - 3 hrs.

58:252. Advanced Composition - 3 hrs.

Creative work in the larger forms. Student must complete at least one original project in any of these forms. Prerequisite: 58:152.

58:253. Advanced Arranging - 2 hrs.

Scoring for orchestra, band, or chorus. Student must complete at least one transcription for a large instrumental or vocal group. Prerequisite: 58:153.

MUSIC LITERATURE

59:170. History of Music I-3 hrs.

From classical antiquity to the beginning of the nineteenth century. Prerequisite: 52:020.

59:171. History of Music II-3 hrs.

From Beethoven to the present day. Prerequisite: 52:020.

59:172(g). Music History-American - 3 hrs. History and literature of our music from 1620 to the present. Prerequisite: 59:171.

59:173(g). Ethnic Music in the United States -3 hrs.

Examination of the contribution of ethnic and minority groups, both extant and extinct, to the musical scene in the United States.

59:175(g). Music History-Baroque - 3 hrs.

The early, middle, and late Baroque periods in Italy, the Netherlands, Germany, France, Spain, England. Prerequisite: 59:171.

59:176(g). Music Literature—Contemporary
-3 hrs.

Principal styles and trends in the twentieth century. Prerequisite: 59:171.

59:178(g). Performance Literature in ______

A combination ensemble-literature course for the performer. A study in depth of the music literature available for a specific instrument or related areas. The area to be covered will be included in the Schedule of Classes.

59:260. History of Musical Instruments

The development of musical instruments from

antiquity to the present day with emphasis on the function or use of all important changes.

59:270. Music History – Renaissance – 3 hrs. Western music to about 1600. Prerequisite: 59:171.

Philosophy and Religion

T. Thompson, Head. Amend, Bernhard, Bluhm, Crownfield, Fox, Hallberg, Morgan, J. Robinson.

PHIL	OS	OP	HY	MA	JOR
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Required: three of the following: 65:144; 65:146; 65:101;	
65:102	9 hours
Required: 65:145 Electives in philosophy	3 hours
Processor Programme Progra	2.0
	30 hours
RELIGION MAJOR	
Required: 64:124; 65:113	6 hours

PHILOSOPHY AND RELIGION MAJOR

*At least 6 hours shall be in philosophy, and at least 6 hours shall be in religion; the remaining 12 hours may be in either philosophy or religion courses, but of these 12 hours up to 6 hours may, with the consent of the student's adviser, be in related courses from any department in the university.

PHILOSOPHY MINOR

RELIGION MINOR

PHILOSOPHY

65:021. Introduction to Philosophy - 3 hrs.

65:101(g). History of Philosophy: Medieval -3 hrs.

The history of philosophy from late Roman times through the Middle Ages, with emphasis on Augustine and Thomas Aquinas. 65:021 strongly recommended to precede.

65:102(g). History of Philosophy: Modern -3 hrs.

History of philosophy from Kant to the present; emphasis on idealism, romanticism, materialism, posititivism, phenomenology, existentialism. 65:021 recommended to precede.

65:113(g). Philosophy of Religion – 3 hrs. Introduction to the philosophical examination of religious ideas. Strongly recommended that some work in philosophy or religion precede this course.

65:117(g). Philosophers on Education—3 hrs. Study of the major philosophical approaches to education, as exemplified in idealism, realism, pragmatism, and analytic philosophy.

65:119(g). Philosophy of Science—3 hrs.
Philosophical problems of the sciences; nature of laws and theories, causation, explanation and scientific method, and the relation between the natural and social sciences.

65:142(g). Ethics - 3 hrs.

A study of the major problems of moral conduct, with emphasis on contemporary ethical theories.

65:143(g). Aesthetics - 3 hrs.

Problems of experiencing and interpreting the arts presented through readings and discussion of the various arts.

65:144(g). History of Philosophy: Ancient -3 hrs.

The history of philosophy from the Pre-Socratics to late antiquity, with emphasis on Plato and Aristotle. 65:021 strongly recommended to precede.

65:145(g). Logic - 3 hrs.

Methods, principles, and rules of reasoning with emphasis upon their practical uses in effective thinking, scientific inquiry, and verbal communication.

65:146(g). History of Philosophy: Renaissance through Enlightenment - 3 hrs.

The history of philosophy from the Renaissance through Hume, with emphasis on continental rationalism and British empiricism. 65:021 strongly recommended to precede.

65:150(g). Recent and Contemporary Philosophy - 3 hrs.

A study of selected men and issues reflecting a variety of approaches to current philosophical questions. 65:021 strongly recommended to precede.

65:152(g). Existentialism - 3 hrs.

A study of interpretations of human existence in contemporary thought. Presupposes no previous knowledge of philosophy.

65:154(g). American Philosophy – 3 hrs. Major developments in American philosophy from their colonial origins to their contemporary expressions.

65:160(g), John Dewey – 3 hrs.

Study of Dewey's pragmatism as expressed in the fields of ethics, religion, education, society, and theory of knowledge.

65:186(g). Studies in Philosophy – 3 hrs. Study of philosophical thinker or problem to be announced in advance of registration.

65:189(g). Individual Readings in Philosophy – 1-3 hrs.

Individually arranged readings and reports drawn from (1) history of philosophy, or (2) contemporary philosophical problems. Repeatable for a maximum of 6 hours. Prerequisite: department head approval.

RELIGION

64:020. The Heritage of the Bible - 3 hrs. A non-sectarian study of the Bible.

64:112(g). History of Christianity - 3 hrs.

An historical survey, with special attention to the development of major religious ideas and institutions in Western Christianity.

64:117(g). Religious Ideas in America—3 hrs. Investigation of religious movements and beliefs from colonial times to the present. Recommended to precede this course one of the following: 64:020; 64:124; 65:021.

64:124(g). Religions of the World-3 hrs. Living religions of man with emphasis on their relevance to interpretations of existence, the problem of meaning and values, and human destiny.

64:130(g). Religions of India – 3 hrs. Hinduism, Jainism, Buddhism, Islam.

64:132(g). Religions of China and Japan – 3 hrs.

Taoism, Confucianism, Buddhism, Shintoism.

64:134(g). Religions of the Near East-3 hrs.

A study of the origin and early history of Judaism, Christianity, and Islam, including the examination of ancient Egyptian.

Mesopotamian, and Graeco-Roman religions. 64:124 strongly recommended to precede.

64:139(g). Atheism-3 hrs.

A critical introduction to various types of modern atheism.

64:141(g). Old Testament-3 hrs.

Introduction to the history and ideas of the Old Testament. Prerequisite: 64:020.

64:142(g). New Testament-3 hrs.

An introduction to the history and ideas of the New Testament. Prerequisite: 64:020.

64:150(g). Contemporary Religious Thought – 3 hrs.

A study of selected men and ideas in 20th Century religious thought.

64:151(g). Religion and Contemporary Society - 3 hrs.

Examination of the place of religion in contemporary society and of religious interpretations of society and social change.

64:152(g). Religion and Public Education - 2 hrs.

Issues, problems, and curricula development in studying about religion in the public school.

64:153(g). Religious Perspectives in Modern Literature – 3 hrs.

A theological interpretation of modern culture through the analysis of representative 19th and 20th century literary works.

64:186(g). Studies in Religion - 3 hrs.

Study of special topic to be announced in advance of registration.

64:189(g). Individual Readings in Religion – 1-3 hrs.

Individually arranged readings and reports from (1) Biblical studies, (2) history of religions, or (3) contemporary religious thought. Repeatable up to 6 hours. Prerequisite: department head approval.



Speech

Hall, Head, F. Conklin, Edelnant, C. Eilers, Glenn, Jensen, King, MacDonald, Mardon, C. Nelson, Neumann, Scholz, Skaine, M. Smith, Stone, Thorne, Vernier, Wagner, Williams, S. Wood.

SPEECH MAJOR-TEACHING

Required: 50:030 or 50:139; 50:031; 50:144; 50:154; 50:035; 50:053: 50:193	20	1
50:053; 50:193 Plus one of the following <i>emphases</i> for	15-16	hours
Emphases:	35-36	hours
Interpretation —		
Required: 50:055; 50:132 (sections 1, 2, and 3) Required: 50:198 Electives in speech	1	hour
Public Address —	15-16	hours
Required: *50:030 or 50:139	1	hour
50:143; 50:145; 50:165; 50:194	11-12	hours
(*Both 50:030 and 50:139 are required to complete the major with this emphasis.)	15-16	hours
Theatre —		

SPEECH MAJOR

Required: courses in speech excluding 50:026; 50:130; 50:193;
50:194; 51:101; 51:195
At least 9 hours must be from courses numbered 100 or above. Not more than
seven hours may be used from the following: 51:010; 51:105; 51:125; 51:140; 51:130; 51:165; 51:155.

Radio-Television Emphasis

students who choose the major with this emphasis will complete the following:
required; 50:026; 50:060; 66:032; 50:061; 50:062; 50:161;
50:032 or 51:105; 50:169
66:132; 66:040; 33:153 9 hours
34-35 hours

SPEECH MINOR-Teaching

SPEECH MINOR

SPEECH SUBJECT FIELD-Junior High School Major

Required: 50:026; 50:030; 50:031; 50:053; 50:130;
50:139; 50:154; 50:193; 51:101
Electives in speech 5 hours
33 hours

APPLIED SPEECH

A student may earn a maximum of 2 hours applicable toward a baccalaureate degree for participation in either Theatre or Forensics or a combination of the two. Permission for credit is determined by the Director of the activity. Not more than 1 hour can be earned in one semester. Credit not available in the summer.

50:010; 50:110(g). Applied Theatre-1 hr.

50:011; 50:111(g). Applied Forensics -1 hr.

50:015. Theatre Aesthetics - 3 hrs.

Theories of the theatre arts. For theatre-emphasis students. This course is prerequisite to all required courses in theatre.

50:020. Introduction to Theatre-3 hrs.

The place of the theatre in the life of man, with a critical appreciation of the various arts and skills involved. Emphasis on the creative function of the audience.

50:026. Fundamentals of Speech-3 hrs.

Preparation for intelligent public disclosure on issues of consequence through the development of competence in research, the selection and organization of materials, and in the processes of oral communication.

50:030. Public Speaking - 3 hrs.

Application of the principles of psychology, sociology, political science, and composition to situations confronting the public speaker. Prerequisite: 50:026 or equivalent.

50:031. Interpretation - 3 hrs.

Oral reading of prose and poetry.

50:032. Voice and Diction - 3 hrs.

Study and practice in voice and diction to develop superior vocal and articulatory skill.

50:034. Human Communication - 3 hrs.

Explanation and experiences in forms, potentials, and problems on human expression. Discussion, 3 periods; lab., 1 period.

50:035. Problems in Interpersonal Communication – 1 hr.

Experiences and insight into one-to-one human communication.

50:051. Graphic Techniques for Theatre – 2 hrs.

Fundamentals of graphics for theatre design. Laboratory, 4 hrs.

50:053. Theatre Practice - 4 hrs.

Fundamentals of scene and costume construction, lighting and makeup. Practical experience on current productions. Discussion, 2 periods; lab., 3 periods.

50:055. Performing Voice-2 hrs.

Practical work in developing the voice for performance situations.

50:060. Fundamentals of Broadcasting - 3 hrs.

50:06l. Broadcasting Practice - 3 hrs.

Preparation and presentation of radio programs on the broadcasting schedule of station KYTC. Prerequisite: 50:060.

50:062. Radio-Television Speaking - 2 hrs.

Development of understanding and skills needed for effective broadcasting speech. Prerequisite: 50:060.

50:100(g). Introduction to Rhetorical Theory -3 hrs.

A systematic examination of rhetorical theory and its place in spoken and written discourse; development of an understanding of the functions of rhetoric; and an introduction to terms and concepts of rhetorical theory.

50:101. Communication in Education – 2-3 hrs. Exploration of new methods and avenues of communication in teaching. Offered opposite student teaching. May not be counted in meeting requirements of a major or minor in Speech.

50:130(g). Creative Dramatics for Children – 3 hrs.

Prepares students to guide children in creative drama. Study of the art of spontaneous drama as it relates to the development of the child.

50:131(g). Speech Composition—3 hrs. Construction and presentation of speeches of considerable length. Prerequisite: 50:30.

50:132(g). Advanced Interpretation—3 hrs. Application of the principles studied in Oral Interpretation to more advanced material. 1. Poetry; 2. Prose; 3. Readers Theatre. Additional credit may be earned by taking different sections of this course, but not by repeating the same section. Prerequisite: 50:31 or equivalent.

50:134(g). Theatre for Children-3 hrs.
Reading of children's plays and discussion of production problems related to staging of children's theatre.

50:139(g). Principles of Discussion—3 hrs. Practical experience in dealing with contemporary problems through the methods of discussion and debate.

50:140(g). Persuasion — 3 hrs. Study of the factors of oral discourse which are the determinants of beliefs and action. Prerequisite: 50:30.

50:141(g). History of the Theatre 1-3 hrs. Examination of plays, production methods, and historical trends in the theatre from the beginnings to the Restoration.

50:142(g). History of the Theatre II-3 hrs. Examination of plays, production methods, and historical trends in the theatre from the Restoration to 1900. Prerequisite: 50:141.

50:143(g). Advanced Discussion - 3 hrs. Prerequisite: 50:139.

50:144(g). Debate – 3 hrs. Examination in detail of theories of argumentation and debate, emphasizing evidence and reasoning. Prerequisite: 50:026 or equivalent.

50:145(g). Argumentation - 3 hrs.

Advanced study in theory and methods of argumentation. The student will study the ethical, logical, and evidential contributions of various authors to argumentation theory.

50:147(g). History of the Theatre III-3 hrs. Examination of plays, production methods, and historical trends in the theatre from 1900 to the present.

50:150(g). Stage Costume I-2 hrs.

Discussion, 3 periods; lab., 1 period. Basic principles of stage costume design and construction, with emphasis on educational theatre.

50:151(g). Scene Design – 3 hrs. Techniques of scenic design. Prerequisites: 50:051 and 50:053.

50:152(g). Directing II – 3 hrs. Advanced problems in directing. Prerequisite: 50:154.

50:153(g). Acting I-3 hrs. Fundamentals of acting, stressing the basic skills and techniques of the body and voice. Prerequisite: 50:031.

50:154(g). Directing 1-3 hrs.

Analysis of plays and fundamentals of directing.

50:155(g). Acting II—3 hrs.

Application of the skills and techniques of Acting I to more advanced work in the various styles of acting. Prerequisite: 50:153.

50:156(g). Stage Lighting – 3 hrs. Study of stage lighting, history and theory. Prerequisite: 50:151.

50:157(g). Stage Costume II −3 hrs. Advanced study of historic dress and realistic design; an investigation and practice in highly theatrical design.

50:158(g). Makeup - 2 hrs. Stage makeup. Lab. required.

50:160(g). Playwriting – 3 hrs. Prerequisite: consent of instructor.

50:161. Radio-Television Writing – 2 hrs. Writing for broadcast purposes, covering continuity, advertising, news, news analysis, documentaries, and special features. Prerequisite: 50:060.

50:162(g). Conference Techniques and Interviewing - 3 hrs.

Communication in specialized business situations: conferences, small group meetings, and interviews.

50:163(g). Business and Professional Oral Communication - 3 hrs.

Communication in specialized business speaking situations.

50:164(g). Dimensions of Interpersonal Communication - 3 hrs.

Bases, applications, and implications of interpersonal communication. Prerequisite: 50:034 or 50:035.

50:165(g). Experimental Research in Speech

Introduction to quantitative research procedures in the field, and to major research studies already completed. Offered with an emphasis in any of three areas: (1) communication; (2) persuasion; (3) theatre. Additional credit may be earned by taking different sections, but not by repeating the same section.

50:168(g). Theatre Management - 3 hrs.

An intensive study of business practices in the academic, community, and commercial theatre. Field trips and guest lecturers to be included.

50:169. Radio-Television Internship-6 hrs.

Intensive experience in a campus or community radio-television facility. Prerequisite: departmental approval.

50:182(g). Stage Fight Choreography

Basic skills of modern and historic styles of fencing, swordplay, and other modes of fighting, and application of these skills to the planning and safe execution of an effective and artistic stage fight.

50:188. Parliamentary Procedure - 2 hrs.

Study of the rules of order which govern the proceedings of organizations in a democratic society.

50:189(g). Readings in Theatre-3 hrs.

Intensive investigation of a theatre style, form, period, or concept. May be repeated for a maximum of 6 hours. Prerequisite: Instructor approval.

50:193(g). Teaching of Speech-3 hrs.

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.

50:194(g). Methods of Directing Forensics -2 hrs.

Credit also as a course in education for a student whose major is speech.

50:205. Interpersonal Communication — 3 hrs. Synthesis of psychological, sociological, philosophical analysis of person-to-person communication.

50:212. Speech Criticism - 3 hrs.

50:225. Bibliography and Methods of Research - 3 hrs.

50:230. Psychology of Speech-3 hrs.

50:240. Classical Rhetoric - 2 hrs.

Rhetorical theory from 500 B.C. to about 100 A.D. Emphasis on the rhetorical theory of Aristotle, Cicero, and Quintilian. Modern theories examined in the light of the classical period.

50:241. British and American Rhetoric - 3 hrs. From the eighteenth century to the twentieth.

50:242. British and American Public Address - 3 hrs.

Study of major speakers and movements, including style. Offered in three sections.

(1) British Public Address

(2) American Public Address to 1865

(3) American Public Address, 1866 to the Present.

Additional credit may be earned by taking different sections, but not by repeating the same section.

50:251. Problems in Theatre Design -3 hrs.

Study of auditorium design: design of scenery, lighting, costumes, and props for different types of auditorium design and different types of staging. Prerequisite: approval of instructor.

50:273. Projects in Speech - 1-3 hrs.

May be repeated for a total of 3 hours credit. Approval of departmental committee must be obtained before registration.

50:282. Seminar in Theatre-3 hrs.

Specialized study in areas of theatre as related to educational theatre.

Sec. I. European Theatre. Prerequisite: 50:142

Sec. 2. American Theatre. Prerequisite: approval of instructor.

Sec. 3. Stage Interpretation of Selected Plays.
Prerequisite: approval of instructor.

Sec. 4. Technical Production. Prerequisite: approval of instructor.

Additional credit may be earned by taking different sections of this course, but not by repeating the same section.

50:283. Seminar in Teaching Speech —3 hrs.

Emphasis on (1) problems related to organizing and teaching speech courses in the public schools, (2) directing of extra-curricular speech activities, and (3) teaching speech at the college level. May be repeated for a maximum of 6 hours.

50:285. Seminar in Public Address—3 hrs. Class interest determines whether the emphasis will be upon (1) persuasion. (2) rhetoric, or (3) debate and discussion. May be repeated for a maximum of 6 hours.

50:287. Seminar in Interpretation—3 hrs. Problems in interpretation. Class interest will determine whether the emphasis will be on (1) problems in teaching interpretation. (2)

problems in directing interpretation activities; or (3) problems in developing materials for interpretation. May be repeated for a maximum of 6 hours.

50:288. Seminar in Scene Design - 3 hrs. History and theory of scene design. Laboratory. Prerequisite: 50:053 and 50:151.

50:299 Research.

Speech Pathology and Audiology

R. Eblen, Head. Boots, J. Harrington, House, Robinson, Rooney, *R. Schwartz.

*on leave

SPEECH PATHOLOGY MAJOR - TEACHING

Recommendation for certification is made only upon completion of the Master of Arts program in Speech Pathology as described on page 229.

Required: 51:010; 51:105; 51:106; 51:111; 51:125; 51:127;

38 hours

The completion of the undergraduate major or its equivalent will be considered adequate preparation for the graduate portion of the program. Deficiencies in undergraduate preparation must be made up before the student can begin his graduate sequence in speech pathology.

51:010. Introduction to Pathology of Speech and Hearing — 3 hrs.

51:101(g). Speech Correction for the Classroom Teacher - 3 hrs.

The role of the classroom teacher in dealing with speech and hearing problems. Information on identification, causes, personality problems, referrals, and remediation procedures. Not to be taken by students majoring in Speech Pathology.

51:105(g). Speech Science-4 hrs.

Physical and psychological aspects of sound. Anatomy and physiology of the vocal and hearing mechanisms.

51:106(g). Language Acquisition in Children – 3 hrs.

Language in children from birth through age five. (The acquisition of the phonological, morphological, and syntactic systems of Standard English will be studied.) Theories of language learning will be studied as well as the effect of physiological, psychological, and environmental factors.

51:111(g). Practicum in Phonetics in Speech Pathology and Audiology – 2 hrs.

Transcription of the International Phonetic Alphabet with emphasis on the symbols for transcription of defects in articulation and voice as well as ethnic differences. Includes laboratory practice sessions.

51:125(g). Disorders of Articulation - 4 hrs.

Normal and abnormal speech and language plus diagnosis and remediation of articulation problems. Prerequisite: 51:010.

51:127(g). Language Intervention Procedures -3 hrs.

Techniques for rehabilitation of language disorders. The mentally retarded and disadvantaged children will be considered as well as the language-delayed child in the normal classroom. Includes lectures, readings, discussion, and demonstrations. Prerequisite: 51:106 or instructor's approval.

51:130(g). Cleft Palate - 2 hrs.

Etiology, nature and principles of remediation of speech problems resulting from cleft palate, and other structural facial deviations. Demonstration of applied techniques. Includes laboratory. Prerequisite: 51:125 or instructor's approval.

51:140(g). Stuttering: Theory and Therapy - 3 hrs.

Etiology, nature, and therapy for disorders of rhythm in speech production. Prerequisite: 51:125 or instructor's approval.

51:155(g). Clinical Practice - 1-2 hrs.

Clinical experience in diagnosis and remediation of the speech problems associated with disorders of articulation, cleft palate, stuttering, as well as experience in the testing of hearing. Prerequisite: 51:125 or instructor's approval. Must be repeated for a total of 4 hours of credit.

51:165(g). Introduction to Audiology -3 hrs.

Types of hearing loss and audiometric measurement. Pertinent organic and psychological problems. Prerequisite: 51:105.

51:175(g). The Acoustically Impaired -3 hrs.

Philosophies and history of education of the acoustically handicapped. Relevant organic and psychological problems. Types of programs and vocational training. Introduction to rehabilitation methods.

51:180(g). Current Problems in Speech Pathology and Audiology - 2 hrs.

Major issues confronting clinicians, researchers, and training institutions. Seminar discussion topics to be determined by participants. Prerequisite: approval of instructor,

51:195(g). Methods in Speech Pathology -2 hrs.

Intensive investigation of the planning and conducting of speech pathology and audiology programs in appropriate clinical settings. Prerequisite: 51:125 or instructor's approval.

51:201. Bibliography and Methods of Research - 3 hrs.

51:210. Clinical Examination - 3 hrs.

Theoretical and practical aspects of the evaluation process.

51:235. Disorders of Voice-4 hrs.

Normal and abnormal human voice production. Etiology, diagnosis and treatment of organic and functional voice problems. Open to Speech Pathology majors only. 51:245. Neuropathologies of Speech-4 hrs.

Nature, etiologies, principles of remediation of speech problems associated with cerebral palsy, aphasia, and various pathologies of the nervous system. A unit on basic anatomy and function of the nervous system is included. Open only to Speech Pathology majors.

51:255. Advanced Clinical Practice -1-4 hrs.

Clinical experience in diagnosis and remediation of the speech problems associated with aphasia, cerebral palsy, hearing loss, and disorders of voice. Prerequisite: 51:155. May be repeated for a total of 4 hours of credit.

51:256. Clinical Practice in a Medical Setting - 1 hr.

Supervised experience in examination and/or therapy in speech pathology and language pathology in cooperating medical facilities off campus. These may be hospitals, nursing centers or rehabilitation centers. (Approx. 3 clock hours each week during a semester in this practicum.) Prerequisite: 51:245.

51:257. Practicum in Clinical Examination—1 hr.

Supervised experience in clinical examination in speech pathology, language pathology and audiology; writing examination reports. Oral presentation of reports at weekly meetings. (Approx. 3 clock hours each week during a semester in the practicum.) Prerequisite: 51:210 and instructor's approval.

51:265. Pure Tone and Speech Audiometry - 3 hrs.

Fundamental principles and clinical applications of pure tone and speech audiometry. Prerequisite: 51:165.

51:275. Aural Rehabilitation-3 hrs.

Speech reading, speech therapy, auditory training and oral language for the hard of hearing and deaf.

51:280. Individual Readings - 1-2 hrs.

Project must be approved before beginning of semester in which work is to be done. May be repeated. Prerequisite: approval of instructor and head of department.

51:295. Seminar in Speech Pathology and Audiology — 2 hrs.

Offered in five sections: (1) Stuttering, (2) Articulation Theory, (3) Disorders of Language, (4) Experimental Phonetics, (5) Audiology. Prerequisite: instructor approval. May be repeated for a total of 6 hours.

51:299. Research.

College of Natural Sciences

There are six instructional departments in the College of Natural Sciences. These are Biology, Chemistry, Earth Science, Industrial Arts and Technology, Mathematics, and Physics.

Majors and minors are available in all departments on both teaching and liberal arts programs leading to the Bachelor of Arts degree. In addition, students may major in science on both programs. This is an interdepartmental major and is offered under the general jurisdiction and the general supervision of the Dean of the College.

Since science education does involve the cooperation of a number of departments, a Science Education Coordinating Committee functions in promoting this cooperation. There are members on this committee from other colleges as well as from the departments in the College of Natural Sciences.

The degree of Bachelor of Technology may be earned with majors in the Department of Industrial Arts and Technology. This degree provides educational experience for those who wish to work as technologists in industry or as teachers in trade and technical schools.

There are graduate majors in all departments and in science and science education for students working for a degree of Master of Arts. A major in science education may be selected for the Specialist degree.

The College of Natural Sciences, in attempting to perform the basic academic functions of instruction, research, and service, has the following objectives and goals:

- To prepare students for a variety of career opportunities in fields related to the disciplines of the departments.
- To provide students with the background they will need to pursue professional goals further in other fields, such as medicine, dentistry, and engineering.
- 3) To provide students with the background they will need to pursue educational and professional goals further in the field of their major toward the advanced level of the doctorate.
- 4) To contribute to the general education of all students by relating the sciences, mathematics, and industrial arts and technology, particularly in specially designated courses, to other fields and to conditions and problems of society in general.
- 5) To engage actively in research, inquiry, and other creative endeavors which will complement the instructional program and make direct contributions to the academic disciplines and to society.
- 6) To provide service to schools and to other community agencies and organizations in the form of consultations, specially designed courses and conferences, and regular programs of visitation in order that the on-campus expertise of the College will be shared with the off-campus world.

Departments are the essential units in the college organization that determine the above goals, the relative priorities given those goals, and the programs designed to meet them. Faculty members, students, administrators, and non-academic staff members are all involved in the planning and execution of the educational programs.

The career opportunities for graduates in the College of Natural Sciences are numerous and diverse. All departments offer programs for prospective teachers in elementary and secondary schools. Departmental offices are excellent sources of information about other careers.

A sampling of careers for which work in the College of Natural Sciences would prepare one might include: engineering assistant, horticulturist, computer programmer, industrial chemist, actuary, park naturalist, petroleum geologist, automotive technologist, analytical chemist, pharmaceutical salesman, food and drug inspector, and statistician. It should be emphasized that these are only representatives of many possibilities.

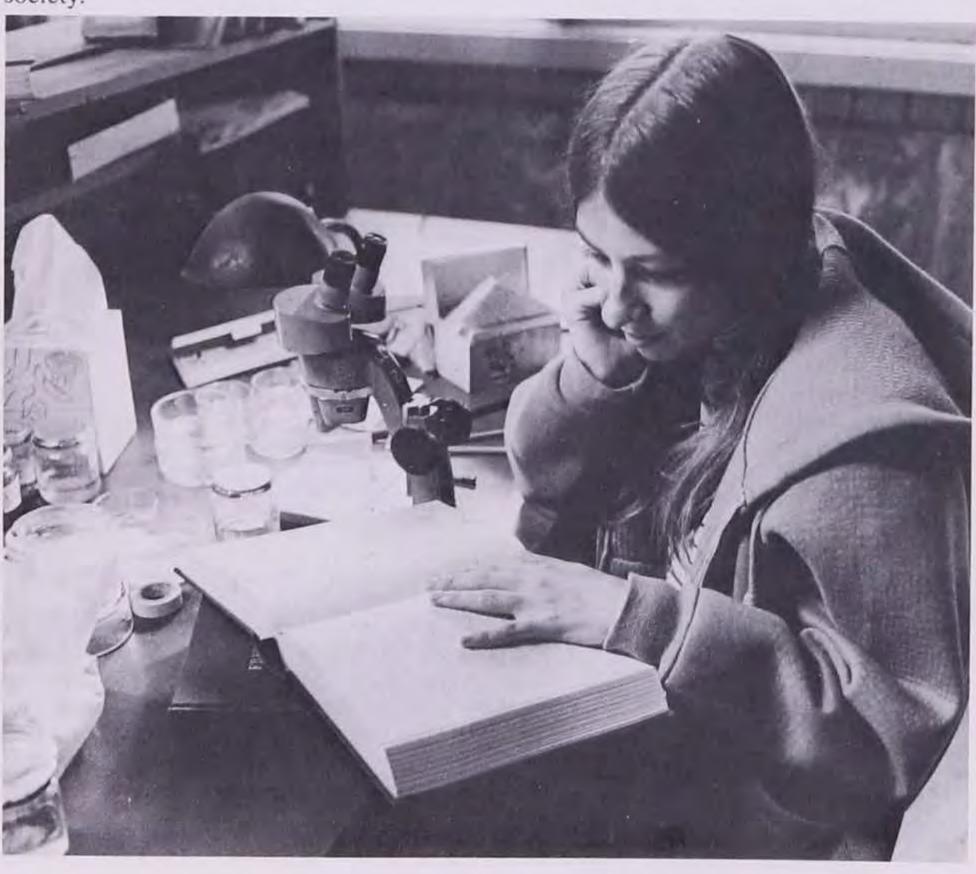
In addition, of course, many students take background work and go on in such professional training programs as pharmacy, medicine, dentistry, mortuary science, engineering, and veterinary medicine. Others go on for advanced work leading to the

doctorate in various specialized fields of mathematics, science, and technology,

The College of Natural Sciences is involved in a number of interdepartmental and intercollegiate projects. An annual Science Symposium brings outstanding scientists to the campus to speak to large numbers of outstanding high school students and their teachers, and the students compete for scholarships and other awards. An annual Industrial Education Exposition provides scholarships and awards for outstanding industrial arts projects. Faculty members participate in a variety of interdisciplinary courses and seminars, many of them concerned with environmental science and ecology.

The College of Natural Sciences is attempting to make the study of science, mathematics, and technology meaningful and helpful for the problems of modern

society.



Biology

Downey, Head. Allegre, Clausen, Dowell, *Eilers, Goss, Haman, D. Johnson, McCalley, Orr, Picklum, Riggs, Simpson, D. Smith, TePaske, Whitson, Winier, N. Wilson.

*on leave

BIOLOGY MAJOR-TEACHING

Plan A

Area I: 84:021; 84:103; 84:160; 84:168.

Area II: 84:022; 84:112; 84:130; 84:132; 84:166; 84:170.

Area III: 84:023; 84:131; 84:140; 84:142; 84:146.

Area IV: 84:024; 84:106; 84:108; 84:114; 84:120; 84:122; 84:138; 84:172.

Area V: 84:025; 84:128; 84:151.

Plan B

Area I: 84:112; 84:130; 84:132; 84:166; 84:170.

Area II: 84:106; 84:108; 84:114; 84:120; 84:122; 84:138; 84:172.

Plan C

INDIVIDUALIZED PROGRAM: a biology major may elect, with the assistance of his advisor, to formulate an individualized plan of study for achieving his major goals. A plan stating the student's long-range educational objectives and specifying how the objectives will be met must be submitted by the student, with his signature and that of his advisor, to a departmental review committee for final approval. Any changes in an approved plan are by student petition. Student must contact the department for this option.

BIOLOGY MAJOR

Plan A

Required: 86:044: 86:048: 86:050 or 86:124
Required: 86:044; 86:048; 86:050 or 86:124
sciences, foreign language, geography, mathematics, physics, or
psychology
psychology
Electives in biology
And one course from each of the five areas listed in Plan A of
BIOLOGY MAJOR—Teaching
55 hours

Plan B

INDIVIDUALIZED PROGRAM: a biology major may elect, with the assistance of his advisor, to formulate an individualized plan of study for achieving his major goals. A plan stating the student's long-range educational objectives and specifying how the objectives will be met must be submitted by the student, with his signature and that of his advisor, to a departmental review committee for final approval. Any changes in an approved plan are by student petition. Student must contact the department for this option.

Total minimum hours required: 55 hours

BIOLOGY MINOR-Teaching and Liberal Arts

*Required: 86:044 or 86:030	ours
And one course from each of the five areas listed in Plan A of	Curs
BIOLOGY MAJOR - Teaching of which eight hours must be	
100-level. (84:191 may also be counted toward the 8-hour	
requirement.)	ours
24 h	ours

*Home Economics majors may substitute 86:061 for this requirement.

84:021. LIFE: Environmental Relationships -3 hrs.

Man as an integral part of the balance of nature, not as an external manipulator. Experience in collecting and interpreting ecological data and relating same to environmental problem areas. Discussion, 2 periods; lab., 2 periods (18 weeks); or discussion, 4 periods; lab., 4 periods (9 weeks).

84:022. LIFE: Local Plants and Animals -3 hrs.

Introduction to biological world through field experience; acquaintance with similarities and differences, community composition, and habitats of representative organism. Discussion, 4 periods; lab., 4 periods (for 9 weeks).

84:023. LIFE: Adaptation and Survival - 3 hrs. Mechanism by which organisms and populations, including man, have adapted to respective environments and how adaptive information is stored, transmitted, utilized and

exchanged. Discussion, 4 periods; lab., 4 periods (for 9 weeks).

84:024. LIFE: Form and Function—3 hrs. Interdependence of biological structure and function with primary focus given to interaction of biological systems. Discussion, 4 periods; lab., 4 periods (for 9 weeks).

84:025. LIFE: The Cell-3 hrs.

Structural organization, energy production and its utilization; replication, and transmission of genetic information, and the control of cell activities are considered to understand the maintenance of life. Discussion, 4 periods; lab., 4 periods (for 9 weeks).

84:031. Anatomy and Physiology 1-4 hrs. Structure and function of the organ systems of the human body. Open only to nurses in training. Discussion, 3 periods; lab., 2 periods.

84:032. Anatomy and Physiology II - 3 hrs. A continuation of 84:031. Open only to nurses in training. Prerequisite: 84:031. Discussion, 2 periods; lab., 2 periods.

84:033. Principles of Microbiology - 3 hrs.

The base concepts and practical applications of microbiology in daily life are stressed. The course is designed for students majoring in areas other than science. Sections may be offered exclusively for nurses in training. Discussion, 2 periods; lab., 2 periods.

84:034. General Zoology -4 hrs.

Activities, structure, methods of reproduction, and relationships of major types of animal life. Discussion, 2 periods; lab., 4 periods.

84:036. General Botany -4 hrs.

Activities, structure, methods of reproduction, relationships, and uses of major types of plant life. Discussion, 2 periods; lab., 4 periods.

84:103(g). Conservation of Iowa Resources -3 hrs.

Natural resources of Iowa, including soil, forest, wildlife, minerals and water, their interrelationships with the economics and social development of the state and nation; techniques of natural resources management. Discussion, 2 periods; lab., 2 periods.

84:104(g). Iowa Conservation Problems I -3 hrs.

Forests, wildlife and ecology relationships. Field experience. Preparation of visual aids, demonstrations and projects. Offered only at Iowa Teachers Conservation Camp.

84:105(g). Iowa Conservation Problems II -3 hrs.

Soil, water, and mineral resources. Field experience. Preparation of visual aids, demonstrations and projects. Offered only at Iowa Teachers Conservation Camp.

84:106(g). Comparative Anatomy of the Vertebrates -4 hrs.

Consideration of the origin of vertebrates and a comparison of the anatomy of the organ systems of the classes. Discussion, 2 periods, lab., 4 periods. Prerequisite: zoological background.

84:108(g). Vertebrate Embryology -4 hrs.

Development of vertebrate organism. Formation and development of germ cells; fertilization; growth and differentiation. Prerequisite: zoological background; 84:106 recommended. Discussion, 2 periods; lab., 4 periods.

84:112(g). Invertebrate Zoology -4 hrs.

Anatomy and physiology of type forms of the invertebrate phyla. Prerequisite: 84:34. Discussion, 2 periods; lab., 4 periods.

84:114(g). Animal Physiology -4 hrs.

Application of physical and chemical principles to selected organ systems, especially mammals. Discussion, 3 periods; lab., 3

periods. Prerequisite: Zoological background and a year of chemistry. One semester of physics recommended.

84:120(g). Plant Morphology - 3 hrs.

Structure and evolution of plant phyla with emphasis upon algae, fungi, mosses, and ferns. Prerequisite: botanical background. Discussion, 1 period; lab., 4 periods.

84:122(g). Plant Physiology -4 hrs.

Functional aspects of plant processes related to composition, metabolism, transport mechanisms, growth and development. Discussion, 2 periods; lab., 4 periods. Prerequisite: botanical background required and chemistry desired.

84:128(g). Cell Biology -4 hrs.

Fundamental physiological processes of cellular function with emphasis on metabolism, respiration, photosynthesis, protein synthesis, and molecular controls. Discussion, 3 periods; lab., 3 periods. Prerequisite: 86:124.

84:130(g). Protozoology -4 hrs.

Consideration of systematics, morphology, physiology, morphogenesis, genetics and ecology of free-living and parasitic protozoa; literature studies on contemporary research and historical prespective. Discussion, 2 periods; lab. and field work, 4 periods. Zoological background required.

84:131(g). Animal Behavior -4 hrs.

Psychological, physiological, sociological, and ethological approaches to behavior; relationship between behavior and environment, and experimental variables. Discussion, 3 periods; lab., 3 periods. Prerequisites: 84:023 plus two other courses from LIFE series or consent of instructor.

84:132(g). Parasitology -4 hrs.

Morphology, ecology, and life history of parasites important to man and other animals. Prerequisites: 84:022; 84:112 or consent of instructor. Discussion, 2 periods; lab., 4 periods.

84:138. Human Physiology -4 hrs.

Anatomy and functioning of the organ systems of the human body. Discussion, 2 periods; lab., 2 periods.

84:140(g). Genetics -4 hrs.

Analytical approach to classical, developmental and population genetics. Discussion, 3 periods; lab. projects arranged.

84:142(g). Organic Evolution-2 hrs.

History, theory, and mechanics of evolution. The course of evolution as indicated by fossil records and other lines of evidence. Evolution and the modern synthesis of biology.

84:146(g). Experimental Embryology -4 hrs.

Patterns and principles of animal development. Emphasis on current concepts in developmental genetics. Discussion and lab., two 3-hour periods.

84:151(g). General Microbiology -4 hrs.

Physiology, morphology, taxonomy, and pathogenicity of microbes, with applications to agriculture, sanitation, and industry. Discussion, 2 periods; lab., 4 periods. Prerequisite: biological and chemical background.

84:160(g). Field Zoology of Vertebrates -4 hrs.

Identification and natural history of Iowa vertebrates. Field trips emphasized, Discussion, 2 periods; lab. and field work, 4 periods. Prerequisite: zoological background.

84:166(g). Plant Systematics - 4 hrs.

Biology of angiosperms, including classification, evolution, population structures, and breeding systems. Discussion, 2 periods; lab. and field work, 4 periods. Prerequisite: permission of instructor.

84:168(g). Ecology -4 hrs.

Relationships of plants, animals and environments with emphasis on the principles of community structure and dynamics. Prerequisite: botanical and zoological background. Discussion, 3 periods; lab., 2 periods.

84:170(g). Entomology -4 hrs.

Introduction to the biology of insects. Discussion, 2 periods; lab., 4 periods. Prerequisite: zoological background.

84:172(g). Plant Anatomy -4 hrs.

Ontogeny, growth and differentiation of simple and complex tissues of root, stem, leaf, and reproductive organs of higher plant groups. Prerequisite: botanical background. Discussion, 2 periods; lab., 4 periods.

84:191. The Teaching of Biological Sciences -4 hrs.

Credit also as a course in education for a student whose major is science. Prerequisite: 10 hours of biology; should precede student teaching. Discussion, 2 periods; lab., 2 periods.

84:210. Biological Techniques - 3 hrs.

Biological techniques of the teacher of biology. Lab., 6 periods.

84:220. Advanced Plant Morphology -4 hrs. Life histories of representatives of the plant phyla. Morphological and physiological advancements which have resulted in the gradual evolution of flowering plants. Discussion, 2 periods; lab. and field work, 4 periods.

84:225. Aquatic Biology -4 hrs.

The biological, physical and chemical aspects of aquatic environments with special emphasis on collection and identification of aquatic organisms. Discussion, 2 periods; lab. and field work, 4 periods. Prerequisite: botanical and zoological background and a year of chemistry.

84:230. Special Problems in Biology -1 to 6 hrs.

Credit determined at registration. (Problems in biology other than those for theses or in regular curricular offerings.) Prerequisite: departmental approval; 84:292 recommended.

84:240. Endocrinology -4 hrs.

Functions, synthesis and effects of hormones. Lab. experiments include small animal surgical techniques. Discussion, 3 periods; lab., 3 periods. Prerequisite: zoological background and one semester of either cell biology or biochemistry, or instructor's permission. Previous course in physiology recommended.

84:242. Comparative Physiology -4 hrs.

Organ physiology of animals. Comparison of physiological processes in various phyla and relationships to environment. Prerequisites: zoological background, cell biology or biochemistry or instructor's permission. Physics and previous course in physiology recommended.

84:251. Experimental Microbiology —4 hrs.

A general introduction to experimental design and instrumental methods of analysis used in investigating the morphology, physiology and ecology of the major groups of microbes. Student must complete at least one original project in any of the above areas. Prerequisite: 84:151(g), or equivalent. Discussion, 2 periods; lab., 4 periods.

84:292. Research Methods in Biology -3 hrs.

An introduction to experimental design techniques and instruments used in descriptive, quantitative, experimental biology. Practical experience will be available in various areas of instrumentation. Individual exploration of a possible thesis project. Discussion, 3 periods.

Chemistry

L. Wilson, Head. Chang, R. W. Hanson, Lyon, Macmillan, Richter, Rider, W. Wehner, Wiley, Woo.

Note: It is strongly recommended that students considering a chemistry major consult the department head about the possibility of advanced placement or take 86:044 during the first semester of the freshman year.

CHEMISTRY MAJOR-TEACHING

Required:

Chemistry -86:044; 86:048; 86:124; 86:126; 86:132; 86:140	
or 86:142	23 hours
Physics -88:054; 88:056	8 hours
Methods-82:193	3 hours
Electives in Chemistry beyond 86:048	5 hours
	39 hours

Note: Students are advised to complete a minor in another science or in mathematics. The required mathematics and physics courses should be completed by the end of the sophomore year. The mathematics prerequisites for one or more of the above courses are 80:045, 80:046, and 80:060.

CHEMISTRY MAJOR-A

Required: 86:044; 86:048; 86:124; 86:126; 86:132; 86:134 or 86:135;
86:140; 86:141; 86:143; 88:054; 88:056; 80:045; 80:046; 80:060 52 hours
Electives in chemistry or other sciences 6 hours
58 hours

The equivalent of at least 10 hours in a foreign language is strongly recommended especially for those expecting to do graduate work.

CHEMISTRY MAJOR-B

Required: 86:044; 86:048; 86:124; 86:126; 86:127; 86:132; 86:135; 86:140; 86:141; 86:143; 86:145
Required: Two additional advanced chemistry courses with a
physical chemistry prerequisite. One physics course at or
above the level of 88:130 or one mathematics course above
the level of 80:061 may be substituted for one advanced
chemistry course
Required: 88:054; 88:056; 80:060; 80:061
61 or 62 hours

A reading knowledge of Russian or German is required for this major.

This major will meet the requirement specified by the American Chemical Society for an approved undergraduate major.

CHEMISTRY MINOR-Teaching and Liberal Arts

86:030. Contemporary Chemical Problems -4 hrs.

Basic concepts of chemistry and their applications to living systems and the problems of an industrial society. The work of the chemist and the interactions of chemistry with other activities of man. Discussion, 3 periods; lab., 2 periods. No credit for student with credit in any college chemistry course. Recommended for General Education.

86:041. Introductory Physiological Chemistry — 3 hrs.

Inorganic, organic, and physiological chemistry for nurses in training. Discussion, 2 periods; lab., 2 periods.

86:044. General Chemistry I-4 hrs.

Structure of matter, its physical properties and laws describing them, the periodic table and its relation to atomic structure and chemical properties, and non-metallic elements and their compounds. Students who have had one unit of high school chemistry or equivalent may, if they show sufficient proficiency by examination, enter 86:046 or 86:048. Discussion, 3 periods; lab., 3 periods.

86:046. General Chemistry II B-4 hrs.

Continuation of 86:044 with emphasis on chemistry of non-metals, metals and metallurgy, chemical equilibrium, organic and physiological compounds. For science majors and others who do not take organic chemistry. Prerequisite: 86:044 or equivalent preparation. Discussion, 2 periods; lab., 6 periods. No credit for a student with credit in 86:048.

86:048. General Chemistry II A-4 hrs.

Continuation of 86:044 with emphasis on chemistry of non-metals, metals, chemical and ionic equilibrium, and separation and identification of ions. Discussion, 2 periods; lab., 6 periods. Prerequisite: 86:044 or equivalent. For pre-professional students and science majors with a special interest in chemistry. Others may enroll. No credit for a student with credit in 86:046.

86:050. Bio-Organic Chemistry -4 hrs.

Theoretical and practical consideration of chemical principles important in biological systems. Stresses instrumentation techniques for biologists and medically related fields. No credit for student with credit in 86:126. Discussion, 2 periods; lab., 6 periods. Prerequisite: 86:048.

86:061. Applied General Chemistry -3 hrs.
Principles of chemistry as applied to the home

and industry. For home economics students and non-science majors, Discussion, 2 periods; lab., 2 periods. No credit for student with credit in 86:044.

86:063. Applied Organic and Biochemistry -5 hrs.

For home economics students and non-science majors. Prerequisite: 86:061 or equivalent. Discussion, 3 periods; lab., 4 periods. No credit for a student with credit in 86:124.

86:124(g). Organic Chemistry I-4 hrs.

Essentials of organic chemistry. For majors in the sciences and those preparing for dentistry or medicine. Prerequisite: 86:046 or 86:048. Discussion, 2 periods; lab., 6 periods.

86:126(g). Organic Chemistry II - 4 hrs. A continuation of 86:124, including lipids, carbohydrates, and proteins. Discussion, 2 periods; lab., 6 periods. Prerequisite: 86:124.

86:127(g). Organic Chemistry III -2-3 hrs. A continuation of the basic organic chemistry course, including nitrogen compounds and polymers. Two lectures and an optional 3-hour lab per week. Prerequisite or corequisite: 86:126.

86:128(g). Fundamentals of Chemistry -4 hrs.

Quantitative relationships of substances based upon atomic structure. Enrollment limited to graduate students with special departmental approval. Discussion, 2 periods; lab., 4 periods.

86:132(g). Quantitative Analysis – 4 hrs. Volumetric and gravimetric analysis. Prerequisite: 86:046 or 86:048. Discussion, 2 periods; lab., 6 periods.

86:134(g). Instrumental Analysis I-4 hrs. Instrumental methods of analysis. Theory of instrumentation and practical experience in such areas as potentiometric titration, polarography, electroanalysis, spectrophotometry, and gas chromatography, Prerequisite: 86:132. Discussion, 2 periods; lab., 6 periods.

86:135(g). Instrumental Analysis II-4 hrs.

The application of physical chemical principles to theory and practice of instrumental methods of analysis such as spectrophotometric, electroanalytical, and chromatographic techniques. Prerequisites: 86:132 and 86:140. Prerequisite or corequisite: 86:141. Discussion, 2 periods; lab., 6 periods.

86:140(g). Physical Chemistry I-3 hrs.

Application of the laws of physics to chemical phenomena. Prerequisite: 80:060, 88:056, or permission of the instructor. Discussion, 3 periods.

86:141(g). Physical Chemistry II-3 hrs.

Continuation of Physical Chemistry I which is prerequisite. 80:061 is recommended as a prerequisite, but may be taken concurrently. Discussion, 3 periods.

86:142(g). Principles of Physical Chemistry -3 hrs.

Physical aspects of chemistry for the needs of the high school chemistry teacher, and for students in the biological sciences. Prerequisite: 86:046 or 86:048; 80:046. Recommended: 88:054. Discussion, 3 periods.

86:143(g). Physical Chemistry Laboratory -1-3 hrs.

Techniques of physical measurements related to chemistry. Prerequisites: 86:132 and 86:140; 86:141 may be taken concurrently. Meets 3 to 9 hours per week. Chemistry A and B majors should take at least two hours credit. Those with credit in 86:142 may take one hour credit.

86:144(g). Inorganic Chemistry 1-3 hrs.

The structure of elements and their consequent physical and chemical properties and their relations to the periodic chart. Prerequisite: 86:124, 80:046. Discussion, 3 periods.

86:145(g). Inorganic Chemistry II-3 hrs.

Application of physical chemical principles to the study of inorganic systems. Prerequisite: 86:124; 86:140. Prerequisite or corequisite: 86:141. Discussion, 3 periods.

86:147(g). Inorganic Chemistry Laboratory -1-3 hrs.

Involves the preparation, analysis, and study of the properties of inorganic compounds. Prerequisite: 86:134 or 86:135. Prerequisite or corequisite: 86:141; 86:144 or 86:145.

86:150(g). Biochemistry I-4 hrs.

Chemistry of life processes with emphasis on metabolism. Prerequisite: 86:126. Discussion, 2 periods, lab. 6 periods.

86:151(g). Biochemistry II-4 hrs.

Chemistry of life processes based on physical chemical principles. Prerequisites: 86:126 and 86:140. Prerequisite or corequisite: 86:134 and 86:141. Discussion, 2 periods; lab., 6 periods.

86:160(g). Radioisotope Techniques-4 hrs.

Introduction to use of radioisotopes. Sources, properties, and safe handling of radioactivity, with accompanying laboratory in simple instrumentation and applications of radioactive

tracers. Prerequisite: 86:048. Discussion, 2 periods; lab., 6 periods.

86:180. Undergraduate Research in Chemistry -1-3 hrs.

Credit determined at registration. May be repeated only once for credit. Prerequisite: 86:140 and approval of department head. Prerequisite or corequisite: 86:141.

86:193(g). Current Curricula in Chemistry -3 hrs.

Philosophy, methods, and materials of secondary school chemistry curricula, including CHEM Study, IPS (Introductory Physical Science), PACE Chemistry, and other innovations in the teaching of chemistry. Discussion, 2 periods; lab., 2 periods.

86:230 Coordination Chemistry - 3 hrs.

Lecture course on various aspects of coordination compounds. Prerequisite: 86:141; 86:144 or 86:145.

86:235. Molecular Structure - 3 hrs.

Lecture course on wave mechanics as applied to atomic and molecular structure, with emphasis on experimental spectroscopy. Prerequisites: 80:061; 88:054; 88:056; 86:141.

86:240. Special Problems in Chemistry -1-6 hrs.

Credit determined at registration. Problems selected according to needs of students. Prerequisite: departmental approval.

86:242. Special Topics in Analytical Chemistry -3-4 hrs.

A theoretical and practical consideration of the problems of separation and measurement in analytical chemistry. Discussion, 3 periods; lab., 3 periods; lecture maybe taken without the laboratory. Prerequisites: 86:132 and approval of department head.

86:292. Research Methods and Chemical Literature - 3 hrs.



54 hours

Earth Science

W. I. Anderson, Head. DeKock, DeNault, Grant, Hoff, Holst.

red: 80:045; 80:046; 82:193; 86:044; 86:046*; 88:054; 88:056	houre
8 may be substituted for 86:046	hours
tives may include any 87 numbered course or 84:105 or 97:110. Student complete a minor in another science or in mathematics.	s are
CIENCE MINOR - Teaching and Liberal Arts red: courses in earth science	hours
Y MAJOR red: 80:045; 80:046; 86:044; 86:046*; 88:054; 88:056	nours
i i i i i i i i i i i i i i i i i i i	SCIENCE MAJOR — TEACHING ired: 80:045; 80:046; 82:193; 86:044; 86:046*; 88:054; 88:056

*86:048 may be substituted for 86:046.

**Summer field course requirement to be met by credit earned at a field camp approved by the department.

Recommended electives: 80:060; 80:061; 84:034.

87:010. Astronomy I-3 hrs.

Introduction to astronomy with emphasis on the astronomy of the solar system. Brief introduction to stellar astronomy.

87:011. Astronomy Laboratory - 1 hr.

Students enrolling in 87:010 may enroll in this laboratory. Involves fundamentals of observation, use of introductory equipement, use of almanacs, atlases, and ephemerides. Some photography will be done. Prerequisite: consent of instructor and concurrent enrollment in 87:010.

87:012. Astronomy II-3 hrs.

Continuation of 87:010. Detailed examination of stellar systems, binary stars, variable stars, star clusters, stellar populations and evolution, the Galaxy and exterior galaxies. Prerequisite: 87:010 or previous equivalent course.

87:013. Astronomy Laboratory II - 2 hrs.

A continuation of 87:011. Includes spectral classification, galactic recession, stellar photometry data reduction, and stellar photography. Prerequisite: concurrent enrollment in 87:012 or consent of instructor.

87:021. Elements of Weather - 3 hrs.

Meteorological elements and their application to the environment; interpretation of weather maps and weather data; forecasting and briefing on the daily weather. Discussion, 3 periods.

87:031. Physical Geology - 3 hrs.

Introduction to man's physical environment emphasizing the materials of the earth and the processes that lead to changes within and on the earth. Lab. emphasis: rocks and minerals, landscape development, mountain building. Discussion, 2 periods; lab., 2 periods.

87:033. Geology Spring Field Trip-2 hrs. Geology and earth sciences field trip during annual spring break; to be preceded by weekly seminars on the geology of the proposed study area. Prerequisite or corequisite; 87:031 or equivalent, and permission of the instructor.

87:035. Earth History -4 hrs.

Methods and principles involved in working out the geologic history of the earth; development of plate tectonics and continental drift through geologic time; progression and evolution of life from Precambrian time to present time. Prerequisite: 87:031 or equivalent. Discussion, 3 periods; lab., 2 periods.

87:109(g). Fundamentals of Astronomy -3-4 hrs.

Basic principles of astronomy developed with more of a mathematical treatment than that used in 87:010 or 87:012. Prerequisite: departmental approval. Discussion, 3 periods; or discussion, 3 periods, and laboratory, 2 periods.

87:118(g). Experience in Earth Science -3 hrs.

For elementary and junior high school teachers. Experiential inquiry based learning; investigation of the earth and its environs. Discussion, 1 period; lab., 4 periods.

87:125(g). Invertebrate Paleontology -4 hrs.

Invertebrate animals of the geologic past, including their morphology, evolutionary trends, classification, and distribution. Field trips for the study of fossil occurrences and for the collection of fossil materials. Prerequisites: 87:035 or 84:034. Discussions, 2 periods; lab., 4 periods.

87:128(g). Fundamentals of Geology -4 hrs.

Basic principles of physical and historical geology. Prerequisite: departmental approval.

87:129(g). Structural Geology -4 hrs.

The origins and mechanics of rock deformation. Description and analysis of structural features. Field work where appropriate. Prerequisites: 87:31 and working knowledge of trigonometry. Discussion, 2 periods; lab., two 2-hour periods.

87:132(g). Mineralogy -4 hrs.

Investigation of the more important minerals, including their origin, crystal forms and physical properties with emphasis on the relationship of physical properties to structure, composition and bonding. Field trips. Prerequisite: 86:44; 87:31. Discussion, 2 periods; lab., two 2-hour periods.

87:134(g). Geological Field Methods -3 hrs.

In-field study of geological field procedures and problems including mapping, measurements, aerial photography and aerial photo interpretation, field records, and geological reports. Short field trips. Discussion, 2 periods; lab., 3 periods. Prerequisite: 87:031 or 97:031 or equivalent.

87:135(g). Optical Mineralogy -4 hrs.

The optical properties of mineral and the use

of the petrographic microscope. Emphasis is placed on the identification of minerals by oil immersion methods and in the identification of minerals in rock thin sections. Prerequisite: 87:132. Discussion, 2 periods; lab., 4 periods.

87:136(g). Principles of Stratigraphy -3 hrs.

An investigation of layered rocks, sedimentary processes and environments of deposition. Laboratory exercises on correlation by physical and biological means. Field trips. Prerequisite or corequisite: 87:35 and permission of instructor. Discussion, 2 periods; lab., 2 periods.

87:141(g). Geomorphology - 3 hrs.

Mass Wasting processes and sculptural evolution of varied terrains. Emphasis on Midwestern geomorphology. Short field trips. Discussion, 2 periods; lab., 3 periods. Prerequisite: 87:031 or 97:031 or equivalent.

87:142(g). Introduction to Petrology -4 hrs.

General rock classification, megascopic identification, and petrogenesis of the three great groups of rocks (igneous, metamorphic, and sedimentary); study of rock suites, and field trips. Discussion, 2 periods; lab., two 2-hour periods. Prerequisite: 87:132.

87:189(g). Readings in Earth Science -1-3 hrs.

Maximum of three hours may be applied to earth science or geology majors or minors. Prerequisite: departmental approval.

87:231. Mineral Deposits - 3 hrs.

The origin of metallic ore deposits with emphasis on the character of the ore-bearing solutions, their mode of transfer and controls of ore deposition; a study of nonmetallic deposits with emphasis on the environmental factors controlling their development, examples of the important types of mineral deposits and an introduction to exploration and development methods. Prerequisite: 87:132. Discussion, 3 periods.

87:280. Problems in Earth Science -1-4 hrs.

Problems and area of study selected according to needs of students. Prerequisite: departmental approval.

87:292. Research Methods in Earth Science - 3 hrs.

Methods and evaluation of research in the earth sciences. Individual exploration of a possible research or thesis project in the earth sciences. Discussion, 3 periods.

87:297. Practicum.

87:299. Research.

Industrial Arts and Technology

Rudisill, Head. Archibald, Bro, Browning, Dennis, Freitag, LaRue, Luck, Norton, Pershing, Pine, Serdiuk, Street, W. Wagner.

Bachelor of Arts Programs

man year.

INDUSTRIAL ARTS EDUCATION MAJOR
Required: 33:005; 33:010; 33:015; 33:030; 33:040; 33:050; 33:190;
33:195
(*Special sections of 80:045 for this major.)
It is recommended that the student complete not less than 10 hours in two of the following: drafting, metal, wood, electricity, automotive.
INDUSTRIAL ARTS MAJOR
Required: 33:005; 33:010; 33:111; 33:112 or 33:115; 80:045;
86:044; 88:052; 15:105 or 15:161
33:183, and may include 33:188; 33:190
Special sections of 80:045 may be provided for industrial arts and technology
A student is strongly encouraged to take 88:152 or 88:154. He may count either as an elective in industrial arts.
INDUSTRIAL ARTS EDUCATION MINOR
Required: 33:010; 33:015; 33:030; 33:190
INDUSTRIAL ARTS MINOR
Required: 33:010
include 33:188; 33:190
20 hours
INDUSTRIAL ARTS SUBJECT FIELD-Junior High School Major
Required: 33:010; 33:190
A good pattern for the elective courses would be 23,015, 23,020, 22,040, 22,050
A good pattern for the elective courses would be 33:015; 33:030; 33:040; 33:050; 33:155; 33:175; 88:052.
Students on pre-engineering programs may take the courses in drafting in the fresh-

Bachelor of Technology Programs

TECHNICAL INSTITUTE EDUCATION MAJOR

Required General Education	40 ho	ours
Required Mathematics-Science: 80:045; 80:046; 80:060; 86:044;		
86:046; 88:054; 88:056	28 hc	ours
Required Related Technical: 33:010; 33:012; 33:030; 33:050;		
33:187	16 hc	ours
Required Applied Science: 33:170	4 hc	ours
Required Professional: 20:016; 20:116; 28:139; 33:101;		
33:181; 33:191; 33:193	23 hc	ours
Concentration: one of the following technologies:		
Automotive/Diesel, Construction, Construction Design, Electrical,		
Electronics, Mechanical (Production Option), Mechanical Design,		
Metal	22 hc	ours
	133 hc	ours

A candidate for this major must have at least one (1) year of recent and significant technical experience in industry in his field. The amount of work experience specified is sufficient to obtain certification approval to teach related technical subjects. Approval to teach laboratory or shop courses may be had upon completion of a total of three years of recent and significant technical employment in industry.

TRADE AND INDUSTRIAL EDUCATION MAJOR

Required General Education:	S
Required Mathematics-Science: 80:045; 86:044; 88:054	S
Required Related Trade: 33:010; 33:012; 33:030; 33:050	S
Required Applied Science: 33:162; 33:170; 33:171	S
Required Professional: 20:016; 20:116; 28:138; 33:101;	
33:181; 33:191; 33:193	
Required Supervision: 15:161; 40:156 6 hours	S
Concentration: one of the following: Automotive/Diesel-20 hours;	
Building Construction - 20 hours; Drafting - 19 hours;	
Electricity-Electronics - 20 hours; Metals - 21 hours 19-21 hours	S
Electives: selected from Industrial Arts and Technology,	
Science, Mathematics, or Business	S
133 hours	S

A candidate for this major must have a minimum of two (2) years of recent and significant trade experience in the trade he is preparing to teach. The amount of trade experience specified is sufficient to obtain certification approval to teach related trade subjects. Approval to teach laboratory or shop courses may be obtained upon completion of a total of three years of recent and significant trade employment.

INDUSTRIAL TECHNOLOGY MAJOR

Required General Education
Required mathematics-science: 80:045; 80:046; 80:060; 86:044;
86:046; 88:054; 88:056
Required related technical: 33:005; 33:010; 33:012; 33:030;
33:050; 33:187 18 hours
Required applied science: 33:170 4 hours
Electives from technical courses in the Industrial Arts and
Technology department, physics, chemistry, mathematics,
earth science, business, biology, psychology, or education 9 hours
Concentration: minimum of 14 hours in each of TWO (2) of the
following technologies: Automotive/Diesel, Construction,
Construction Design, Electrical, Electronics, Mechanical
(Production Option), Mechanical Design, Metal, Wood
127 hours

A candidate for this major must have at least one (1) year of recent and significant technical experience in his field.

33:005. Industrial Organization and Production - 2 hrs.

An overview of the structure of industry and the technology involved in processing materials.

33:010. Design Graphics - 3 hrs.

Technical sketching and mechanical drafting, pictorial and orthographic veiws, dimensioning, and the design process. Not required for students with three semesters of high school credit in drafting.

33:012. Engineering Graphics -2 hrs.

True length, bearing and slope of lines; true size, strike and dip of planes; connectors; piercing points; intersections of planes; and plane vectors. Prerequisite: 33:010 or consent of instructor.

33:015. Wood - 3 hrs.

33:030. Metal 1-4 hrs.

Ornamental iron, welding foundry, spinning, forging, heat treating, bench, and sheet metal.

33:040. Power Mechanics - 3 hrs.

Introduction to a field of power and the transmission of power as applied in transportation, home appliances, agriculture, and manufacturing.

33:050. Electricity I-4 hrs.

Electrical components, basic AC/DC circuitry, and theory and principles of basic meters.

33:101(g). History and Philosophy of Vocational-Technical Education - 2 hrs.

Philosophy and historical development, principles, practices, and organization of public

vocational-technical and adult education in the nation.

33:105(g). Guides to Automotive Fundamentals - 2 hrs.

Automotive principles and first echelon maintenance of the automobile. No credit for a student having credit in 33:040.

33:111(g). Industrial Graphics - 4 hrs.

Detail and assembly drawings, electrical diagram, auxiliary projections, sections, basic tolerancing, gears and cams. Prerequisites: 33:010 or consent of instructor.

33:112(g). Technical Graphics-4 hrs.

Application of contemporary design and drafting practices by manufacturing industries; includes tool design, geometric tolerancing, numerical control, reproduction processes, and metrication. Prerequisite: 33:111 or consent of instructor.

33:113(g). Technical Design Graphics - 3 hrs. Individual or group concentration within a subdivision of design graphics. Prerequisite: 33:111 or consent of instructor.

33:115(g). Architectural Drafting I-3 hrs.

Design and plan development of residential

structures. Prerequisite: 33:010 or consent of instructor.

33:116(g). Architectural Drafting II-4 hrs.

Structural systems, materials, and processes for commercial building; emphasis on planning, drafting, and interpretation of architectural plans. Team approach used in developing plans for commercial structures, Prerequisite: 33:115 or departmental approval.

33:118(g). Technical Illustration - 3 hrs.

Pictorial drafting and shading as used in manufacturing for design proposals, manuals, and publications. Prerequisite: 33:010 or consent of instructor. Other majors should consult the instructor before enrolling.

33:121(g). Advanced Wood-5 hrs.

Prerequisite: 33:015 or departmental approval.

33:123(g). Wood Technology 1-3 hrs.

Mass production in the woodworking industries; product selection and development; production machines; design of tools, jigs and fixtures. Prerequisite: 33:121 or departmental approval.

33:124(g). Wood Technology II-3 hrs.

Wood structure and properties, identification, lumber grading, and modified wood products. Prerequisite: 33:121 or departmental approval.

33:128(g). Building Trades Mechanical -4 hrs.

Practical application and principles of plumbing, heating, electrical and air conditioning, including sheet metal. Instruction provided by journeymen tradesmen in respective areas; lab. and on-the-job experiences. Prerequisite: departmental approval.

33:130(g). Metal II-4 hrs.

Student will divide his time equally between two of the following: Advanced instruction in oxy-acetylene welding, electric arc welding, foundry, sheet-metal, metal spinning, ornamental iron, forging and heat treating, and art metal and enameling. Prerequisite: 33:030 or departmental approval. May be repeated in different areas but credit towards degree may not exceed 8 hours.

33:141(g). Machine Tools -4 hrs.

Prerequisite: 33:030 or departmental approval.

33:143(g). Machine Tool Technology I -3 hrs.

Procedures for researching, developing, and producing machined metal devices. Prerequisite: 33:141 or departmental approval.

33:144(g). Machine Tool Technology II -3 hrs.

Advanced study in layout, quality control and measurements, product scheduling and control, tool and die, jig and fixture, automatic, semi-automatic, and special metal cutting machines. Prerequisite: 33:143 or departmental approval.

33:151(g). Electricity II-3 hrs.

Single and three-phase motors, transformers, controls, and power distribution systems. Prerequisite: 33:050 or consent of instructor.

33:152(g). Electronic Circuits - 3 hrs.

Introduction to semi-conductor theory, electric circuits, amplifiers, power supplies, oscillators, detectors. Prerequisites: 33:050 or 88:056 or consent of instructor.

33:153(g). AM-FM Radio - 3 hrs.

AM and FM transmission and reception and principles of television. Prerequisite: 33:050 or 88:056 or consent of instructor.

33:154(g). Electronic Communications -3 hrs.

Pulse communication methods, television methods, transmission lines, wave guides, antennas and microwave systems. Prerequisite: 33:153 or departmental approval.

33:155(g). Graphic Arts-4 hrs.

Includes bookbinding, paper making, relief printing, and silk screen.

33:158(g). Advanced Graphic Arts – 2 hrs. Prerequisite: 33:155 or departmental approval.

33:160(g). Automotive and Diesel Engines -4 hrs.

Principles of spark and compression-ignition engines; comparative study of variations in design and operational characteristics of engine types. Prerequisite: 33:040 or departmental approval.

33:161(g). Power Trains and Suspension -3 hrs.

Principles and problems of power train units, front suspension and brake systems.

33:162(g). Applied Hydraulics and Pneumatics - 3 hrs.

Basic fluid mechanics including pneumatics with emphasis on principles and applications to the fields of power, transportation, automation (production), and control. Practical mathematical problems and experiments provide greater insight. Prerequisite: 33:040 or departmental approval.

33:163(g). Automotive Electrical and Fuel Systems - 3 hrs.

Operation, testing, and analysis of electrical and fuel units used on automotive and industrial power equipment. Broad application of testing equipment. Prerequisite: 33:040 or departmental approval.

33:164(g). Fuel Injection Systems - 3 hrs.

Operation, testing, and adjustment procedure for fuel injection systems, governors, fuel cleaners, and metering devices. Prerequisite: 33:160 or departmental approval.

33:165(g). Problems of Internal Combustion Engines -4 hrs.

Design, performance variation, engine diagnosis and correctional procedures for both spark and compression ignition engines. Prerequisite: 33:163 and 33:164, or departmental approval.

33:166(g). Building Construction I-3 hrs.

Site selection, building materials, and procedures for residential structures.

33:167(g). Building Construction II -4 hrs.

Layout, materials, processes, and cost estimating for commercial structures. Prerequisite: 33:166 or departmental approval.

33:168(g). Problems in Power Trains and Suspensions - 3 hrs.

Design, performance, diagnosis and correctional procedures on automotive transmissions, suspensions, and hydro-mechanical system. Prerequisite: 33:161 or departmental approval.

33:169(g). Applied Photography -4 hrs.

Photographic fundamentals; emphasis on photographic systems: electrical, optical, mechanical, chemical, and light-sensitive component areas.

33:170(g). Statics and Strength of Materials -4 hrs.

Testing, evaluating, and reporting material characteristics and strength, and probable usefulness in the construction of products. Prerequisite: 88:54, or departmental approval.

33:171(g). Applied Heat - 3 hrs.

Generating and controlling heat energy and transforming it into other useful forms of energy. Prerequisite: 88:54 or departmental approval.

33:173(g). Building Construction III —3 hrs.

Construction procedures for residential and commercial buildings; advanced study of heating, plumbing, and electrical equipment. Prerequisite: 33:166 or departmental approval.

33:175(g). Industrial Crafts - 2 hrs. Lapidary, leather, and plastics.

33:177(g). Industrial Plastics I-3 hrs.

Introduction to plastics; industrial molding, thermoforming, casting and coating, reinforcing, foaming, joining, fastening.

33:178(g). Industrial Plastics II-2 hrs.

Advanced instruction in one of the following: molding processes A (compression, transfer, blow); molding processes B (injection, rotational); thermoforming; reinforcing process; foaming processes. Prerequisite: 33:177 or departmental approval. May be repeated in different areas but not more than 8 hours may be counted toward a degree.

33:181(g). Trade and Technical Course Construction - 2 hrs.

Basic methods of identifying, analyzing, selecting, and organizing instructional content for vocational trade and technical programs.

33:182(g). Coordination of Part-time Industrial Education-2 hrs.

Planning, organizing, developing, and teaching part-time cooperative industrial education programs.

33:183(g). Industrial Arts for the Elementary School-2 hrs.

Also includes industrial arts for the junior high school.

33:184(g). Technical Program Development -2 hrs.

Advanced methods of identifying, analyzing, selecting, and organizing instructional content for technical programs. Prerequisite: 33:181 or departmental approval.

33:185(g). Industrial Technology - 3 hrs.

Offered in separate areas as shown in Schedule of Classes. Credit may be earned in more than one area but not repeated in a single area.

33:187(g). Co-operative Technology -3 hrs.

Designed to be taken twice in consecutive semesters. To be taken following or concurrently with acceptable technical work experience. This should be considered a 36-week course. Prerequisite: department approval.

33:188(g). Advisory Committees and Conference Leading -2 hrs.

Principles and practices for organizing, developing, and using the advisory committee in vocational-technical education, utilizing conference procedures and techniques.

33:190(g). Teaching Industrial Arts -3 hrs.

Credit also as a course in education for a student whose major is industrial artsteaching. Prerequisite: 11 hours in industrial arts.

33:191(g). Methods of Teaching Trade and Technical Courses - 2 hrs.

Basic teaching principles, organizing instruction, methods of presentation, lesson planning, testing and evaluation of trade and technical students.

33:192(g). Special Problems in Career Education - 2 hrs.

Problems in instruction, program development, and local program evaluation. Prerequisite: departmental approval. May be repeated once for credit.

33:193(g). Personnel Evaluation in Vocational-Technical Education -2 hrs.

Basic concepts and techniques for vocationaltechnical student evaluation and evaluation of other personnel. Prerequisite: 33:191 or departmental approval.

33:194(g). Management of Technical Instruction - 2 hrs.

Advanced teaching methods, organization of course content, lesson planning, experiment and problem development, testing, evaluation, and management for technical teacher preparation. Prerequisite: 33:191 or departmental approval.

33:195(g). School Shop Planning -2 hrs. Prerequisite: 33:010 and 33:190.

33:198 Independent Study. See pp. 58, 76.

33:214. Problems in Teaching Industrial Arts - 4 hrs.

Not over 3 hours may also count as education to satisfy the special methods requirement in the professional core.

33:226. Foundations of Industrial Education -4 hrs.

Leaders, movements, principles and curriculum techniques and trends.

33:228. Contemporary Theories - 2 hrs.

Practices and procedures in industry and education. Developments in technology.

33:270. Research Projects in Industrial Arts – 3 hrs.

Students choose an activity from the following: 1. Automotive, 2. Drafting, 3. Electricity, 4. Industrial Arts Design; 5. Machine Shop; 6. Metal; 7. Wood; 8. Plastics; 9. Graphic Arts. Provides for concentration. Students may reenroll in different activities and earn a maximum of six hours in any one activity. Prerequisite: 33:292 or consent of instructor.

33:273. Research Projects in Technology -3 hrs.

Scientific investigations, application, demonstration, and reporting of individualized areas of advanced technology. May be repeated for a total of 9 semester hours. Prerequisite: 33:292 or consent of instructor.

33:282. Industrial Arts Seminar - 1 hr.

Selected problems dealing with the school shop and its operation. May be repeated once for credit.

33:292. Industrial Arts Research Methods - 2 hrs.

33:299. Research

Mathematics

Hamilton, Head. D. Baum, Bruha, J. Cross, M. Cross, Dotseth, Duncan, Litwiller, Longnecker, Lott, Miller, Moehlis, Myung, Rathmell, Rule, Schurrer, I. Silvey, C. Wehner, *Whittlesy, Wiesenfield, Wilkinson.

*on leave

The sequence in Mathematics begins with:

However, at the time of first enrollment each student will be placed in the most advanced course for which he is qualified by previous training and experience. Credit for courses which may thus be bypassed does not need to be made up with other mathematics courses, but some students are advised to strengthen their programs by choosing additional advanced courses in mathematics.

A student whose high school background in mathematics is not strong may be

required to take 80:020 Mathematics for General Education, 3 hours, and/or 80:112 Introduction to Geometry, 4 hours. Such a student might require up to 51 hours of work in mathematics to complete a major.

A student who elects an undergraduate major in mathematics may want to complete at least one minor in some field of application such as physics, chemistry, biology, economics, sociology, or accounting.

Students who plan to continue their work in mathematics beyond the B.A. level are urged to begin the study of at least one foreign language. Russian, German, and French are particularly recommended. Some students will, by careful use of their electives, be able to complete both a language minor and a minor in a field in which mathematics is applied.

MATHEMATICS MAJOR-TEACHING

Required: The completion of 80:062

Required: 80:190

Electives: 16 hours from at least three of the following areas with

one of these including a two-semester sequence: Probability and Statistics 80:153; 80:174; 80:175

Algebra 80:160; 80:161; 80:162 Geometry 80:165; 80:166; 80:189 Analysis 80:147; 80:148; 80:156

Computer Science 80:171; 80:176; 80:177; 80:184; 80:187

Mathematical Logic 80:169; 80:179; 80:182; 80:188

with additional electives in mathematics to make a total of 16 hours.

The total program hours will depend on a student's background and will vary from 19 to 43 hours. A student beginning with 80:045 will have a minimum program of 39 hours.

MATHEMATICS MAJOR Plan A

Required: The completion of 80:062

Electives: 20 hours from at least three of the following areas

with two of these including two-semester sequences:

Probability and Statistics 80:153; 80:174; 80:175

Algebra 80:160; 80:161; 80:162 Geometry 80:165; 80:166; 80:189 Analysis 80:147; 80:148; 80:156

Computer Science 80:171; 80:176; 80:177; 80:184; 80:187

Mathematical Logic 80:169; 80:179; 80:182; 80:188

Topology 80:167; 80:168

with additional electives in mathematics to make a total of 20 hours.

The total hours will depend on a student's background and will vary from 20 to 44 hours.

Plan B — Computational Emphasis

Required: the completion of 80:062

Required: 80:050; 80:070; 80:149; 80:171; 80:176;

80:177; 80:187

Required: 6 hours from the following -

80:153; 80:154; 80:160; 80:165; 80:166; 80:169;

80:174; 80:175; 80:184

The total program hours will depend upon the student's background and will vary from 27 to 51 hours.

MATHEMATICS MINOR-Teaching and Liberal Arts

A minimum of 16 hours is required as follows:

Required: 80:060

Electives: at least three courses numbered above 80:046 which may include only one course from 80:070, 80:107, 80:172, and which must represent at least two of the areas listed under Mathematics Major—Plan A.

Note: a. electives may not include 80:111, 80:112, 80:113, 80:130, 80:131, 80:134, 80:139, 80:170, 80:183, or 80:185.

b. 80:158 and 80:190 may not be included in the 3 courses required under the electives but may be used by a student on the teaching program as additional elective to complete the 16 hours requirement.

The total minor will depend on a student's background and will vary from 16 to 28 hours. The student contemplating a mathematics minor is urged to consult with the head of the Department of Mathematics for assistance in planning his program.

As with the major, first enrollment should be in the most advanced course for which the student is qualified by previous training and experience.

MATHEMATICS SUBJECT FIELD-Junior High School Major

Required: 80:060; 80:158; 80:190	nours
Required: one course from each of the following two	
categories for a total of7 I	nours
Geometry: 80:112 or 80:165	
Probability and Statistics: 80:153 or 80:172	
Electives from: 80:054; 80:070; 80:107; 80:134;	
80:144; 80:180	nours
22 1	hours

A maximum of 30 hours is required if the student takes 80:045 and 80:046.

80:020. Mathematics for General Education —3 hrs.

The language and ideas of mathematics.

80:045. Elementary Analysis I-4 hrs.

Properties of algebraic, exponential, logarithmic, and circular functions, mathematical structures.

80:046. Elementary Analysis II-4 hrs.

Plane and solid analytic geometry, vector algebra in 2 and 3 space. Polar Coordinates, translations and rotations of the coordinate plane.

80:050. Matrices with Applications - 3 hrs.

Introduction to matrices, systems of linear equations, vector spaces and linear mappings, rank and inverses, determinants, characteristic values and characteristic vectors. Prerequisite: 80:046. Students with credit in 80:161 should not enroll in this course without permission of the head of the department.

80:054. Mathematics of Measurement – 3 hrs. Laboratory approach to the applied problems of elementary analysis. Prerequisite: 80:46. 4 periods.

80:060. Calculus I-4 hrs.

The derivatives and integrals of elementary functions and their applications. Prerequisite: 80:046.

80:061. Calculus II-4 hrs.

Continuation of 80:060, which is a prerequisite.

80:062. Calculus III-4 hrs.

Continuation of 80:061, which is a prerequisite.

80:070. Introduction to Programming -1-2 hrs. An introduction to programming of electronic calculators and to Fortran programming for digital computers. If taken for one hour, may be repeated for a total of 2 hours credit.

80:107. Mathematics of Finance-2 hrs.

Interest, annuities, and life insurance. Prerequisite: one year of high school algebra or 80:045.

80:109(g). Readings in Mathematical Literature -2 hrs.

May be repeated for credit. Prerequisite: departmental approval.

*80:111(g). Introduction to Analysis -4 hrs.

A study of the properties of the real numbers; linear equations, functions, inequalities; linear systems including systems of inequalities and linear programming; complex numbers; quadratic relations; and circular and exponential functions. Prerequisite: departmental approval or 80:130. No credit for a student who has credit in 80:45.

*80:112(g). Introduction to Geometry -4 hrs.

Topics in three divisions of geometry, namely (1) Greek geometry; (2) contemporary developments in Euclidean geometry; (3) Foundation and other geometries. Prerequisite: departmental approval or 80:130.

*80:113(g). Topics in Mathematics - 3 hrs.

Topics in number theory, geometry, and algebra not included in the prerequisite courses. Topics will be selected from the following: divisibility; congruence; continued fractions; theory of proportion; applications of mechanics in geometry; maximum and minimum problems in geometry; linear programming; Fibonacci numbers; transfinite arithmetic; mathematical induction. Prerequisite: 80:111 and 80:112.

*Note: 80:111, 112, and 113 are designed especially for elementary majors with mathematics subject field and for advanced graduate students with meager backgrounds who want to do serious work not involving calculus.

80:120(g). Elementary Game Theory -3 hrs.

Zero and non-zero sum games. Games with and without saddle points. Strategies, linear programming, games with complete and incomplete information. Particular interest to students in business and social science. Prerequisite: 80:45 or consent of instructor.

80:130(g). Foundations of Arithmetic -3 hrs.

Cardinal numbers and sets. Abstraction and extension of number concepts. Place value numeration as related to algorisms. Students with credit in either 80:158 or 80:160 should not enroll for this course without permission of the head of the department.

80:131(g). Geometry for the Elementary Teacher - 3 hrs.

The language of geometry. Properties of selected geometric curves. Rigid motion. Selected activities from topology, measurement. Prerequisite: 80:130. Students with credit in 80:112 or 80:165 should not enroll without permission of the head of the department.

80:134(g). Teaching of Mathematics in the Elementary School -2 hrs.

Prerequisite: 80:130 and 80:131.

80:139. Seminar for the Elementary Teacher-1 hr.

Offered on special tocpis as indicated in the Schedule of Classes. Prerequisites: two content courses in mathematics and 80:134 or 80:190. May be repeated once for credit.

80:144(g). Elementary Number Theory -3 hrs.

Topics from prime numbers, elementary theory of congruence, continued fractions, Diophantine equations, Fibonacci numbers, Pell's equation, the golden rectangle, Pythagorean triangles and transfinite numbers. Prerequisite: 80:046.

80:147(g). Advanced Calculus I-3 hrs.

The real numbers, Euclidean n-space, continuous and differentiable functions of several variables. Infinite sequences and series of functions, Prerequisite: 80:062.

80:148(g). Advanced Calculus II - 3 hrs.

A continuation of 80:147. Riemann and Lesbesgue integrals. Curves and surfaces and the integrals on them. Prerequisite: 80:147.

80:149(g). Differential Equations - 3 hrs.

Differential equations of the first order and linear equations with constant coefficients. Prerequisite: 80:062.

80:153. Probability Theory -3 hrs.

Discrete sample spaces, conditional probability, Bayes' formula, random variables, probability functions, expected value. Chebychev's Theorem, applications. Prerequisite: 80:046.

80:154(g). Introduction to Stochastic Processes - 3 hrs.

Elements of stochastic processes. Markov chains, random walk, applications. Prerequisite: 80:153 and 80:061.

80:155(g). Elementary Differential Geometry -3 hrs.

The analytic study of curves and surfaces in three-dimensional Euclidean space. Prerequisite: 80:062.

80:156(g). Introduction to Complex Analysis - 3 hrs.

Differentiation and integration of functions of a single complex variable. Taylor and Laurent expansions. Conformal mapping. Prerequisite: 80:062.

80:158(g). Foundations of Elementary Mathematics - 4 hrs.

Critical study of the elements of arithmetic, geometry, and algebra. Topics from number theory, algebraic and geometric structures. Students with credit in either 80:130 or 80:160 should not enroll for this course without permission of the head of the department. Prerequisite: 80:046 or equivalent.

80:160(g). Modern Algebra I-4 hrs.

An introduction to the study of algebraic systems. Includes: groups, rings, fields, homomorphisms and isomorophisms. Prerequisite: 80:061 or equivalent.

80:161(g). Linear Algebra - 4 hrs.

Vector spaces, linear transformations, dimension, inner products, matrices, determinants, minimal polynomial, Jordan canonical form, eigenvalues and eigenvectors, applications. Prerequisite: 80:160.

80:162(g). Modern Algebra II-3 hrs.

A continuation of 80:160. Includes groups with operators, modules over rings. Sylow theorems, composition series, semisimple and simple rings, field theory and introduction to Galois theory. Prerequisite: 80:160.

80:163(g). Lattices and Boolean Algebra -3 hrs.

Elementary lattice theory and applications to logic, electrical networks, and geometry. Boolean functions and Boolean Algebras. Boolean rings and their representations. Prerequisite: 80:160.

80:165(g). Introduction to Modern Geometries-4 hrs.

Foundations of geometry; basic concepts of Euclidean and non-Euclidean geometries. Prerequisite: 80:046.

80:166(g). Introduction to Linear Geometry - 3 hrs.

Basic concepts and properties of convex sets in two, three, and higher dimensions. Convex polyhedra. Applications to maxima-minima problems in geometry, graph theory and linear programming. Prerequisite: 80:165 or consent of instructor.

80:167(g). Topology 1-4 hrs.

An introductory study of metric spaces, completeness, toplogical spaces, continuous functions, compactness, connectedness, separability, product and quotient spaces. Prerequisite: 80:061.

80:168(g). Topology II-3 hrs.

A continuation of 80:167. Two and n-dimensional manifolds, orientable manifolds, the fundamental group of a space, free groups, covering spaces, application to geometry and knot theory. Prerequisite: 80:160 and 80:167.

80:169(g). Mathematical Logic I-4 hrs.

An introduction to the semantics and syntax of the propositional calculus and the predicate calculus. Elements of the theory of algorithms. Prerequisite: 80:060 or consent of instructor.

80:170(g). Fundamentals of Computer Programming -2 hrs.

An introduction to the historical development of digital computers, to Fortran IV programming, and to flow charting. The writing and execution of computer programs.

80:171(g). Introduction to Computer Science - 4 hrs.

Concepts and construction of algorithms used in various areas of computer science with an introduction to the design of digital computers. Prerequisite: 80:070.

80:172(g). Fundamentals of Statistical Methods - 3 hrs.

Intuitive approach to probability and inferential statistics.

80:174(g). Mathematical Statistics I -3 hrs.

Continuous random variables, moment generating functions, central limit theorem, sampling distributions; testing hypotheses and estimation. Prerequisite: 80:062 and 80:153.

80:175(g). Mathematical Statistics II -3 hrs.

Continuation of 80:174. Small sample theory, sample models in analysis of variance. Prerequisite: 80:174.

80:176(g). Introduction to Numerical Analysis – 3 hrs.

An introduction to mathematical methods applicable to the digital computer including finite differences, numerical integration and differentiation, solution of linear and nonlinear equations, and solutions of ordinary differential equations with initial conditions. The writing and execution of programs involving these methods. Prerequisite: 80:061 and 80:070.

80:177(g). Introduction to Optimization —3 hrs.

Mathematical techniques used to solve optimization problems; topics from classical optimization techniques, search techniques, linear programming using the simplex method, nonlinear programming, integer programming. Prerequisites: 80:070; 80:050, 80:179(g). Mathematical Logic II-3 hrs.

Semantics of the predicate calculus. Gödel's completeness theorem for first order theories. Completeness, categoricity and decidability. Some decidable mathematical theories and the method of elimination of quantifiers. Prerequisite: 80:169.

80:180(g). History of Mathematics - 3 hrs. Prerequisite: 80:46.

80:181(g). Philosophy of Mathematics -3 hrs.

Consideration of views on foundations of mathematics and such topics as the role and possible limitations of mathematics in scientific investigation; the significance of logical constructs in mathematics. Prerequisites: A Humanities course, plus one semester of calculus and at least one additional mathematics course.

80:182(g). Introduction to Set Theory -3 hrs.

The axioms of set theory. Relations and functions. Equivalence and ordering relations, ordinal numbers and transfinite induction. Ordinal arithmetic. Zorn's lemma, well-ordering and the axiom of choice. Cardinal numbers and the Cantor-Bernstein theorem. Prerequisite: 80:160 or 80:165 or 80:169.

80:183(g). History of Arithmetic -2 hrs.

80:184(g). Introduction to Automata Theory -4 hrs.

Finite automata. Neural networks and memories in finite state machines. Infinite automata. Algorithms, computability and infinite-state machines. Turing machines. Decision problems for finite and infinite machines. Introduction to formal languages. Prerequisite: either 80:070 or 80:169; and 80:061 or consent of instructor.

80:185(g). Mathematics for the Exceptional Child - 3 hrs.

Work with clinical cases under guidance. Prerequisite: 80:134.

80:187(g). Formal Languages - 3 hrs.

Natural languages and formal languages. Grammars and their generated languages. Finite and infinite machines and their relations to formal languages. Operations on languages. Some unsolvable and solvable problems. Prerequisite: either 80:070 or 80:169; and 80:061 or consent of instructor.

80:188(g). Modal Logic - 3 hrs.

The syntax and semantics of several modal propositional and predicate logics. Consistency, completeness, and decidability questions. Prerequisite: 80:169.

80:189(g). Geometric Transformations -3 hrs.

Rigid and similarity transformations in the Euclidean plane and Euclidean space. Groups, subgroups and normal subgroups of transformations. Symmetry groups, the Polya-Burnside theorem and applications to crystallography and design. Groups and the foundations of geometry, Prerequisite or corequisite: 80:165 and 80:160.

80:190. The Teaching of Secondary Mathematics - 3 hrs.

Credit also as a course in education for a student with a major in mathematics. Prerequisite: 80:046.

80:198. Independent Study. See pp. 58, 76.

80:201. Mathematical Analysis I-3 hrs.
The real numbers. Topology of Cartesian spaces. Continuous functions. Differentiation

spaces. Continuous functions. Differentiation in Cartesian spaces. Prerequisite: 80:147.

80:202. Mathematical Analysis II—3 hrs.

Riemann-Stieltjes and Lebesgue Integral. Integration in Cartesian spaces. Improper and infinite integrals. Infinite series. Prerequisite: 80:201.

80:210. Theory of Numbers - 3 hrs.
Basic interrelations of the system of integers.

80:220. Functions of a Real Variable -3 hrs.

Metric spaces, topological spaces, limits, continuity, Weierstrass Approximation Theorem, Stone-Weierstrass Theorem, functions of bounded variation. Tietze's Extension Theorem, Prerequisite: 80:148.

80:221. Measure and Integration - 3 hrs.

Lebesgue measure and integral; measure spaces, measurable functions, monotone convergence theorem, Lp-spaces, product measures, Fubini theorem, Haar measure. Prerequisite: 80:220.

80:235. Problems in Teaching Arithmetic -2 hrs.

Seminar. Prerequisite: departmental approval.

80:245. Topics in Abstract Algebra – 3 hrs. Topics from groups, rings and ideals, fields, Galois theory, introduction to homological algebra, infinite Abelian groups and linear algebras.

80:265. Systems of Geometry -3 hrs.

Projective geometry. Transformations in projective geometry, and the development of affine, Euclidean and non-Euclidean geometries as subgeometries within projective geometry. Prerequisite: 80:165.

80:267. Topics in Topology - 3 hrs.

Selections from general topology; uniform spaces, topological groups and algebras, rings of continuous functions, topological vector spaces. Prerequisite: 80:167.

80:268. The Gödel Incompleteness Theorems - 3 hrs.

Elementary number theory as a formal theory. Recursive functions and relations, and their formal representations. The arithmetization of metamathematics. The incompleteness of formal number theory. Essential incompleteness and undecidability. Prerequisite: 80:169.

80:273. Topics in Probability and Statistics -3 hrs.

Topics chosen from correlation and regression analysis, analysis of variance and co-variance, non-parametric methods, order statistics. Prerequisite: 80:175 or equivalent. May be repeated for credit.

80:278. Topics in Mathematical Logic —3 hrs.

Topics from: algebraic logic, topological logic, intuitionistic logic, the theory of definability, many-valued logic, the logic of infinitely long formulas, theories of computability and

decidability, and decision procedures in formal mathematical theories. Prerequisite: 80:169. May be repeated for credit.

80:280. Elementary School Mathematics -Curriculum-3 hrs.

80:281. Elementary School Mathematics -Concepts-3 hrs.

80:289. Topics in Geometry - 3 hrs.

Topics from: general theory of magnitudes; content and measure in geometry; the Banach-Tarski paradox; geometric dissection theory; packing and tiling; combinational geometry; geometric inequalities; descriptive geometry. Prerequisite: 80:165.

80:290. Problems in Teaching Junior High School Mathematics - 2 hrs.

Seminar. Prerequisite: departmental approval. May be repeated once for credit.

80:291. Problems in Teaching High School Mathematics – 2 hrs.

Seminar. Prerequisite: departmental approval. May be repeated for credit.

80:299. Research.



Physics

R. J. Hanson, Head. Engardt, Hsu, Hsue, V. Jensen, Olson, Poppy, Unruh, Vilmain.

PHYSICS MAJOR-TEACHING

Required: 80:060; 80:061; 82:193; 88:130; 88:131; 88:169; 88:19327 hours
*Electives in physics beyond 88:056
Electives in non-physics courses from the College of Natural
Sciences (excluding 82:020; 82:022, and mathematics below 80:060)10 hours
44 hours

*A course in electronics is highly recommended unless the student has a strong background in electronics.

Sufficient work should be taken for certification approval in a second area. Common teaching combinations are physics-chemistry or physics-mathematics.

PHYSICS MAJOR-A

Required physics: 88:130; 88:131; 88:169;
one course from 88:135, 88:162, 88:163, 88:165;
and one from 88:152, 88:154, 88:161, 88:170, 88:175
Electives in physics beyond 88:056
Required mathematics: 80:060; 80:061 8 hours
Electives in mathematics beyond 80:061
Electives from College of Natural Sciences (excluding 82:020,
mathematics below 80:060, and physics below 88:130)14 hours
52 hours

This major is especially suitable for students (including double majors) desiring a broad background in science who are taking a substantial amount of work in other science areas. It is also suitable for students not seeking a high degree of specialization.

PHYSICS MAJOR-B

Required Physics: 88:130; 88:131; 88:135; 88:162; 88:169;	
88:170; 88:175; 88:165; and electives beyond 88:056	,
Required Mathematics: 80:060; 80:061; electives beyond 80:061 15 hours	
Required Chemistry: 86:044 and 86:048 8 hours	
59 hours	

Recommended: At least 10 hours in a foreign language.

This major is recommended for students planning graduate study in physics or engineering, or who wish to have a strong undergraduate background for work such as that of an industrial physicist.

PHYSICS MINOR-Teaching and Liberal Arts

Electives	s in physic	cs beyond 88:0	56	
At the t	time of the	e first enrollm	ent in physics, eac	ch student will be placed in the
course for w	which he i	s best qualifie	d depending upon	his previous education and ex-

Note: For some students a background of 88:054 and 88:056 is recommended before enrolling in 88:130 and 88:131. Students with strong physics and mathematics background from high school may enroll in 88:130-131 without 88:054-056. Placement test may be taken in department. Chemistry or mathematics majors should enroll in 88:130-131 if physics is taken after the sophomore year. Students who have not had 88:054-056 should register for 88:128 concurrently with 88:130 and 88:129 concurrently with 88:131.

88:010. Physics and the Environment – 3 hrs. Basic physics principles necessary to understand certain contemporary problems of man's relationship to his environment. Application to energy production, use, and distribution; to thermal, light, radiation, and noise pollution; to clean air and water problems, and to transportation. Discussion, 3 periods. Does not apply toward a physics major.

88:052. Principles of Physics-4 hrs.

Topics in mechanics, heat and electricity. Does not apply toward a physics major or minor. No credit given for a student with credit in 88:054 or 88:056. Prerequisite: 80:020 or equivalent. Discussion, 2 periods; lab., 2 periods.

88:054. General Physics I-4 hrs.

Basic principles and interrelationships of matter, motion, and energy, including topics from classical and modern physics. Discussion, 3 periods, lab., 2 periods. Prerequisite: working knowledge of algebra and trigonometry.

88:056. General Physics II-4 hrs.

Continuation of General Physics I. Discussion, 3 periods; lab., 2 periods. Prerequisite: 88:054.

*88:120(g). Elementary Atomic and Nuclear Physics -4 hrs.

Atomic and nuclear structure, elementary particles, radio activity, wave-particle duality, interactions and detection of radiation. Lower mathematical level than 88:169. Prerequisite: 88:056. Discussion, 3 periods; lab., 2 periods. Not for physics majors.

88:128. Experiments in Physics I-1 hr.

May accompany 88:130 only. No credit for a student with credit in 88:054.

88:129. Experiments in Physics II-1 hr. May accompany 88:131 only. No credit for a student with credit in 88:056.

*88:130(g). Physics I-4 hrs.

A calculus-based course in mechanics, heat, and wave motion. Discussion, 5 periods. Prerequisite: 80:060 or permission of the in-

*88:131(g). Physics II-4 hrs.
A calculus-based course in electricity, magnetism, and optics. Discussion, 5 periods.
*Graduate credit for non-physics majors only.

Prerequisite: 88:130 and 80:061 or permission of instructor.

88:135(g). Analytical Mechanics—3 hrs. Vector analysis, particle dynamics, celestial mechanics, dynamics of a system of particles, rigid body motion, Lagrange's equations, and

theory of vibrations. Prerequisite: 80:061 and 88:130. Discussion, 3 periods.

88:136(g). Thermodynamics - 3-4 hrs.
First and second laws of thermodynamics:
PVT surfaces; reversibility, entropy; phase

transitions; statistical viewpoint. Prerequisite: 80:061, 88:056 or 88:131. Discussion, 3 periods; lab., optional, 2 periods.

88:152(g). Electronics I-4 hrs.

Electronics principles, basic d.c. and a.c. circuits, electrical measurements, power supplies, amplification by vacuum tubes and transistors, amplifier circuits. Discussion, 2 periods; lab., 4 periods. Prerequisite: 88:056 or equivalent.

88:154(g). Electronics II-4 hrs.

Oscillators, comparison measurements, and selected topics from: servo systems, operational amplifiers for measurements and control, electronic switching, and timing and digital counting systems. Discussion, 2 periods; lab., 4 periods. Prerequisite: 88:152 or permission.

*88:157(g). Fundamentals of Physics 1-4 hrs. Basic principles of mechanics, heat, and sound. Enrollment limited to graduate students other than physics majors or minors. Department approval required. Prerequisite: Working knowledge of algebra and trigonometry. Discussion, 3 periods; lab., 2 periods.

*88:158(g). Fundamentals of Physics II - 4 hrs. Basic principles of electricity, magnetism, light, and modern physics. Department approval required. Prerequisite: 88:157 or equivalent. Discussion, 3 periods; lab., 2 periods.

88:161(g). Acoustics and Optics—4 hrs. Harmonic oscillators, wave theory, acoustics, and physical optics. Prerequisite: 80:061 and 88:131. Discussion, 3 periods; lab., 2 periods.

structor.

88:162(g). Electric and Magnetic Fields I -3 hrs.

Vector analysis, electrostatic fields and boundary value problems, dielectric material, electromagnetic induction, magnetic fields, magnetic materials, Maxwell's equations and radiation, selected topics. Prerequisite: 80:061 and 88:131. Discussion, 3 periods.

88:163(g). Electric and Magnetic Fields II -3 hrs.

Continuation of 88:162. Prerequisite: 88:162. Discussion, 3 periods.

88:165(g). Introductory Quantum Mechanics - 3 hrs.

Solution of Schrödinger equation for several systems. Super-position of states. Matrix formulation. Physical interpretation. Discussion, 3 periods. Prerequisite: 80:061; 88:131; 88:169.

88:169(g). Modern Physics-5 hrs.

Atomic and nuclear structure; special relativity; alpha, beta, gamma, and X-radiation; wave-particle duality; introductory quantum mechanics; elementary particles. Discussion, 4 periods; lab., 2 periods. Prerequisite: 80:061; 88:056. Recommended: 88:130 and 88:131.

88:170(g). Solid State Physics - 3-4 hrs.

Molecular binding; band theory of solids; electrical, thermal, and magnetic properties; imperfections; semiconductors, p-n junctions, and transistors. Prerequisite: 88:169 or equivalent. Discussion, 3 periods; lab., optional 2 periods.

88:175(g). Nuclear Physics - 3-4 hrs.

Interaction of radiation with matter; alpha, beta, and gamma decay; neutron physics and nuclear reactions; nuclear models; elementary particles; applications of nuclear physics. Prerequisite: 88:169. Discussion, 3 periods; lab., optional, 2 periods.

88:180. Undergraduate Research in Physics - 1-3 hrs.

Research activities under direct supervision of sponsoring staff member. Prerequisite: departmental approval.

88:185(g). Laboratory Projects-1-3 hrs.

Experimental activities to meet individual needs and interests not normally included in other courses. Maximum of 3 hours credit may be applied to a physics major or minor. Prerequisite: departmental approval.

88:189(g). Readings in Physics-1-3 hrs.

Readings/problems in areas of physics (or related interdisciplinary areas) not normally covered in other courses. Maximum of 3 hours may be applied to a physics major or minor. Prerequisite: departmental approval.

88:193(g). Current Curricula in Physics – 3 hrs. Philosophy, methods, and materials of secondary school physics and physical science curricula, including PSSC, Project Physics, TMMW, PSPE (Gohman), IPS, ISCS, and others. Prerequisite: 8 hours of physics. Discussion, 2 periods; lab., 2 periods.

88:250. Special Problems in Physics — 1-6 hrs. Credit determined at registration. Problems selected according to needs of students. Prerequisite: departmental approval.

88:280. Current Topics in Physics—3 hrs. Selected topics from areas of current interest in fundamental and applied physics: includes means of communication with high school students on these topics. Prerequisite: 88:169.

88:291. Evaluation of Programs in Secondary School Physics - 3 hrs.

Critical examination of the philosophy, materials and instructional techniques in secondary school physics programs such as PSSC Physics. Project Physics, IPS Physical Science and others. Study of educational research done on these programs will be included. Discussion, 3 periods. Prerequisite: 15 hours of physics and two years of physics teaching experience; 88:193 recommended.

88:292. Research Methods in Physics - 3 hrs.



Science

There is no science department as such. The science majors and the general courses in science are offered under the jurisdiction and the general supervision of the Dean of the College of Natural Sciences.

SCIENCE MAJOR-TEACHING

 Required: 80:045 and 80:046 or 80:111 and 80:112; 86:044; 86:046*;

 88:054; 88:056; and three of the following: 84:021, 84:022,

 84:023, 84:024, 84:025
 33 hours

 Required: 84:191 or 82:193**
 3 hours

 Electives in: Biological science or in earth science and physical science
 10 hours

21:178 The Junior High School—5 hrs. is strongly recommended as this major is intended especially for those desiring to teach general science in junior and senior high school and not for those desiring to teach biology, chemistry or physics.

*86:048 may be substituted for 86:046.

**If both 84:191 and 82:193 are taken, only one can be counted to meet required major hours.

SCIENCE MAJOR

The equivalent of at least 10 hours in a foreign language is strongly recommended.

SCIENCE SUBJECT FIELD-Junior High School Major

*If both courses are taken, only one can be counted to meet the required hours of the field.

Strongly recommended: 87:031; 87:035; 87:108; 87:180.

It is recommended that consideration be given to taking additional hours appropriate to the major in Science, and that the completion of this major would be a desirable goal.

GENERAL COURSES IN SCIENCE

82:020. The Physical Sciences - 3 hrs.

Introduction to basic ideas of astronomy, motion, energy, atoms and the structure of matter, and methods of science. Discussion, 3 periods; or discussion 2 periods and investigations, 1 period.

82:120(g). Experiences in Physical Sciences -3 hrs.

For majors in elementary or junior high education. Selected fundamental physical science concepts. Student inquiry and investigation of scientific phenomena stressed. Discussion, 2 periods; lab., 2 periods.

82:122(g). Experiences in Biological Sciences -3 hrs.

For majors in elementary or junior high education. Outdoor and laboratory observations of nature correlated with simple experimental design. Fundamental biological concepts applicable to classroom use. Discussion, 1 period; lab., 4 periods.

82:175. The Nature of Science - 2 hrs.

Science as a field of subject matter, with consideration of its nature, development, and methods, using a chronological approach with a philosophical emphasis. Special attention is paid to the interrelations of the various sciences, the relations of science (including the social sciences and psychology) to other fields, such as philosophy, religion, and art, and the

interactions of science and these other areas of thought and culture throughout history and in current times. Discussion, 2 periods.

82:193. The Teaching of Physical Sciences -3 hrs.

Credit also as a course in education for a student whose major is science. Prerequisite: 10 hours of physics or chemistry or the physical sciences. Should precede student teaching. Discussion, 2 periods; lab., 2 periods. Laboratory may be offered in two sections. 1. Chemistry, 2. Physics.

82:198. Independent Study.

See pp. 58, 76.

82:200. History and Philosophy of Science -2 hrs.

82:202. Physical Science Techniques – 2 hrs. Devising and building equipment for demonstrations and experiments in the laboratory out of locally obtainable, less expensive materials. Discussion, 1 period; lab., 2 periods.

82:280. Seminar in Science Teaching - 2 hrs.

82:288(g). Seminar in Computer Applications -1-2 hrs.

Follows 80:170. Fundamentals of Computer Programming.

82:299. Research.



Interdisciplinary Courses and Majors

In addition to programs and courses offered in the strict collegiate structure, the university offers a variety of interdisciplinary curricula to meet the growing need and interest in work beyond collegiate division. The following courses and programs are under the supervision and jurisdiction of several committees, departments, or colleges as indicated. The courses and programs include:

Humanities Courses
Humanities Major
Asian Studies Major—Teaching
Foreign Areas Program
American Studies Major
Latin American Studies Major
Russian Area Studies Major
Individual Studies Major

Humanities

There is no humanities department as such. The courses below are interdisciplinary and are taught jointly by staff from several departments.

68:021. Humanities 1-4 hrs.

Literature, philosophy, religion, and the fine arts, integrated with the history of Western Civilization (ancient times through the reformation).

68:022. Humanities II-4 hrs.

A continuation of 68:021 (from the 17th century to the present).

68:124. Foreign Area Studies-China-3 hrs.

An historical treatment of significant elements of Chinese culture and major aspects of modern China's transformation since the midnineteenth century.

68:125. Foreign Area Studies-India-3 hrs.

An historical treatment of significant elements of Indian culture and major aspects of modern India's transformation under Brithish rule and since independence.

68:130. Culture of the Ghetto-3 hrs.

Various aspects of the black experience: economics, psychology, education, sociology, Provides the student an opportunity to meet blacks from all walks of life, to travel to various ghettos in the country, to work with black children. May be repeated for an additional 3 hours of credit.

68:131. Practical Experience in Ghetto Living – 2 hrs.

Student to spend at least 5 hours a week working in a ghetto on a self-optioned or assigned project; may include work in public school system, volunteer bureaus, and/or community social agencies. Project to be approved by the instructor at time of enrollment. Prerequisite or corequisite: 68:130. May be repeated for an additional 2 hours of credit.

68:165(g). Tragedy - 3 hrs.

The interpretation of classical, Christian, and modern works portraying the human encounter with suffering and death.

68:168(g). Mythology - 3 hrs.

Emphasis on Greek and Roman literature.

HUMANITIES MAJOR

This is an interdisciplinary major offered by the College of Humanities and Fine Arts, and is under the jurisdiction and supervision of the dean of that college.

Required: 68:021; 68:022 8 ho	ours
*Interdisciplinary courses in, or including,	
the Humanities	ours
Courses in history, from any department	ours
Critical and analytical courses	
Participatory courses in one creative or	
performing art	ours
Electives in any of the above or other Humanities areas9 ho	ours
44 ho	ours

*These courses may include seminars in the interpretation of texts, in philosophy of history, in aesthetics, in a theme or period, in a topic relating the Humanities to the natural or social sciences, or other appropriate courses as available.

It is recommended that at least three courses center on the same chronological period. At least two courses should focus on the contemporary period; at least two outside the contemporary period.

It is recommended that at least four courses be integrated by being in the same academic discipline or by dealing with a common theme or problem.

All reasonable variations on this program should be approved.

The programs and the general courses in the non-Western foreign areas studies are offered under the jurisdiction of the Committee on Asian Studies and the general supervision of the Dean of the College of Business and Behavorial Sciences.

ASIAN STUDIES MAJOR-TEACHING

Required: 68:124; 68:125 6 hours
Required: 92:053, 94:014; 98:058 9 hours
Required: 90:190
Required: 96:183; 96:187; 96:181; 96:182
Electives in Asian Studies: a minimum of 23 hours of credit from
among at least three different disciplines must be completed
from the following courses:
Anthropology: 99:174
Art: 60:147
Economics: 92:143
Geography: 97:163; 97:165; 97:185
History: 96:168; 96:184; 96:185
Political Science: 94:165
Religion: 64:130; 64:132
Independent Study: electives may include supervised individual study in spe- cific discipline. Approval of instructor required. For variable credit up to three (3) hours.

53 hours

Note: Student must also satisfy certification requirements.

FOREIGN AREAS PROGRAM

A student may have recorded on his record the completion of the following minimum program which is designed to help prepare him either to teach in the area or to secure background work for advanced study.

Required: 68:124 and 68:125 6	hours
Required: One additional course in either China or India	hours
Electives in any Art, History or Geography courses dealing with an	
Oriental, African, South American, Middle Eastern, or Russian	
subject	hours
15	hours

AMERICAN STUDIES MAJOR

This is an interdisciplinary program offered jointly by the College of Business and Behavorial Sciences and the College of Humanities and Fine Arts, and is under the jurisdiction of the heads of the departments of History and English Language and Literature.

Required: 3 courses in American history	hours
Required: 3 courses in the social sciences	hours
Required: 3 courses in American literature including 62:031	hours
Required: 3 courses from religion, philosphy, theater, art, or	
music	hours
Required: senior colloquium*	hours
39	hours

*Colloquium to be an exploration of the total culture of an era or region in historical perspective by applying the disciplines of history, literature, art, philosophy, and the social sciences.

Courses used to meet General Education requirements may not be counted on this major.

Courses from the four specified areas must be chosen from a selected list approved by the student's adviser.

Note: This major does not carry certification to teach. In order to teach, the student should declare a major in either history or English on a teaching program and make the major in American Studies a second major.

LATIN AMERICAN STUDIES MAJOR

This major is offered jointly by	the College o	of Business and	Behavorial	Sciences and
the College of Humanities and Fine	Arts.			

Danwing Chaminh*	
Required Spanish*— 78:051 and 78:061 for	irs
Electives in Spanish 0-6 hou	
24 hou	irs
Required Social Science— 96:179; 96:180	rs
sociology, geography	rs
21 hou	rs
Total — 45 hou	ırs

*78:051 and 78:061 may each be repeated once for credit.

*Students with no language competence will be required to take an additional 5-10 hours of Spanish at the elementary level.

Note: This major does not carry certification to teach. In order to teach, the student should declare a major in one of the social sciences on a teaching program and take the major in Latin American Studies as a second major.

RUSSIAN AREA STUDIES MAJOR

This interdisciplinary major is under the direct jurisdiction of the Dean of the College of Humanities and Fine Arts.

PAR MA AMMINISTRA WITH COMPANIES	
Required: a total of 45 semester hours as follows-	
Required Russian - 22 semester hours:	
Intermediate Russian, including either 77:051 or 77:061	hours
other 100-level Russian Literature course	
77:141	nours
Electives in Russian to complete the 22 hours	
22 1	hours
Required Social Science - 23 semester hours:	
Soviet Union courses including 92:137; 94:164; 96:155;	
96:169; 96:170; 97:169 and	
6 hours of electives in European history	nours

Hours of history in required Social Science will meet minimal standards to teach in World History.

Note: This major does not carry certification to teach. In order to teach, the student should declare a teaching major in one of the social sciences or in another teaching program and take the major in Russian Area Studies as a second major.

INDIVIDUAL STUDIES MAJOR

This is an interdisciplinary program administered under the Individual Studies Program by the program Director and the Individual Studies Board. (The Individual Studies Board is composed of faculty and students.) This program requires the completion of 124-130 semester hours, including the General Education requirement of 40 semester hours.

Required: a Coherent, Interdisciplinary Area of Study	1-44 hours
Required: Undergraduate Thesis	6 hours
Required: Elective or other major or minor credit which may	
include courses required for certification3	-54 hours
8-	4-90 hours

With the Individual Studies Major a student may plan a specific program of courses in an area not yet formally developed by any university department as a major. The purpose of this major is twofold: 1) to enable a student to organize his own major out of the courses offered in several academic departments; 2) to explore, through individual student programs, interdisciplinary areas of study before those areas are formally adopted as departmental or interdepartmental majors.

Students interested in this major should have at least one semester's experience in university study before applying for such a major. Applications for the major and the approval of particular programs will be administered under the Individual Studies Program with the Individual Studies Board serving as the policy-making body. A student will consult the Director of Individual Studies concerning a possible application for an Individual Studies Major in a particular area. If the university does not have faculty or curricular resources for the area requested by the student, he will be so advised. Also, if the student does not yet appear to be academically prepared or if his plans are not sufficiently clear, specific steps will be recommended by which he may gain such preparation and clarification.

Upon the application of the student, the Individual Studies Director will ask for the assignment of a faculty adviser by the department head whose discipline is related to the student's individual study area. In addition, an interdisciplinary committee will be selected by the Individual Studies Board with responsibility for approval of the prospectus for the major. In some cases, with the approval of the faculty adviser and the program director, an extraordinary amount of independent study may be counted toward the major. In most cases, an Undergraduate Thesis will be a requirement of this major.



Dean Robert Morin





Dean Francis E. Smith



Dean Howard Knutson



Dean Gordon Rhum



Dean Clifford G. McCollum



The Graduate Program

The Graduate Program at the University of Northern Iowa has grown to meet the increasing demands of higher education. In 1951 the university was authorized by the State Board of Regents to offer a program of graduate work leading to the Master of Arts in Education degree; the program began with the summer session of 1952. In 1960 the graduate program was extended with the addition of a sixth-year program leading to the Specialist in Education degree. These programs were developed to prepare professionally competent personnel in education—highly qualified teachers, supervisors, administrators, school psychologists, and specialists in various fields for elementary and secondary schools as well as for colleges.

In 1965, in recognition of a more general need for advanced study, the graduate program was further expanded with the addition of the Master of Arts degree. This degree is open to those students who plan to pursue careers in fields other than education and is also available for students interested in doing advanced work in teaching fields—elementary, secondary, and college. More advanced study in these areas was made possible under the program leading to the Specialist degree inaugurated in 1970.

Graduate majors are available in most departments, and graduate-level courses are offered by all departments of the university. The University of Northern Iowa offers these four graduate degrees.

Master of Arts in Education Master of Arts Specialist in Education Specialist

A cooperative program leading to the Ph.D. degree in educational administration is also available. (See p. 240.)

Those who wish to continue their professional and cultural growth without fulfilling the requirements for a graduate degree may do so if they satisfy the requirements for admission to graduate study. All students taking work beyond the bachelor's degree, whether they are studying for an advanced degree or not, are classified as graduate students. Detailed information on the university's Graduate Program may be obtained from the Dean of the Graduate College, Administration Building, University of Northern Iowa, Cedar Falls, Iowa 50613.

The University of Northern Iowa is a member of the Council of Graduate Schools in the United States.

The Quad-Cities Graduate Study Center

The University of Northern Iowa is one of nine colleges and universities of Iowa and Illinois which are participating in the Quad-Cities Graduate Study Center, with offices in Rock Island, Illinois. The cooperating institutions offer graduate courses, and appropriate courses completed at the Center may be regarded as residence credit by the institution at which the student is working toward a graduate degree. An interested student should confer in advance with the head of his major department. Preliminary inquiries may be directed to the Dean of the Graduate College.

ADMISSION TO GRADUATE STUDY

(This section applies to all students taking graduate courses at the University of Northern Iowa after receiving the bachelor's degree.)

APPLICATION

Anyone possessing the bachelor's degree from this or any other recognized institution who wishes to register for either undergraduate or graduate credit in this university must make application for admission to graduate study through the Registrar. Seniors in their final semester in this university who are within 14 semester hours of graduation and who wish to register for graduate credit in that semester or summer session must apply for admission to graduate study. The combined total of course credits (undergraduate and graduate) may not exceed 15 semester hours in a semester or eight semester hours in a summer session. The graduate work thus completed will be counted as graduate credit only if the student actually earns the bachelor's degree at the end of the given semester or summer session. In registering for such mixed credit, the student must obtain on the reverse side of the registration form written approval for each graduate course from the Head of the Department in which the course is offered.

A student who expects to earn a graduate degree at this university must file a transcript from the college or university granting the baccalaureate degree if other than the University of Northern Iowa. A student who has earned graduate credit at another college or university must file an official transcript of such credit. A student who does not hold a teaching certificate and expects this university to recommend him for an original certificate must also file an official transcript. However, students who do not expect to become degree candidates and who do not expect the University of Northern Iowa to recommend them for certificates do not need to file transcripts. An official statement of the degree and date awarded will be sufficient.

A Health Record is required of all new graduate students regardless of classification or number of hours taken and must be on file with the Student Health Center before registration can be completed. The examination must have been given by a practicing physician within one year prior to registration and recorded on a form provided by the university. Students enrolled as undergraduates at UNI must update their previous UNI health records. This physical examination is not given at the Student Health Center.

For transfer students, a transcript of their physical examination from their previous school will be accepted provided the examination has been made within one year before coming to UNI.

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 by 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 he 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 some of the required information and data have not been received by the Registrar.
 - b. The student has not completed the work for the bachelor's degree at the time he applies for admission to graduate study.

- 3. Probational admission to graduate study may be granted (each case is considered on an individual basis) to a student 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 by a corresponding regional accrediting agency.
 - b. His undergraduate record and other data indicate that he 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.

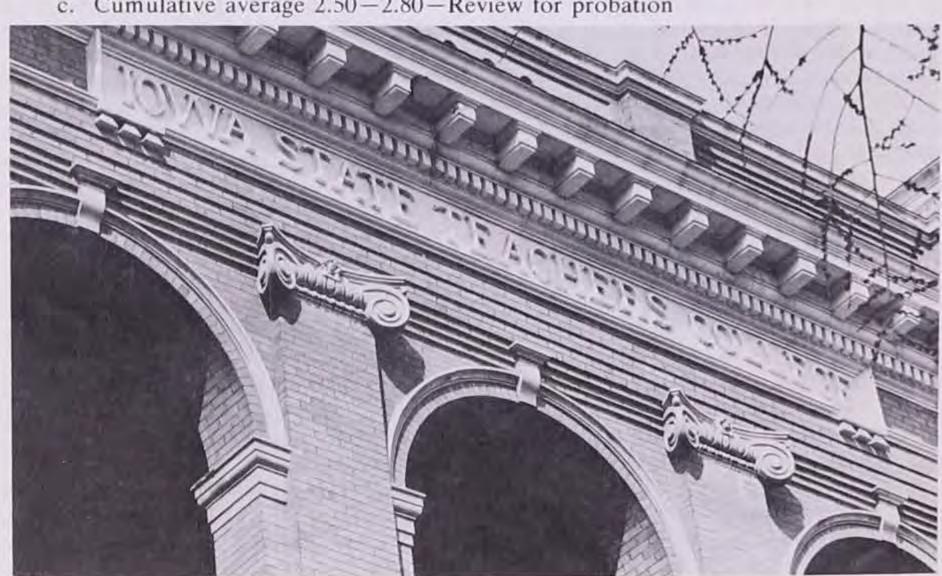
The probational admission status may be removed by the Registrar when the student has earned 8 hours of graduate credit in this institution with an average grade of B or higher.

Grade Point Requirements

Graduate students are expected to maintain high academic standards. At the end of each term graduate student records are reviewed, and students with unsatisfactory performance are placed on probation, or advised to discontinue graduate study, or suspended.

Following are the categories used for review and action by the Graduate Council:

- 1. Failing more than one-half of all work attempted Suspend
- 2. After three (3) enrollments or 15 semester hours
 - a. Cumulative average less than 2.00 Suspend
 - b. Cumulative average of 2.00-2.49-Review for probation
- 3. After twenty-four (24) semester hours
 - a. Cumulative average less than 2.20 Suspend
 - b. Cumulative average 2.20-2.49-Advise to continue graduate study
 - c. Cumulative average 2.50-2.80-Review for probation



 If students complete two enrollments while on probation without qualifying for removal of probation, they are advised to discontinue graduate study.

In determining a graduate student's grade index all course work attempted in graduate study at this university will be used as the basis of computation. If a graduate student repeats a course, both grades are counted in computing the index.

Post-baccalaureate students enrolled for work to meet requirements for certification as elementary or secondary teachers are given the same grade index advantage as is given undergraduate students for courses repeated (see page 55). This applies only to those courses required for certification.

REGULATIONS AFFECTING REGISTRATION

Each student admitted to graduate study is assigned an adviser. The adviser will assist the student in the registration process, involving the selection of courses and such other matters as:

- 1. The General Graduate Examinations. These examinations are administered by the Bureau of Research and Examination Services during the period of the graduate student's first registration. The Miller Analogies Test, a test of general academic ability, is required of all graduate students in most departments. A Professional Examination, an instrument measuring professional interest, attitudes, and understandings, is required of (1) all students on the Master of Arts in Education program except those majoring in College Student Personnel Services, (2) students on the Master of Arts program taking the non-thesis plan and Professional Core A, and (3) all students on specialist degree programs. The university will assess a minimal fee for these examinations.
- MAXIMUM ACADEMIC LOAD. The maximum graduate student load during each semester of the academic year is 15 hours; that permitted during the eight-week summer session is 8 hours; that during the two-week post session, 2 hours. Persons employed full time should not register for more than 6 hours of graduate credit in any semester.
- 3. LEVEL OF COURSES. Graduate students normally take courses in the 100(g) series and 200 series. A graduate student may take courses in the 100 series (without "g") or below for undergraduate credit, but such courses do not carry graduate credit. However, all courses, graduate or undergraduate, taken as a graduate student count in determining grade point average.
- 4. CREDIT FROM OTHER INSTITUTIONS. A maximum of 8 semester hours of graduate credit earned in another accredited institution may be applied toward meeting the minimum requirements for a master's degree at the University of Northern Iowa.
- 5. VETERANS. All students planning to receive benefits from the Veterans Administration must file a Certificate of Eligibility from the Veterans Administration in the Office of the Registrar when enrolling at the University of Northern Iowa for the first time. The university cooperates with the Veterans Administration in providing for the education of veterans under the provision of federal laws. Dependents of veterans or of those persons who may be classified as prisoners of war or missing in action in Vietnam may also receive financial assistance from the Veterans Administration. The Office of Veterans Affairs and the office of the Registrar will assist students eligible under any of these laws and provide the required reports. Subsistence will depend upon the number of course hours for which the student enrolls.

GRADUATE ASSISTANTSHIPS

Several kinds of assistantships are available to qualified graduate students who are working toward a graduate degree at UNI. Graduate assistantships and teaching assistantships are available through the Graduate College under the following conditions:

- 1. Graduate Assistantships are available for graduate students who are in residence through the academic year. These assistantships require the students to carry 9-12 hours of course work each semester. Most of the assistantships for students working toward the master's degree carry a stipend of \$1,800, but stipends may range up to \$2,700. The associated work assignments vary from 10 to 15 hours per week. For students working toward a specialist's degree the stipend is usually \$2,200; in special cases the stipends could be between \$2,200 and \$2,700. The associated work assignments vary from 12 to 15 hours per week. For both the master's and specialist's assistantships, the work of the student will be so arranged that he may normally complete his degree program in one academic year plus the equivalent of one or two summer sessions. Work assignments consist of assisting designated professors with certain non-teaching functions; some graduate assistants serve as aides on faculty research projects.
- 2. TEACHING ASSISTANTSHIPS are available for graduate students who hold the master's degree and are working on the specialist's degree and who are in residence through the academic year. The teaching position must be in the area of specialization. These provide a varying stipend up to a maximum of \$3,500 for the academic year. Teaching assistants will carry a partial course-work load and will instruct, under careful supervision, introductory courses; the combination of teaching load and course-work load may not exceed 12-15 credit hours per semester.

With the exception of the student activities fee which is required of all students and which is subject to change without notice, the two assistantships listed above include a remission of the basic fees for the academic year.

Application forms may be obtained from the office of the Dean of the Graduate College or the department in which the student is majoring. Applications should be filed by March 1 with the department in which the student is applying for an assistantship. Recommendations for awarding of assistantships are made by department heads to the dean of their college who selects the recipients from the college. Appointments are announced by the Dean of the Graduate College.

GRADUATE RESIDENT ADVISERS — In addition to the above, assistantships are available for graduate students who are interested in working and living in the residence halls. These assistantships involve a variety of responsibilities and experiences, usually directly related to the student's formal program of graduate study. The graduate resident adviser assistantship is for the academic year only, and the student is expected to work from 15 to 18 hours per week. The assistantship carries a stipend of \$1600 plus room for nine months and allows a student to carry a maximum of 11 hours of graduate work each semester.

With the exception of the student activity fee which is required of all students, this assistantship includes a remission of the basic fees for the academic year.

The graduate resident advisers are utilized in the Division of Student Services. Application forms for this assistantship may be obtained from the Office of the Dean of Students and must be filed with that office no later than June 1. Appointments will be

made from the Office of the Dean of Students.

SCHOLARSHIPS

The Mary Jensen Shackelford Award, established in 1968, is available to graduate students at the University of Northern Iowa. Preference is given to applicants seeking a Master of Arts in Education degree; however, the award is open for any area of graduate study at UNI. To be eligible, a student must have at least six hours of graduate work at this institution with a minimum grade point average of 3.0 and desirable personal and professional qualifications as determined by the selection committee. Each award is for \$500 and will be made to a full-time graduate student for the regular academic year only. Additional information on the award may be secured at the Office of the Dean of the Graduate College and/or the Office of the Director of Financial Aids.

LOANS

Qualified students may secure loans from either the National Defense Education Act fund or the Aubrey and Winslow Grubb fund. These loans are available to graduate students who are on a continuous program and who meet certain standards of scholarship. Information about both types of loans may be secured at the Office of the Director of Financial Aids.

PART-TIME EMPLOYMENT

The Director of Financial Aids will assist graduate students who need part-time employment. A limited number of opportunities for such work are available on the campus. However, to carry a full load of graduate studies requires so much of the student's time that part-time employment is usually out of the question. Individuals who have full-time employment should not register for more than 6 semester hours of work in any one semester.



Master's Degree Programs

COMMON REGULATIONS AND REQUIREMENTS

Admission to Candidacy

Admission to candidacy is not the same as admission to graduate study. A student may wish to take only selected courses and have no intention of becoming a degree candidate. A student who wishes to earn the master's degree must first be admitted to graduate study, and then seek admission to candidacy for the degree. Admission to candidacy is granted after the conditions explained below have been met. Students must have a cumulative grade point average of at least 3.00 for courses taken as a graduate student to be eligible for candidacy.

Application for candidacy is normally made soon after the first semester or summer session of residence work and candidacy must be approved before the beginning of the semester or summer session in which the student expects to receive his degree. The forms on which the application is made are available in 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 the Graduate College for approval as soon as:

1. The General Graduate Examinations, if required, have been completed successfully.

2. The Departmental Candidacy Examination has been completed successfully.

This examination is prepared and administered by the department in which the student plans to pursue a major. The examination may be either written or oral or a combination of the two. Performance tests related to the special skills in such areas as art, music, speech, and business education may be included as part of the candidacy examination for students pursuing majors in these areas. Each student should consult with his department head concerning the nature and content of these examinations.

The departmental examinations are conducted periodically and the student should consult the head of the department as to the time and place. The student

will usually take this examination during the first semester of residence.

3. Either the thesis plan or the non-thesis plan has been designed by the student. On several majors, students selecting the non-thesis option must also complete either Professional Core A or Professional Core B. For most of the majors leading to the Master of Arts in Education degree, the student must hold or be eligible for an Iowa Professional Teaching Certificate; teaching experience may also be required.

4. A program of studies prepared by the candidate and the adviser has been approached by the departmental committee. This 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. Each department offering a graduate major has one or more departmental committees.

5. The departmental committee recommends candidacy.

6. The application has been approved by the department head.

7. The application has been approved by the dean of the appropriate college.

The Dean of the Graduate College may approve the application at once or may delay action until additional scholarship or other data are available or may return it to the department with comments. The Dean of the Graduate College is in general charge of each graduate student's program.

THESIS COMMITTEE For the student following the thesis plan, the thesis committee is appointed by the Dean of the Graduate College after his approval of the student's application for candidacy. It usually consists of the student's adviser as chairman and two additional faculty members. The committee assists the student in further defining his course work, in supervising his research and writing, and eventually accepts or rejects the thesis.

The nature of the thesis is described on p. 211.

SELECTION OF THESIS TOPIC. The student following the thesis plan of study is urged to make at least a tenative selection of a topic by the end of his first semester in residence. The delineation of an exact topic is not necessary before applying for candidacy, but the designation of a probable area of study must be made.

Graduation Requirements

THESIS PLAN:

- A minimum of 30 semester hours of graduate credit, of which at least 24 hours must be in course work excluding thesis research credit. At least 20 semester hours must be earned at the University of Northern Iowa.
- A minimum of nine (9) semester hours in 200-level credits other than xx:299 Research, plus six (6) semester hours in xx:299 Research (for thesis).
- The course requirements for a specific major and any additional courses designated by the departmental committee.
- 4. Core requirement.

Master of Arts in Education

20:214 Advanced Educational Psychology - 2 hrs.

OF

25:234 Philosophy of Education-2 hrs.

25:294 Educational Research - 3 hrs.

Master of Arts

Varies with the major. See pp. 219 to 230.

NON-THESIS PLAN:

- The minimum number of hours of graduate credit varies with the major. All
 include at least 30 semester hours. (See pp. 215 to 230.) At least 20 semester
 hours must be earned at the University of Northern Iowa, of which at least six (6)
 semester hours must be earned in a single semester or summer session.
- 2. A minimum of nine (9) semester hours in 200-level credits other than xx:299 Research, plus 3 additional semester hours of 200-level credits which may or may not be in xx:299 Research depending upon the policy of the major department and the specific study plan formulated for the individual student.
- The course requirements for a specific major and any additional courses designated by the departmental committee.
- 4. Core Requirements:

Master of Arts in Education

20:214 Advanced Educational Psychology - 2 hrs.

or

25:234 Philosophy of Education-2 hrs.

25:294 Educational Research - 3 hrs.

Master of Arts

Professional Core A or Professional Core B-required only by certain majors.

Professional Core A (prerequisite: Iowa Professional Certificate or equivalent)

20:214 Advanced Educational Psychology - 2 hrs. or

25:234 Philosophy of Education – 2 hrs.

25:294 Educational Research or

a departmental course in Research and Bibliography

A course in curriculum or methods of instruction in the major field or any additional course numbered 200 from courses in the 20: through 29: series.

Professional Core B (Students completing Professional Core B with an appropriate distribution of courses in one or more subject areas may be recommended for Iowa Public Junior College certification. Iowa requires a course in American history or American government for all certification.

27:252 Current Issues in Higher Education-2 hrs. (or 3 hrs.)

27:250 Teaching in College-3 hrs.

:297 Practicum-2 hrs.

5. At least one research paper approved by the department and filed in the departmental office.

Other Requirements and Criteria

- SCHOLARSHIP. A cumulative grade index of 3.00 (B average) must be earned at the University of Northern Iowa in all courses attempted as a graduate student. No credit toward graduation is allowed for a course in which a grade below C is earned.
- RECENCY OF CREDIT. Courses taken more than 7 years prior to the granting of the degree cannot be used to meet degree requirements.
- 3. CANDIDACY. The requirements for candidacy are described on pp. 208-209.
- 4. TRANSFER CREDIT. Graduate credit from other approved institutions may be accepted to a maximum of one-third of the total amount of credit included in the student's graduate study plan. However, if use of a correspondence course is authorized, the permissible amount of transfer credit it correspondingly reduced. Application of transfer credit toward a graduate major is dependent upon its acceptability in the judgment of the major department.
- 5. CORRESPONDENCE CREDIT. Correspondence courses may not ordinarily be applied toward a graduate degree program. In unusual circumstances a student may request that a maximum of 3 semester hours of 100g-level correspondence credit may be applied to a graduate degree program. The request must be made prior to registering for the course.
- 6. RADIO AND TELEVISION CLASS CREDIT. Credit earned in radio and television classes usually may not be applied toward the master's degree.
- 7. SATURDAY. EVENING. AND SHORT-TERM CLASSES. Some classes are scheduled for Saturday morning, or for an evening, or for extended sessions daily for two or three weeks. These classes differ from other residence classes only in that they involve fewer meetings and longer single sessions. Such classes are offered in Cedar Falls and at other announced locations in various parts of the state. Lists of the classes may be secured by writing to the Office of the Registrar during the month preceding the opening of a semester or summer session.
- 8. CHANGES IN COURSE NUMBERS, ETC. Occasionally the university makes changes in course designations: title, number, or hours of credit. A graduate student continues

to use the designations as they existed at the time he was enrolled in a given course.

9. Examinations. Thesis Plan. In addition to whatever examinations are required for each course, the candidate for the degree on the thesis plan will take (1) General Graduate Examinations, as required (see p. 205), and (2) the Departmental Candidacy Examination (see p. 208). Further, if final written and oral examinations are required by his thesis committee and his major department, the candidate will be required to pass them.

Non-Thesis Plan. The candidate for the degree on the non-thesis plan is required to take the same examinations required on the thesis plan and in addition, (3) a Final Comprehensive Examination (which may be written or oral), which is prepared and administered by the major department. Results must be reported to the Office of the Dean of the Graduate College at least 15 days before semester Commencement and at least one week before summer session Com-

mencement.

10. Research Credit. Registration for 299 Research will not be accepted until the student has submitted a statement or outline of the proposed research project and has secured the approval of the person directing the research project and the head of the appropriate department. A copy of the completed research report, approved by the director of the research project and the department head, will be filed in the departmental office.

Research carries residence credit and may be pursued either on campus or off campus, but NOT in an extension class. There is no prerequisite, although it is strongly recommended that 25:294 Educational Research or a departmental course in research be completed before registering for Research. It is expected that the

work will be completed during the given semester or summer session.

11. RESIDENCE. At least two-thirds of the total minimum hours required for either the thesis or non-thesis plan must be taken with members of the UNI faculty; this is exclusive of thesis credit. Correspondence credit may not be counted in the above hours. At least six semester hours must be earned in a single semester or summer session.

After a student has been admitted as a candidate for the master's degree in this university, and provided that prior arrangements have been made with the Dean of the Graduate College, he may take work at the University of Iowa, Iowa State University of Science and Technology, or the Quad-Cities Graduate Study Center for which residence credit may be given at the University of Northern Iowa.

12. Thesis. A thesis is required of all candidates who choose the thesis plan of study. Because the thesis is considered to serve a functional need, no attempt is made to

limit the topics considered acceptable.

The thesis may take the form of studies, experiments, surveys, compositions, creative work, and projects and may concern itself with such matters as methodology, understanding children, and materials of instruction, or may delve rather deeply into some aspect of a specialized academic field. Whatever the nature of the subject, its development into an acceptable thesis is considered to contribute to the growth of such attributes as maturity of judgment, initiative, writing ability, and organizing ability. While the thesis may make no significant contribution to the world's knowledge, its preparation should develop in the writer a broader understanding of the world's knowledge and a more genuine appreciation of the research efforts of others.

The work on a master's thesis will normally be considered to cover about 6

semester hours of work. To earn this credit, a student registers for Research and usually not in one block. The instructor will assign a grade for a semester's registration in Research based upon the progress made, but may assign an Unfinished (U) if he feels the work has not reached the place where it can be evaluated. Registration for the last segment of Research credit for which a student registers (for work on his thesis) should be postponed until the thesis is near completion. The Dean of the Graduate College may authorize the extension of time for the completion of an Unfinished in Research up to one additional calendar year; but if at the end of that time the work has not been completed, the grade of U will be changed to an F (Failure).

Completion of a thesis project occurs when the thesis has been approved by

the Committee and the Dean of the Graduate College.

13. FILING OF THESIS. The thesis must be presented in final form to the thesis committee at least 30 days before graduation. A specimen title page and form for final approval may be obtained in the Office of the Dean of the Graduate College. The student must present two acceptable copies, an original and one carbon copy, both on bond paper of either 16- or 20- pound weight; these are retained by the university library. The student's major department may request a third copy for its files. After the thesis committee has accepted the thesis, the student must transmit the two copies to the Dean of the Graduate College not later than two weeks before semester graduation or one week before summer commencement. When the student has been notified of the acceptance of his thesis, he will secure a fee card to cover the thesis binding cost of \$6 for the library copies and will pay this fee at the business office.

14. FILING OF ABSTRACTS OF THESIS. An abstract or summary of the thesis is required of each candidate following the thesis plan toward the master's degree. The abstract will be approximately 500 words in length and will be filed in triplicate in

the Office of the Dean of the Graduate College.

15. APPLICATION FOR GRADUATION. The candidate for the master's degree must make application for graduation not later than the end of the ninth week of the semester or the fourth week of the summer session in which he plans to receive the degree. The application form may be secured in the Office of the Registrar. Applications received after the dates designated will be placed with those for the following session.

18. ATTENDANCE AT COMMENCEMENT. The candidate for the master's degree is expected to secure the appropriate academic costume and to appear at Commencement for the awarding of the degree.



Summary of Hour Requirements

A summary of the hour requirements for both the thesis and the non-thesis plans is listed below:

Thesis	Non-
	Thesis
Minimum graduate hours required	30-37 **
Minimum hours of credit at UNI	20-25†
correspondence credit10‡	10-12‡
Maximum usable hours of correspondence credit (requires	
special permission to use)	3
Minimum hours required in courses numbered	
200 and above9#	9##

^{*}Includes 6 semester hours for research.

Certification and Endorsements

CERTIFICATION. For approval in some graduate programs, a student must have earned or be eligible for an Iowa Professional Certificate or its equivalent endorsed in an area appropriate to the graduate major. Credit earned in education, psychology, or teaching to secure a teaching certificate as a prerequisite to candidacy for the master's degree may not be used toward the master's degree. Iowa requires a course in American history or American government for all certificates. For information on certification consult the Registrar.

TEACHING CERTIFICATE AND ENDORSEMENTS. Students interested in securing certificates to teach in another state should secure information directly from the State Department of Public Instruction in that state and should consult the Registrar of his college.

Students with an Iowa Professional Certificate, the master's degree, and four years of successful teaching experience are entitled to an Iowa Permanent Professional Certificate with appropriate endorsements.

Second Master's Degree

To receive a second master's degree a student must meet all the requirements for the second degree with the exception that eight hours of work from the first degree may be used for the second degree. The requirements for work at the University of Northern Iowa, "200" work, and all other specific requirements shall be met for the second degree in addition to work completed for the first degree. For all course work taken beyond the first master's degree, the cumulative grade point index must be 3.00 or higher.

^{**}Includes at least one research paper. Total hours depends on major chosen.

[†]Must include 6 or more hours in one semester or summer session.

[‡]Up to one-third of the hours on the graduate study plan.

[#]In addition to the 6 hours research credit for thesis.

^{##}Some departments may require an additional 3 hours which may or may not be in research credit.

Master of Arts in Education Degree

This degree is designed for students whose work is primarily in professional education. Majors are available in the following areas:

EDUCATIONAL MEDIA

Educational Media

EDUCATIONAL PSYCHOLOGY

General Educational Psychology
School Psychology
Teaching

Elementary Education

Elementary Education

READING

Developmental Reading—Elementary Developmental Reading—Secondary Remedial Reading

SCHOOL ADMINISTRATION AND SUPERVISION
Secondary Principalship
Elementary Principalship
Elementary Supervision

SCHOOL BUSINESS MANAGEMENT School Business Management

Special Education
Special Education
Gifted
Visually Impaired

Student Personnel Services

Elementary Guidance and Counseling
Secondary Guidance and Counseling
College Student Personnel Services

Although a special curriculum is not available for supervisors of student teaching, a student can arrange a program which will qualify him for such a position.

Two plans of study leading to the degree of Master of Arts in Education are available: one plan requires the writing of a thesis; the other does not. The program prescribed for each student depends upon his undergraduate preparation, his experience, and his future plans. The needs of the student as determined by him, his adviser, and his departmental committee are the guiding factors in program planning. Regardless of the plan of study followed, graduate work leading to the degree of Master of Arts in Education should constitute a cohesive, logically planned program, not merely an accumulation of credit in a variety of courses. Only selected students are admitted to candidacy.

Detailed information for each of the above program areas, and specific requirements for each major, may be obtained from the head of the department offering the major. These include:

Department of Curriculum and Instruction

Educational Media

Elementary Education

Reading

Special Education

Department of Educational Psychology and Foundations

Educational Psychology

Department of School Administration and Personnel Services

School Administration and Supervision

School Business Management

Student Personnel Services

REQUIREMENTS FOR VARIOUS MAJORS

On each curriculum and for each major, the student who plans to receive the degree of Master of Arts in Education must meet the graduate requirements described on pp. 208 to 213.

Many programs at this level carry with them the requirements for certificate endorsement. In some cases, the student may be building up his competency in a field in which he has had little or no preparation at the bachelor's level. For these reasons some of the programs must carry with them a substantial number of specific requirements. Whenever possible, however, an effort is 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 departmental committee, may plan the graduate program which will best meet his individual needs.

Worksheets showing the specific requirements of each major and emphasis are available in the office of the department which offers the major.

EDUCATIONAL MEDIA

Major in Educational Media

The student must hold certification valid for either elementary or secondary school teaching in order to meet certification requirements in this major.

Required: 24:131; 24:135; 24:137; 24:205; 27:220 or 27:227; 24:289; 24:290.

Electives as recommended by the department.



EDUCATIONAL PSYCHOLOGY

Major in General Educational Psychology

Competency is required through examination or the following courses: 40:008; 20:100 or 20:116; 25:181; 25:180.

Required: A minimum of 20 semester hours in courses numbered with the prefix 20 or 40; 15 hours must be chosen from a selected list.

A student who expects to teach in college should take: 27:250 and 27:252.

Major in School Psychology

The student must have completed either two years of successful teaching experience or two years of related experience in psychology prior to graduation.

Competency is required through examination or through the following courses:

25:181: 25:180.

Required: 20:139 or 20:142; 25:282; 25:283; 20:194; 22:150; 20:289; 20:290; 23:112 or an acceptable course in reading.

An approved course in guidance.

Some of these courses required may be satisfied by previous undergraduate work.

Electives as recommended by the department.

Major in Teaching

This major is designed to serve the professional needs of experienced teachers.

Required: A minimum of 30 semester hours as follows:

department8-12 hours

ELEMENTARY EDUCATION

Major in Elementary Education

The student must be fully certified to teach in the elementary schools prior to his completing this major. In addition to the professional core, if the student has not had the following courses or their equivalent, satisfactory completion of the courses or a proficiency equivalent will be required as part of the major: 20:100; 25:181; 25:180.

This program has been designed to include a maximum amount of flexibility to permit the student, his adviser and the committee to plan his program in such a way as to assure that it will strengthen him as an elementary teacher or as a college teacher of elementary education. No specific course requirements have been set. For some students, it will permit a maximum amount of depth in one or more subjects; for others, it will allow for breadth; for still others, it may eliminate deficiencies in preparation. However, the program will be carefully planned early in the career of the student to assure maximum benefits.

READING

Major in Developmental Reading - Elementary

These courses satisfy the requirements for certification as a reading teacher. The student must be certified to teach elementary schools. Competency is required through examination or the following courses: 20:100; 21:044; 23:110; 23:112; 23:113; 23:140; 25:181; 25:180.

Required: 23:210; 23:212; 21:289; 21:290.

Recommended electives: 21:144; 23:114; 23:132; 23:147; 23:148; 23:192; 23:244; 24:132.

Major in Developmental Reading - Secondary

These courses satisfy requirements for approval as a secondary reading teacher. The student must be certified to teach in secondary schools. Competency is required through examination or the following courses: 20:116; 23:130; 23:132; 25:180; 25:181; 62:165.

Required: 23:289; 21:290; 23:147; 23:210; 23:212.

Recommended electives: 24:132; 23:114; 23:140; 23:244.

Major in Remedial Reading

This major satisfies course requirements for endorsement as a Reading Clinician. Student must be certified to teach in either the elementary or secondary schools. Competency is required through examination or the following courses: 20:100 or 20:116; 23:110 or 23:180; 21:044 or 21:144 or 62:165; 23:147; 23:148; 25:180; 25:181.

Required: 23:210; 23:212; 23:240; 23:289; 23:290.

Recommended electives: 23:112; 23:113; 23:114; 23:140; 23:192; 23:242; 23:244.

SCHOOL ADMINISTRATION AND SUPERVISION

The student must complete the usual degree and certification requirements as well as those for the particular endorsement he seeks. He must complete a minimum of one year of successful teaching appropriate to the major prior to graduation.

In addition to the general requirements, a student will be required to complete:

27:202; 27:204 or 27:210.

Practicum in an appropriate area.

A course in child growth and development, guidance and counseling, educational psychology, or in the area of the exceptional child.

Major in Secondary Principalship

Required: 27:228; 27:227 or 27:141.

Major in Elementary Principalship

Required: 27:221; 27:220 or 27:141.

Major in Elementary Supervision

Required: 27:221; 27:141; 27:212; 27:220.

Note: Superintendency

The program for the preparation of the superintendent of schools is a two-year program. The requirements may be met by completing the appropriate Specialist in Education degree program or prescribed program beyond the master's degree. A program sheet with specific details may be obtained from the departmental office.

SCHOOL BUSINESS MANAGEMENT

Major in School Business Management

This major is offered cooperatively by the Department of School Administration and Personnel Services and the Department of Business Education and Office Administration. Students completing the major in the Department of School Administration and Personnel Services are awarded the Master of Arts in Education degree; students completing the major in the Department of Business Education are awarded the Master of Arts degree. For the Master of Arts in Education, the program is as follows:

Required: 27:102; 27:240; 17:267; 21:289 or 15:282; 27:230.

Electives as approved by chairman and co-chairman.

The student's chairman will be appointed by the Department of School Administration and Personnel Services and a co-chairman by the Department of Business Education. Candidacy and comprehensive examinations will be under the joint jurisdiction of the two departments.

SPECIAL EDUCATION

The student must be fully certified to teach in either the elementary or secondary schools (depending on the major chosen) prior to completing a major in this area.

Competency is required through examination or the following courses: 20:100 or 20:116 (whichever appropriate), and 22:150.

Major in Special Education

Required: Professional Core A.

Required: Competency through examination or course work at either the graduate

or undergraduate level in 22:170; 22:171; 22:174; and 4 hours of 22:192

from tutorial, preacademic, primary, intermediate, or secondary.

Required: Competency demonstrated through proficiency evaluation or course

work at either the graduate or undergraduate level in 22:184; 22:252; 22:289; 22:290 and in two of the following courses: 22:180, 22:181,

22:182, 22:183.

Required for secondary emphasis only: 22:251 Electives as recommended by the department.

Major in Gifted

Required: 22:154; 25:282; 21:289; 20:194 or 28:250.

Electives from a selected list-5 hours.

Major in Visually Impaired

Required: 20:214 or 25:234 and

25:294; 22:161; 22:162; 22:163; 22:164; 22:165; 22:166; 22:260; 22:261;

22:290.

Required: Research-Visually Handicapped.

STUDENT PERSONNEL SERVICES

The student must complete the usual degree and certification requirements and those for the particular endorsement he seeks.

Competency is required through examination or the following courses for majors in elementary or secondary guidance and counseling: 25:278; 25:181.

Major in Elementary Guidance and Counseling

Required: 20:270; 29:104; 29:207; 29:210; 21:289; 21:290-3.

One year of teaching experience is required prior to graduation.

Major in Secondary Guidance and Counseling

Required: 29:102; 29:110; 29:203; 29:205; 29:210; 21:290.

One year of teaching experience is required prior to graduation.

Major in College Student Personnel Services

Certification to teach is not required for this major.

Required: 29:205; 29:230; 29:289; 29:290 (two different practicum experiences -4 hours).

Electives from a selected list-8 hours.

Master of Arts Degree

A number of curricula lead to the degree of Master of Arts. Programs are available for advanced preparation of elementary and secondary teachers, for college teaching, including programs for Iowa Public Junior College certification and for graduate study without reference to teaching. The following majors are offered.

Art Biology

Business

Business Education

Chemistry

Communications Media

Counseling Earth Science

English

English Linguistics

French Geography German

History

Home Economics Education

Industrial Arts Library Science Mathematics

Mathematics for Elementary Schools

Music

Physical Education

Physics

Political Science

School Business Management

Science

Science Education Social Science Sociology Spanish Speech

Speech Pathology

Teaching English as a Foreign Language

Technology

The Master of Arts program is a highly flexible one. The plan of study prescribed for each student depends upon his undergraduate preparation, his experience and his future plans. The needs of the student as determined by him, his adviser, and his departmental committee are the guiding factors in course selection. It should be stressed, however, that regardless of the plan of study followed, graduate work leading to the degree of Master of Arts should constitute a cohesive, logically planned program, not merely an accumulation of credit in a variety of courses. On most programs both the thesis and non-thesis plans are available. Only selected students are admitted to candidacy.

REQUIREMENTS FOR VARIOUS MAJORS

On each curriculum and for each major, the student who plans to receive the master's degree must meet the graduate requirements described on pp. 208-213.

Major in Art

Each student's program will be determined by his background and his needs after consultation with his advisor. The department assumes that most candidates for a master's degree will have undergraduate preparation in the field of art.

On admission to graduate study each candidate will have his undergraduate record and a portfolio of his work evaluated to determine what, if any, undergraduate work must be made up before graduate hours will apply to a degree program. In the total preparation for a master's degree (both undergraduate and graduate work) a student is expected to have completed:

a minimum of 60 semester hours in art, including at least 14 hours in art history.

"Equivalent experience" will be taken into consideration by the evaluating graduate faculty group.

Three options are offered: the thesis, non-thesis, and the studio thesis. A minimum of 30 hours of applicable graduate work, including six hours of graduate art history, is

required using any option.

The studio thesis will consist of an exhibition, performance, or project to be evaluated by an assigned studio thesis committee. Slides, reproductions, or other suitable visual record of the thesis are required to be filed, along with catalog information identifying the work. Examples from the thesis will ordinarily be selected and retained. In certain cases, a written statement may also be required by the evaluating committee if it seems pertinent to explain techniques, processes, or attitudes.

If a student wishes to pursue a certificate for endorsement as a supervisor of art, he must have completed four years of successful teaching in art and must include in his

graduate program:

60:296

and at least 7 hours from 27:141, 27:212, 27:220; 27:226, 27:227.

Before the master's degree is conferred the student must demonstrate proficiency in his major area. Usually this would take the form of an exhibition, but proficiency might be demonstrated in other ways. Specific information relative to this requirement is available in the office of the Department of Art.

Major in Biology

This major is available on both the thesis and non-thesis options. No core is required on either option. Prospective majors must complete an application with the department prior to beginning their programs.

Required: 84:292; 82:200.

Minimum number of hours for the non-thesis option is 37 semester hours, 34 hours plus a three-hour research paper. At least 23 hours must be in the field of biology.

Minimum hours for the thesis option is 30 hours, of which 6 hours is the thesis. At least 12 hours exclusive of research and thesis must be in the Biology area.

Major in Business

This major is a non-teaching program designed to qualify men and women for creative leadership in a dynamic business society. Admission to candidacy for the degree is dependent upon the candidate's undergraduate record and test scores on the Admission Test for Graduate Study in Business. The ATGSB examination must be taken prior to enrollment in the program. In special cases the examination may be taken during (but not later than) the first semester of enrollment.

The length of the program will depend upon the candidate's undergraduate background and business experience. Both the thesis and the non-thesis options are

available for the majors in Business. For either option, the program is:

Required: 15:260; 15:292; 92:139;

15:282 Sec. 1 Accounting - 3 hrs. Sec. 2 Marketing - 3 hrs.

Sec. 4 Finance - 3 hrs.

Electives: Minimum of 12 hours for non-thesis.

Minimum of 6 hours (plus thesis) for thesis.

Electives must be approved by the candidate's graduate committee and selected from the fields of business, economics, mathematics, anthropology, sociology, or psychology.

Candidates selecting the non-thesis option must write a major research paper for which no credit will be given. The candidate must make a formal oral defense of this paper before the graduate faculty of the Department of Business.

Major in Business Education

Both the thesis and the non-thesis options are available for the major in Business Education. A professional core of seven or eight semester hours is required; it may consist of Core A, Core B, or the following courses: 17:113; 17:114; 17:119. When approved in advance by the departmental graduate committee, the core may be composed of other combinations of professional courses.

Required: 15:292 or 25:294; 17:203 and/or 17:207.

Graduate and undergraduate credit combined must include at least 50 semester hours in business, business education, and closely related subjects and must include credit in economics and in accounting.

Candidates selecting the non-thesis option must write a formal research paper approved by the departmental graduate committee. This may be a paper written independently without credit or may be one presented to meet a requirement of a business education course numbered 200 or higher.

Major in Chemistry

This major is available only to students taking Professional Core A or B.

Required: 25:294 or 86:292.

A student must complete 82:200 or an acceptable substitute.

The total number of graduate hours required for the major in chemistry will depend upon the student's undergraduate preparation.

Major in Counseling

The program is designed for persons who plan to counsel in non-school settings such as churches, industry, student centers, employment services, domestic peace corps, job corps, and similar situations. Students who major in this area will complete a basic core of courses applicable to all preparing for work as counselors. Courses in psychology and measurement are provided as a background. Specific areas of interest



and the professional field in which the person plans to work will determine the supporting course work and the appropriate electives. Since persons working on this major will be interested in counseling activities in settings other than that of education, there will be no necessity for the student to hold a teaching certificate. The student's baccalaureate degree may be in liberal arts or a profession, including teaching, however.

Required: 25:181; 25:294; 27:290; 29:110; 29:205.

Required: A minimum of 6 hours selected from the following:

An appropriate statistic course; 20:118; 20:139; 20:140; 20:142;

29:203: 29:220.

Electives: A minimum of 8 hours from a selected list.

Worksheets giving complete details of this program are available in the office of the Department of School Administration and Personnel Services.

Major in Communications Media

This major is offered by the Department of Curriculum and Instruction as a program in media production and message design for persons planning to work in non-school settings, and is available on both the thesis and the non-thesis options. A minimum of 30 hours is required for either option.

Majors in this area will complete a basic core of course work applicable to all preparing for work as media specialists or communications designers. Specific areas of interest will determine the supporting electives. A teacher's certificate is not required. The student's baccalaureate degree may be in any field.

Required: 24:131; 24:135; 24:137; 24:140; 24:205; 24:289

Electives: 16 hours from Educational Media and other academic disciplines related to the individual learner's area of emphasis. Selection of the emphasis shall be made in consultation with the student's adviser.

Major in Earth Science

Each student who majors in Earth Science will complete Professional Core A or Professional Core B or a special core arranged by the student and his graduate committee.

Required: 87:292 or 25:294; 82:200.

Electives: As approved by the department; a minimum of 18 hours of graduate credit hours in earth science.

A maximum degree of flexibility is permitted so that each program of studies can be adjusted to the particular needs of the individual. The total number of graduate hours required for the major will depend upon the student's undergraduate preparation. A minimum of 30 graduate credit hours is required for this major.

A research paper in earth science is required of students on the non-thesis program. Credit may be earned for the paper by enrolling for 87:299. It is expected that the paper and research will involve field and laboratory study.

Major in English

The major in English is available on both the thesis and the non-thesis options.

Required of all students: 62:201.

Thesis option: Minimum of 30 hours including 6 hours for the thesis.

Non-thesis option: Minimum of 30 hours-

Core A or Core B. Required: 62:193 or equivalent. No Core: Program planned by student and adviser.

At least one semester before the degree is conferred, all candidates for degrees in English must demonstrate a basic competence in a foreign language. This requirement may be met in one of two ways: either by obtaining at least a C grade in the second

semester of a language course at this university (or its equivalent at another accredited institution) or by passing a proficiency examination. This requirement does not apply to a student whose native language is other than English. Work taken to satisfy the foreign language requirement does not count toward the number of hours required for the completion of the degree.

(See p. 230 for the major in Teaching of English as a Foreign Language.)

Major in English Linguistics

This major is offered on both the thesis and non-thesis options for a total of at least 30 hours on either program from the following courses. Competency in a foreign language is required.

Linguistic Core: 63:141; 63:144.

Electives - Group I: 63:125; 63:254; 63:256; 63:285.

Group II: 62:144; 62:166; 63:147; 62:184; 63:231; 63:286. Group III: 51:105; 50:230; 65:145; 80:169; 99:175; 63:299.

Thesis option requires the following:

Linquistic Core-6 hours

Electives from Group I-9 hours

Electives from Group II and III combined - 9 hours

Non-thesis option requires the following:

Linguistic Core - 6 hours

Electives from Group I-9 hours

Electives from Group II-12 hours

Electives from Group III - 3 hours

This major may be completed in three consecutive summer sessions at this university provided that the thesis is completed in the intervening period and that for the non-thesis person three (3) additional hours* are earned during some academic year. (*These hours to be earned in work as approved by the department.)

The foreign language requirement can be met by a student who offers a grade of at least C in the second semester of college-level French, Spanish, German, Latin, or Russian, or who can pass a reading comprehension examination in one of these languages. Work taken to satisfy the foreign language requirement does not count toward the number of hours required for the completion of the degree.

Major in French

This program prescribes no required courses. Each student's program will be determined by his needs and in consultation with his adviser. A minimum of 30-32 hours is required for both the thesis and non-thesis options.

Major in Geography

To be accepted on the M.A. degree program, a student must have at least an undergraduate minor in geography or the equivalent of 18 hours of geography. Students with less than an undergraduate minor in geography may be accepted, subject to completion of courses approved by the department head. Required, either in undergraduate preparation or on the graduate program: 97:025; 97:101; 97:110; 97:112; 97:193; any 2-3 hour regional geography course.

Required: 97:203; 97:280; 97:288; and at least two of the following: 97:130, 97:132, 97:170, 97:182, 97:183, 97:185.

Thesis required.

Reading knowledge of French, German, Spanish, or Russian strongly recommended. Students must take 3-6 hours outside of geography.

Students must take a final examination, written and/or oral, at the discretion of the Geography faculty.

Major in German

This major is available on both the thesis and the non-thesis programs. A minimum of 30-32 hours is required for either option.

Required: 74:201 or equivalent; 74:203 or equivalent.

The remainder of the program will be determined by the student's needs in consultation with his adviser.

Major in History

This major is available on either the thesis or non-thesis option with a minimum of 30 semester hours required for each (thesis, 24 hours plus 6 hours credit for the thesis). A research paper is required on the non-thesis option. Prospective majors must consult with the department head about further requirements prior to beginning their programs.

Required: 96:290 or 96:292; 96:193.

Students must take a final comprehensive examination, both written and oral.

A reading proficiency in a foreign language is recommended. This is particularly essential for those persons intending to pursue graduate studies beyond the M.A. degree. Students must take 3-6 semester hours outside the field of history.

Major in Home Economics Education

A minimum of 30 semester hours is required for both the thesis and the non-thesis options for this major. The total hours for the thesis plan includes 6 hours credit for the thesis.

Required: 31:280; 31:281; 31:282; 31:283. Electives as approved by the department.

It is recommended that students follow either Professional Core A or Core B.

Major in Industrial Arts

The industrial arts major is available on both the thesis and non-thesis options. A minimum of 30 semester hours is required for the thesis option, and 32 semester hours for the non-thesis plan.

Required for Professional Core A (K-14 teachers): 20:214 or 25:234; 33:214; 33:226;

33:228; 33:270 (6 hours) or thesis; 33:292.

Required for Professional Core B (post-high school teachers): 27:250; 27:252; 33:214; 33:226; 33:270 (3 hours) or thesis; 33:292; 33:297.

Required for Departmental Core (individually planned programming): 33:292; 33:270 (6 hours) or thesis; and program requirements based on student's needs and interests as cooperatively planned by student and adviser and approved by departmental Graduate Committee.

All students must complete a minimum of 40 semester hours in industrial arts counting both undergraduate and graduate courses. To be admitted as a candidate for the degree in this major, a student must have completed a minimum of 20 semester hours of undergraduate and/or graduate credit in industrial arts.

Candidates selecting the non-thesis option must write a formal research paper

(usually initiated in 33:270) approved by the departmental Graduate Committee.

Major in Library Science

Applicants for admission to candidacy for the master's degree must hold or be eligible for the Iowa Professional Certificate or its equivalent.

Required: 25:294; 27:220 or 27:227.

Additional course requirements for either the thesis or non-thesis plan will be determined by the department. Requirements will be largely governed by certification needs.

Non-thesis plan requires a minimum of 32 semester hours.

Major in Mathematics

This major prescribes no additional courses beyond the B.A. major or equivalent. A minimum of 30 semester hours is required for both the thesis and the non-thesis options.

Students who expect to teach have the option of two core programs which can fur-

ther their preparation.

Specific courses are selected and agreed upon with the help of the Committee Chairman upon completion of the Candidacy Examination.

Major in Mathematics for Elementary Schools

This major is specifically intended for teachers and supervisors. Candidates are ex-

pected to hold appropriate certification or to provide for it in the program.

It is suggested that all candidates take Core A. Those particularly interested in college teaching may use as part of their additional courses in education; 27:250; 27:252; 80:297.

Required (all programs): 80:185; 80:235; 80:280; 80:281.

Recommended electives in mathematics: 80:111; 80:112; 80:113; 80:134; 80:130 or 80:158; 80:144; 80:153; 80:160; 80:165; 80:172; 80:174; 80:180 or 80:183; 80:175; 80:297.

Recommended courses in other departments: 20:100; 24:132; 21:144; 23:110; 21:152; 27:212; 27:220; 27:221; 27:250; 27:252; 21:289; 21:290; 28:150 or 28:250; 37:13; 52:102; 82:200.

Electives in elementary industrial arts, science, geography, or American history.

Programs will depend on the level of mathematical training presented at the time of admission to candidacy.

Major in Music

To be accepted as a graduate major in music, a student must have attained a proficiency in a field of applied music equal to the level required of a student completing an undergraduate major in music. Proficiency beyond this level is highly desirable.

A graduate student will be classified for graduate credit in an applied area by jury audition. A 200 number will be assigned only to a graduate student who has passed satisfactory audition and is preparing for a graduate recital.

Students who fail the theory entrance tests will take 58:180 without credit toward a graduate degree.

All students (except those taking Professional Core B) must take 52:221.

Required for Professional Core A:

2 hours of 54:2- Applied Music.

2 hours of 57:281 or 57:283 or 57:290 or 57:291.

Required for Professional Core B:

Student must demonstrate artistic and/or scholarly performance in one of the following: applied music, music composition (theory), or writing; and, before a jury, demonstrate an acceptable proficiency at the piano.

Also required, work from each of the following:

Applied Music - 2-8 hours Music Methods - 4-10 hours

Music Theory -8-12 hours

Music Literature -6-10 hours

Students on the thesis plan may complete a conventional type of thesis or may satisfy the thesis requirement by creative work or by a recital. Detailed information should be obtained in advance from the head of the Department of Music and the Dean of the Graduate College.

By including 27:227 or 27:228 and 27:220 or 27:221 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.

Major in Physical Education

This major is available only to students taking Professional Core A or B. A minimum of 30 hours is required on the thesis option, and a minimum of 32 hours on the non-thesis plan. The student must have at least 40 semester hours of physical education at the undergraduate and graduate level, exclusive of activity courses.

Required: 37:273.

Electives as recommended by the departmental committee.

Candidacy and comprehensive examinations will be required of all students.

For certificate endorsement as a supervisor of physical education, the student must have four years of successful teaching experience and include in his program of study:

27:141 and 37:276

and at least 6 hours from: 24:132; 20:191; 25:234; 27:220; 27:227; 28:250.

Major in Physics

Two emphases are available.

PHYSICS TEACHING. The program is for high school teachers. Professional Core A or a departmentally approved core is required. The total number of hours required (minimum of 30) will depend upon the student's undergraduate preparation. Both non-thesis and thesis options are available but non-thesis is recommended unless the student has a large number of undergraduate credits in physics.

JUNIOR COLLEGE TEACHING. Professional Core B or a departmentally approved core is required. However, Professional Core B must be taken by students who do not hold (or are not eligible to hold) an Iowa Professional Certificate endorsed for Junior College Teaching, or its equivalent. A larger number of physics courses (combined undergraduate and graduate) is required than for the other program. The thesis option is normally required. If the student has a strong undergraduate background in physics, the program can be completed with the minimum of 30 graduate hours including thesis.

Both programs require 82:200 unless a suitable undergraduate course is approved as

a substitute.

88:120, 88:130, 88:131, 88:157, and 88:158 may not be used for credit on this major.

Major in Political Science

This major is available on both the thesis and non-thesis options. For the thesis plan, a minimum of 24 semester hours plus 6 hours for the thesis is required. A student on the non-thesis plan must complete a minimum of 33 graduate hours.

Required: 94:292 and 94:275.

A student may, with departmental approval, take as much as 12 hours in other disciplines. Each student's program will be determined by his needs and in consultation with his adviser.

All students must take a final comprehensive examination, both written and oral.

Major in School Business Management

This major is offered cooperatively by the Department of Business Education and Office Administration and the Department of School Administration and Personnel Services. Students completing the major in the Department of Business Education and Office Administration are awarded the Master of Arts degree; students completing the major in the Department of School Administration and Personnel Services are awarded the Master of Arts in Education degree. For the Master of Arts degree the program is as follows:

Required: 17:267; 27:102; 27:240; 21:289 or 15:282; 27:230.

Electives as approved by chairman or co-chairman.

The student's chairman will be appointed by the Department of Business Education and Office Administration and a co-chairman by the Department of School Administration and Personnel Services. Candidacy and comprehensive examinations will be under the joint jurisdication of the two departments.

Major in Science

Required: One of the following: 25:294; 84:292; 86:292; 87:292; 88:292.

A student must complete 82:200 or an acceptable substitute.

A minimum of 32 hours is required for this major. The student's total number of

graduate hours will depend upon his undergraduate preparation.

Detailed information on this major, including directions for procedures to follow in planning an individualized program and in requesting assignment of an adviser, may be obtained from the Dean of the College of Natural Sciences, UNI, or the Dean of the Graduate College.

Major in Science Education

Major offered on both the thesis and non-thesis options. Program requires a minimum of 32 semester hours.

Required: 82:280; 82:200 (or acceptable substitute); 28:250 or 8x:297;

25:294 or 84:292 or 86:292 or 87:292 or 88:292.

Required: At least 12 hours in one and no less than 6* hours in a second of the following disciplines: biology, chemistry, earth science, and physics (*or in closely related courses in disciplines different from the 12-hour em-

phasis)

Required: Minimum of 6 hours as optioned -

Thesis option—thesis in science education or a laboratory science; Non-thesis option—electives as approved by the Science Education Coordinating Committee.

Candidate must:

1) hold an Iowa Professional Certificate or its equivalent;

2) have undergraduate preparation in science and mathematics equivalent to UNI B.A. in science major-teaching degree;

3) complete three years of teaching experience before degree is conferred;

4) pass a comprehensive examination in (a) science education and (b) the science areas of emphasis (unless a thesis is written, in which case one examination of the two-candidate's choice-will be written).

Additional information on this major may be obtained from the Dean of the College of Natural Sciences, UNI, or the Dean of the Graduate College.

Major in Social Science

This major is available only to students taking Professional Core A or B. A student must select two areas of study, one which should be his emphasis, from the following departments:

Economics

Geography

History

Political Science

Sociology and Anthropology

Additional information on this major may be obtained from the Dean of the College of Business and Behavioral Sciences or the Dean of the Graduate College.

Major in Sociology

The major in sociology is available only on the thesis option.

Required: 98:280 Sociological Theory - 3 hrs. 98:280 Sociological Research - 3 hrs.

At least 12 hours of electives in sociology.

Candidates for the degree may take six hours outside sociology. These electives must be approved by the Department of Sociology.

A reading knowledge of a foregin language is recommended.

Comprehensive examinations, written and/or oral, at the discretion of the department.

Students entering graduate study in this department should have taken the following courses or should be able to demonstrate competency in them: 98:58, 98:60, 98:161, and 98:170.

Major in Spanish

The major in Spanish is available on both the thesis and non-thesis options. A minimum of 30-32 hours is required for either option.

Required: 78:117 or 78:144 or equivalent; 78:123 or 78:140 or equivalent; 78:203 or 78:205; and 78:231.

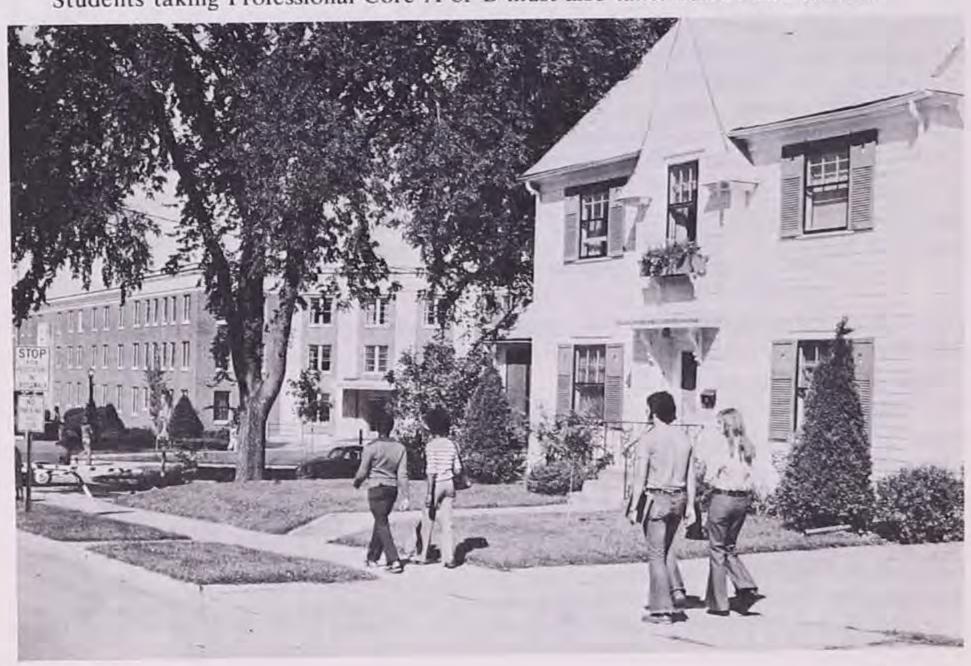
The remainder of the program will be determined by the student's needs in consultation with his adviser.

Major in Speech

A total of 30 semester hours is required for this major on both the thesis and non-thesis options.

Required: 50:225.

Students taking Professional Core A or B must also take: 50:230 and 50:283.



Major in Speech Pathology

This major is available on two plans (A and B), both of which have the following requirements in common. These requirements include both graduate and undergraduate courses considered essential to certification and the master's degree. Starred (*) courses will normally have been completed at the undergraduate level and must precede additional work in speech pathology.

Required in speech pathology: *51:010; *51:105; *51:106; *51:125; *51:130; *51:140; *51:155; *51:165; *51:195; 51:201; 51:235; 51:245; 51:255; 51:275; 51:295.

Required in psychology: 15 hours including 40:008; 20:100; 20:112; 25:180 or 80:172.

Electives to be chosen in consultation with the student's adviser.

In addition to the above courses, the student must complete 150 clock hours of supervised clinical practice.

PLAN A. A minimum five-year program based on an undergraduate teaching major. This plan is available only to students taking Professional Core A or B. The non-thesis option will require 30 to 36 semester hours, depending upon the previous preparation of the individual student.

The professional program in speech pathology is a program of both undergraduate and graduate courses leading to a Master of Arts degree. Recommendation for certification in speech pathology is made only upon completion of the combined undergraduate-graduate program. This program is designed primarily to prepare students for careers as clinicians providing remedial services to the speech and hearing handicapped, with emphasis on children in public schools.

A student on this program must complete all the requirements for the B.A. degree, Speech Pathology Major—Teaching, and must meet all the requirements for admission to graduate work at UNI, and complete all other requirements for the master's degree.

The completion of the undergraduate major or its equivalent will be considered adequate undergraduate preparation for the graduate protion of the program. Deficiencies in undergraduate preparation must be made up before the student can begin his graduate sequence in speech pathology.

PLAN B. This program is for students who do not desire formal teaching certification but who will be eligible for the Iowa Statement of Professional Recognition in speech pathology.

These students will not take either Core A or Core B. If the student has no previous school experience and no teaching certification, the student will take 51:195 and 28:250. If the student's undergraduate major was other than speech pathology, he will complete the same course work as the other students plus any deficiencies in background work.

Note: The maximum academic load, per semester, for any regular graduate student in speech pathology is 12 semester hours of course registration. In addition, as an integral part of the training program, students are assigned part-time professional activities of a clinical and/or research nature. These activities are commensurate with each student's abilities and professional goals. Time required for such activities is approximately 10 hours per week. No registration is required for these part-time professional activities and no academic credit is given; however, clock hours spent in direct, supervised, clinical work will be counted toward ASHA certification. This requirement applies to all graduate students in speech pathology who are enrolled for more than six semester hours. Part-time professional activities are in no way connected with or related to the awarding of an assistantship or fellowship.

Major in Teaching of English as a Foreign Language

All students who have not had the following courses, or the equivalent, must include these courses as a part of their graduate major: 62:162; 63:141; 63:144; 63:147; 63:194. Students selecting the non-thesis option are strongly recommended to take six hours of education and/or psychology, chosen to meet their individual needs.

Required: 63:235; 63:297.

At least one semester before the degree is conferred, all candidates for degrees in English must demonstrate a basic competence in a foreign language. This requirement may be met in one of two ways: either by obtaining at least a C grade in the second semester of a language course at this university (or its equivalent at another accredited institution) or by passing a proficiency examination. This requirement does not apply to a student whose native language is other than English. Work taken to satisfy the foreign language requirement does not count toward the number of hours required for the completion of the degree.

Major in Technology

This major requires a minimum of 33 semester hours and is available on both the thesis and non-thesis options in three specific emphases.

The candidate must:

 possess a baccalaureate degree in technology, industrial arts, mathematics, physics, engineering, or some related field;

 have earned a minimum of 8 semester hours of college mathematics and 8 semester hours of college physics and/or chemistry or other science related to the major area (this may be either graduate or undergraduate credit);

 have earned a minimum of 15 semester hours in a major technical field and 8 semester hours in supporting technical subjects;

4) have or acquire one year of recent and significant trade or technical experience in industry in his particular field of emphasis.

The successful completion of a written Departmental (Department of Industrial Arts and Technology) Candidacy Examination is required in all three emphases, and students on non-thesis programs must successfully complete a written final comprehensive examination. In addition to the above, the emphases in Vocational-Technical Teaching and in Vocational-Technical Education Supervision and Administration must have credit in the following courses (or their equivalent): 33:101; 33:181; 33:188; and 33:191. These courses do not apply for credit on the major.

Emphasis in Vocational-Technical Teaching

Required: 27:250; 27:252; 33:184; 33:194; 33:292; 33:273; 80:170; 33:297.

Electives as approved by the department from a selected list.

Emphasis In Vocational-Technical Education Supervision and Administration

Required: 20:214; 27:252; 33:292; 80:170; 15:160; 15:101 or 15:105; 33:273; 15:260; 33:226.

Electives as approved by the department from a selected list.

Emphasis in Industrial Supervision and Management

Required: 15:105; 15:167 or 80:170; 15:210; 15:260; 33:273; 33:299.

Required: 92:139 or 92:141 or 92:224.

Electives as approved by the department from a selected list.

The Graduate Program

OUTLINE OF ORGANIZATION AND REQUIREMENTS FOR MASTER'S DEGREES. UNIVERSITY OF NORTHERN IOWA

	MASTER OF ARTS IN EDUCATION	MASTER OF ARTS
A. Purpose and Objectives	Preparation of school service personnel a. administrators b. supervisors c. counselors Advanced preparation of elementary teachers	Graduate study in field of specialization Advanced preparation of elementary and secondary teachers Preparation for college teaching
B. Program Options	Thesis plan Non-thesis plan	Thesis plan (open to all) Non-thesis plan (except for majors in Geography and Sociology)
C. Eligibility for Candidacy	Unconditional admission to graduate study General graduate examinations and dept. candidacy examinations passed Hold or be eligible for Iowa Professional Certificate or equivalent*	Unconditional admission to graduate study General graduate examination(s) and dept. candidacy examinations passed
D. Program Requirements	 On the non-thesis plan: at least one research paper approved by the department and filed in the departmental office On all majors: 25:294 Educational Research—3 hrs. 20:214 Advanced Educational Psychology—2 hrs. or 25:234 Philosophy of Education On some majors: Teaching experience as specified 	 On the non-thesis plan: at least one research paper approved by the department and filed in the departmental office On certain majors: work outside the major, or competence in a foreign language, or Prof. Core A or B (see major for specific requirements) Core A (1) 20:214 or 25:234-2 hrs. (2) 25:294-3 hrs., or departmental research course (3) Methods course in major field, or 200-level course
*Except for majors in College Student Personnel Services, General Educational Psychology, and School Business Management. **Students completing Professional Core B with appropriate courses in one or more subject areas may be recommended for Iowa Public Junior (Community) College certification.		in Education or Teaching Core B** (1) 27:250 Teaching in College — 3 hrs. (2) 27:252 Current Issues in Higher Educ. — 2 hrs. (3) 297 Practicum—2 hrs.

Specialist in Education Degree

The Specialist in Education degree is designed to serve a qualitative need for highly trained specialists in various fields of educational endeavor. Many salary schedules have recognized advanced preparation beyond the master's degree but such recognition is often based on a collection of hours not necessarily representing a planned program of study. The Specialist in Education degree requires careful planning with the resultant advantages. It is a program designed to meet the needs of students in professional areas in which the master's degree is not sufficient, but in which the rigorous research emphasis of the doctorate is not necessary. The sixth year of preparation is being recognized in certification standards of several states and as a membership requirement in the American Association of School Administrators.

The program at the University of Northern Iowa leading to the Specialist in Education degree involves breadth of preparation as well as depth in a particular field of specialization. Persons majoring in a professional area of specialization will take work in cognate fields to help develop this broadened base of understanding, such work to be determined in cooperation with the student's adviser. At the same time the program is flexible enough to permit variation in accord with individual backgrounds and aspirations. The flexibility is such that persons with the master's degree in either professional education or in an academic area may participate in the program.

Majors are available in the following areas:

CURRICULUM AND SUPERVISION

Curriculum Coordinator

Elementary Consultant

Secondary Consultant

EDUCATIONAL PSYCHOLOGY

Evaluation
School Psychology

READING Reading Clinician

SCHOOL ADMINISTRATION
Superintendent
Elementary Principal
Secondary Principal

SCHOOL BUSINESS MANAGEMENT School Business Management

SPECIAL EDUCATION

Special Education: Administration

STUDENT PERSONNEL SERVICES

Director of Guidance Services

Elementary Guidance and Counseling
Secondary Guidance and Counseling
College Student Personnel Services

BUSINESS EDUCATION

Major in Business Education

INDUSTRIAL ARTS

Major in Industrial Arts

Detailed information for each of the above program areas may be obtained from the head of the department offering the major. These include:

Department of Curriculum and Instruction

Reading

Special Education

Department of Educational Psychology and Foundations

Educational Psychology

Department of School Administration and Personnel Services

Curriculum and Supervision

School Administration

School Business Management

Student Personnel Services

Department of Business Education and Office Administration

Business Education

Department of Industrial Arts and Technology

Industrial Arts

The programs leading to this degree are open to students who hold a master's degree from an accredited graduate school, who have had at least one year of teaching experience, and who meet the requirements set forth below.

With special approval the student may work directly toward the Specialist in Education degree without going through a master's degree program.

Admission to Candidacy

A student must successfully complete the following examinations: (a) Miller Analogies Test, (b) Professional Education Examination, and (c) Departmental Examinations; however, the major in College Student Personnel Services involves only parts (a) and (c).

A student's application, including program, must be approved by the departmental committee, the head of his department, the dean of the appropriate college and the Dean of the Graduate College. Normally he may be admitted to candidacy during or immediately following the first semester of enrollment following the receipt of the master's degree, but capable students may be admitted to candidacy for the Specialist in Education degree at any time after being admitted to candidacy for the master's degree.

Graduation Requirements

The student shall complete the general requirements for the Specialist in Education degree and shall meet the requirements as specified by the departmental committee using a combination of graduate courses taken for the master's degree and beyond. The student must be eligible for certification as a teacher, if required for the major, before the degree will be granted. In some cases, appropriate certification endorsement will be recommended for those who meet the standards set by the university in conjunction with the appropriate certification agency. Receipt of the degree is not a necessary prerequisite to recommendation for the appropriate endorsement(s) unless state standards require such. Students seeking only specific endorsement will not be required to secure admission to candidacy, complete the thesis requirement, or take comprehensive examinations. A cumulative graduate grade point average of 3.00 or better will be required prior to recommendation for endorsement(s).

HOURS OF CREDIT. A student must earn a minimum of 30 semester hours of graduate credit beyond the master's degree. Credit earned in excess of that required for the master's degree may be applied toward the 30-hour requirement if that credit is earned during the final period of enrollment for the master's degree.

Certain limitations on the amount and kinds of credit must be observed:

200-level Credit. A student must earn at least 24 semester hours of credit in courses numbered 200 or above, counting both the master's and the post-master's work but not counting any Research credit

Research Credit. The provisions regarding research credit are the same as those
for the master's degree and in addition to the amount of such credit used toward
the master's degree. (See p. 211). Not more than six (6) hours of research credit
can be included in the 30 (or more) hours of post-master's credit.

2. Recency of Credit. Courses taken more than 7 years prior to the granting of the degree cannot be used to meet degree requirements.

 Transfer Credit. In addition to the transfer credit permitted on the master's degree, 8 semester hours of transfer credit for post-master's work may be applied toward the degree of Specialist in Education.

 The regulations regarding credit in correspondence courses, and radio and television classes are the same as those for the master's degree. (See p. 210).

SCHOLARSHIP. A cumulative grade index of 3.00 (B average) must be earned at the University of Northern Iowa in all courses attempted after receiving the master's degree. No credit toward graduation is allowed for a course in which a grade below C is earned.

CANDIDACY. The requirements for admission to candidacy are described on p. 233.

ON-CAMPUS RESIDENCE. A student must have completed at least 18 hours in residence credit on campus, including one semester or two summer sessions of fulltime enrollment in residence after the master's degree.

EXAMINATIONS.

(a) A student must pass a comprehensive oral examination, including a defense of the thesis if any. The examination will be conducted and evaluated by the departmental committee and a faculty member designated by the Dean of the Graduate College, although other members of the faculty may participate.

(b) A student may be required by the departmental committee to pass a written comprehensive examination. If required, it should precede the oral examination.

THESIS. A student who did not complete a thesis for the master's degree must complete one for the specialist's degree. A department may require a student who has written a master's thesis to write a thesis for the specialist's degree also. The thesis must be presented in the style and form prescribed for the master's thesis. It must have the approval of the thesis committee and the Dean of the Graduate College.

The work on a thesis will normally be considered to involve about 6 semester hours of credit. To earn this credit a student registers for Research and usually not in one block. The instructor will assign a grade for a semester's registration in Research based upon the progress made, but may assign an Unfinished (U) if he feels the work has not reached the place where it can be evaluated. Registration for the last segment of Research credit (for work on a thesis) should not be made until the thesis is near completion. The Dean of the Graduate College may authorize an extension of time for the completion of an Unfinished in Research up to one additional calendar year; but if at the end of that time the work has not been completed, the grade of U will be changed to an F (Failure). Completion of the thesis project occurs when the thesis has been approved by the thesis committee and the Dean of the Graduate College.

The Dean of the Graduate College will appoint three members of the Graduate Faculty as an advisory committee to guide the student in selecting and completing an appropriate thesis project.

FILING OF THESIS AND ABSTRACT OF THESIS. The same regulations apply as for the master's degree. See p. 212.

APPLICATION FOR GRADUATION. The same regulations apply as for the master's degree, see p. 212.

ATTENDANCE AT COMMENCEMENT. The same regulations apply for the master's degree. See p. 212.

REQUIREMENTS FOR VARIOUS MAJORS

Course work requirements for the Specialist in Education degree are defined in terms of a two-year graduate program, including work taken on the master's degree. A minimum of 60 semester hours is required for completing the program.

Worksheets giving complete details of the various majors and emphases are available in the offices of the departments in which the majors are offered.



CURRICULUM AND SUPERVISION

The programs in curriculum and supervision provide preparation to serve as curriculum director or consultant in city and county systems or college instructor. Competency is required through examination or the following courses: 25:181; 25:180.

General requirements: 20:214; 24:131; 24:132; 25:234; 25:294; 27:141; 27:204 or

27:210; . . :290; plus

8 semester hours of non-professional course work.

Major in Curriculum Coordinator

Must hold a certificate for elementary or secondary teaching prior to completing the program.

Required: 27:212; 27:220; 27:226; 27:227.

Major in Elementary Consultant

Must hold a certificate for elementary teaching prior to completing the program. Required: 27:226; 27:227.

Major in Secondary Consultant

Must hold a certificate for secondary teaching prior to completing the program. Required: 27:226; 27:227.

EDUCATIONAL PSYCHOLOGY

The major in school psychology prepares a student for work in educational psychology at the public school and college levels. The major in evaluation provides preparation in the area of research and measurement in schools and in higher education.

Competency is required through examination or the following courses: 40:008;

20:100 or 20:116; 25:181; 25:180.

General requirements: 20:139; 25:281; 25:282; 25:283; 25:294; 29:203.

8 semester hours of non-professional course work.

Major in Evaluation

Required: 20:214; 25:234; 29:102; 27:220 or 27:227; 25:280; 80:172;

25:289 Evaluation – 2 hrs.

25:289 Research Problems - 2 hrs.

Major in School Psychology

Required: 20:214 or 25:234; 20:118; 20:142; 40:118; 29:104; 22:150; 51:101; 20:194; 29:205;

29:203;

..:289-2 hrs.

An approved course in reading.

6 semester hours selected from a list of restricted electives.

Supervised internship under the direction of a certified school psychologist. The student must have either completed two years of successful teaching experience or two years of related experience in psychology prior to graduation.

READING

Major in Reading Clinician

To be eligible for a degree in this major the student must be certified as an elementary or secondary teacher. This program and two years of teaching experience satisfy requirements for certification as Reading Clinician. Competency is required through examination or the following courses: 20:100; 20:116; 21:44 or 21:144; 23:110; 23:130; 23:147; 23:148; 25:180; 25:181; 62:165.

Required: 20:214 or 25:234; 23:212; 23:114; 23:210; 23:240; 23:244; 25:294; 23:242;

. .:289 - 2 hrs. . .:290 - 2-4 hrs.

8 semester hours required in non-professional course work. Work in speech pathology and sociology recommended.

SCHOOL ADMINISTRATION

The sixth-year program in administration prepares qualified people to serve as superintendent, assistant superintendent, business manager, or principal, or to teach in related areas as the college level.

The student must hold a certificate to teach in the elementary or secondary school and must have successfully completed one year of teaching at the elementary or secondary level prior to completing this degree. (Check certification requirements.)

General requirements: 25:294; 20:214 or 25:234; 25:278; 27:102; 27:240; 27:241;

27:204 or 27:210; 27:141; 25:181; 2x:289; 2x:290; 27:230.

One course in educational psychology, or guidance. 8 semester hours of non-professional course work.

Major in Superintendent

Required: 27:220; 27:221; 27:227; 27:228.

Major in Elementary Principal

Required: 27:212; 27:220; 27:221.

Major in Secondary Principal

Required: 27:226; 27:227; 27:228.

SCHOOL BUSINESS MANAGEMENT

Major in School Business Management

This major is offered cooperatively by the Department of School Administration and Personnel Services and the Department of Business Education and Office Administration. The program is as follows:

Required: 25:294; 20:214 or 25:234; 27:102; 27:240; 27:241; 27:210; 17:267; 15:163; 15:210; 15:270; 21:289 or 15:282; 27:230.

Electives as approved by chairman or co-chairman.

The student's chairman and co-chairman will be appointed according to the department in which the student files his major. Candidacy and comprehensive examinations will be under the joint jurisdicition of the two departments.

SPECIAL EDUCATION

Major in Special Education: Administration

To be eligible for this degree the student must be certified as a teacher of the handicapped or as a school psychologist or speech and hearing clinician.

Required: 25:294; 20:214 or 25:234; 27:230; 22:184; 22:252; 22:278; 22:289; 22:290; 27:102 or 27:228 or 27:221; 27:210 or 27:204 or 27:141 or 27:212 or 27:226.

plus

Two courses in mental retardation, emotionally disturbed or speech correction, and

8 semester hours chosen from non-professional course work.

STUDENT PERSONNEL SERVICES

The appropriate program in student personnel services may lead to counseling work in the elementary or secondary schools, colleges or universities.

Competency is required through examination or the following courses:

25:181; 25:180.

General requirements: 20:214; 25:234; 25:294.

Major in Director of Guidance Services

Must be certified as a teacher and must have successfully completed one year of teaching at the elementary or secondary level. (Check certification requirements.)

Required in evaluation: 25:281; 29:203.

Required in Counselor Education core: 29:102; 29:110; 29:220; 29:227; 29:205; 29:210; 29:225; 29:289; 20:270; 29:207; 29:104; 29:235.

Required in Experience: 29:290 Secondary Counseling Practicum Required in Experience: 29:290 Field Experience—Counseling Required non-professional: 8 semester hours including sociology.

Major in Elementary Guidance and Counseling

Must hold certificate to teach in the elementary school and have successfully completed one year of elementary school teaching before completing the program. (Check certification requirements.)

Required: 20:270; 29:104; 25:281; 29:225; 29:207; 29:227; 29:210;

29:289 Interdisciplinary View of Guidance - 2 hrs.

29:289 Growth and Development – 2 hrs. 29:290 Elementary Counseling – 2 hrs. 29:290 Field Experience – Counseling – 2 hrs.

Required non-professional: 8 semester hours including two courses in sociology.

Major in Secondary Guidance and Counseling

Must hold certification to teach in the secondary school and have successfully completed one year of secondary school teaching before completing the program. (Check certification requirements.)

Required: 29:102; 29:110; 25:281; 29:225; 29:220; 29:227; 29:205; 29:210;

29:289 Interdisciplinary View of Guidance - 2 hrs.

29:290 Secondary Counseling - 2 hrs.

29:290 Field Experience in Counseling -2 hrs.

Required non-professional: 8 semester hours including two courses in sociology.

Major in College Student Personnel Services

Required: 27:252:29:230.

29:289 College Student Personnel Programs (may be repeated once) 29:290 Practicum in Education and Psychology: (three areas required)

College Counseling Services—2 hrs. College Student Housing—2 hrs.

College Student Personnel Administration – 2 hrs.

College Student Activities - 2 hrs.

8 semester hours chosen from a list of restricted electives.

Required non-professional: 8 semester hours including academic psychology.

BUSINESS EDUCATION

Major in Business Education

The number of hours in Business and Business Education courses, counting both graduate and undergraduate hours, must total at least 60 and must include basic

background in Economics. At least 15 hours of Business and Business Education credit must be taken during the student's sixth-year program.

Required: 20:214; 25:234; 15:292, or 25:294; 25:181; 15:167; 15:297; 17:203;

17:207; 17:280; 17:284.

and 8 semester hours in cognate fields (Cognate fields could include fields such as economics, education and psychology, and mathematics).

Students interested in serving as a master teacher in one of the Business Education areas must have a minimum of 20 semester hours of graduate credit in subject matter courses chosen from the following areas with no less than 6 hours of graduate credit in each of two areas: Accounting, General Business, Marketing, Secretarial. At least 9 hours of this requirement must be taken during the student's sixth-year program.

Students seeking to be college teachers, supervisors, or to hold certain administrative posts in the field of business or vocational education will need to select courses particularly suited to the desired goal. Such courses should be made a part of the candidacy program.

INDUSTRIAL ARTS

Major in Industrial Arts

The Specialist in Education degree program with a major in Industrial Arts offers qualified persons an opportunity to prepare for such leadership positions as master teacher in public or private secondary schools, supervisor of student teaching, college teacher, technical institute teacher, supervisor, or director of industrial arts. The student should have established an aim so that his sixth-year program can be designed to help attain his goal.

Required: 33:214; 33:226; 33:228; 33:292 and

15 hours in one of the following: drafting, electricity-electronics, graphic arts, metal, power mechanics, or wood. The number of hours in Industrial Arts courses, counting both graduate and undergraduate hours, must total at least 60.

Required:

25:180; 25:294; 20:214 or 25:234; and

8 hours of work in cognate fields, including: 25:281 or 80:153; 92:116.

Specialist Degree

The requirements concerning candidacy, graduation, scholarship, residence, examinations, and thesis are the same as for the Specialist in Education degree. (See pp. 233-235.)

Major in Science Education

For admission to candidacy the student's program must be approved by the Science Education Coordinating Committee and the Coordinator of Science Education. In addition to examinations required for the specialist's degree, this major requires examinations administered by the Science Education Coordinating Committee.

Each candidate's program will include an emphasis in a particular science discipline that is at least equivalent to an acceptable major on the M.A. program with Professional Core A. In addition, the emphasis must include any courses needed to match the specific UNI requirements for an undergraduate teaching major in that discipline, plus

mathematics through the equivalent of 80:060. (Not all courses taken to meet this requirement will necessarily be eligible for graduate credit.)

Research experience (not necessarily as credit in "Research") in both laboratory science and science education must be part of the total post-B.A. program. Not more than six (6) hours of research credit may be included in the 30 (or more) hours of post-master's credit.

(Worksheets giving complete details of the major and emphases are available in the office of the Dean of the College of Natural Sciences.)

Required Science—minimum of 30 hours, including 82:200, selected from biology, chemistry, earth science, and physics. Must include at least 12 hours in science outside the area of emphasis, preferably in two different disciplines.

Required Research, Thesis, and related courses-12-19 hours

25:294

8x:299

Thesis (if optioned or required)

3 of the following: 25:180 or 80:172; 80:170; 82:288 (1-2 hours); 25:281

Required Internship-4-6 hours

28:250 (2-4 hours); 82:280

Required Education-6-8 hours

20:214 or 25:234

and 2 of the following: 25:280; 27:227; 21:142; 27:220

Additional hours required (0-8 hours) may be selected from:

a. any course listed above but not required

b. any 100g or 200-level mathematics course

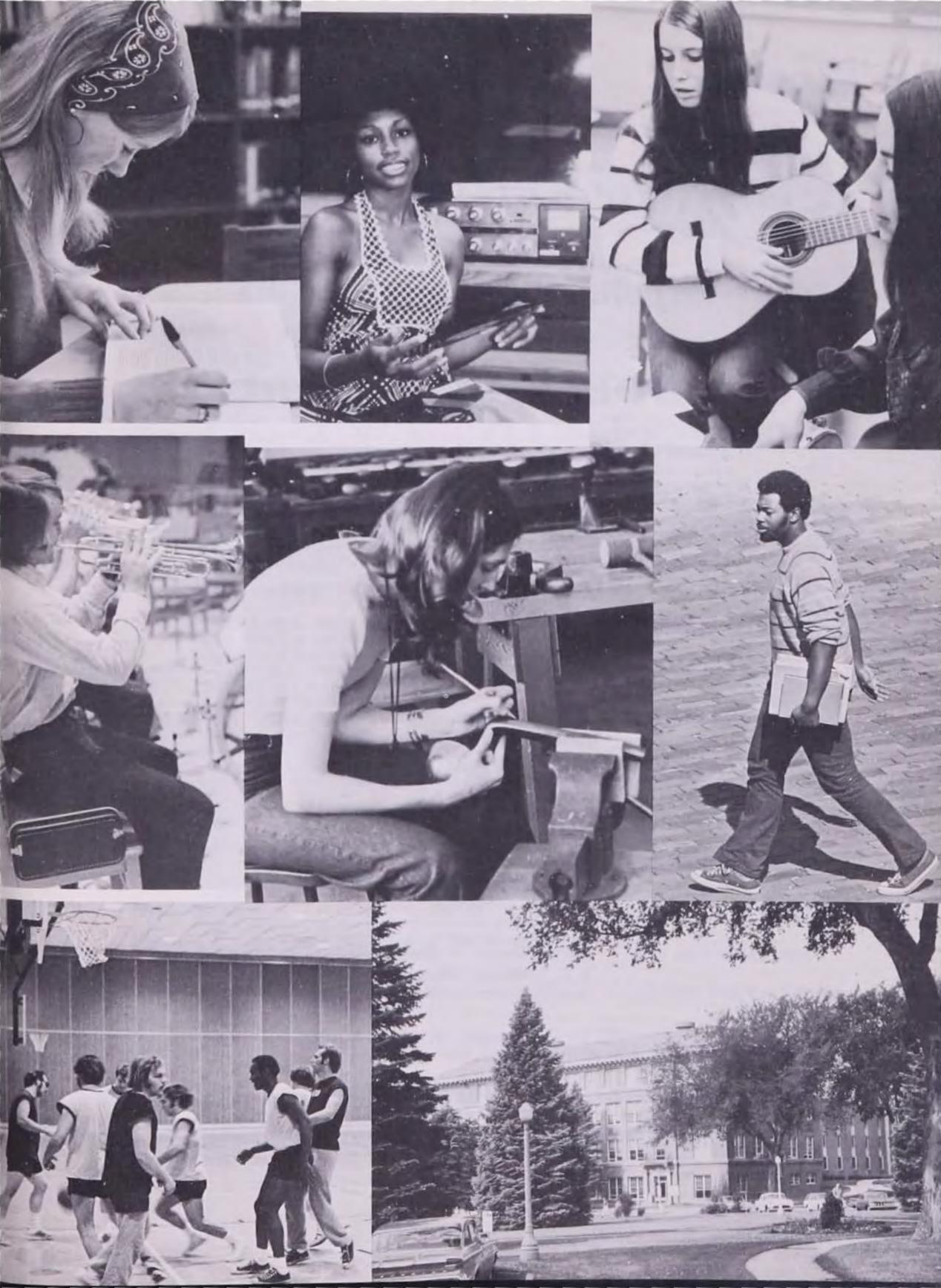
c. any course numbered 82:1xxg or 82:2xx

d. 82:280 (taken as a Professional Core A requirement in a master's program)

e. 27:226; 20:191; 24:137

Cooperative Doctoral Program in Educational Administration

An agreement has been worked out between the University of Northern Iowa and the University of Iowa to provide for transfer of graduate credit earned at the University of Northern Iowa at the sixth-year level to apply on the Doctoral Program in Educational Administration at the University of Iowa (U of I). A student may transfer at any time during the sixth year. If a student completes the Specialist in Education program at UNI, it would be possible for an eligible candidate to complete the requirements for the Doctor of Philosophy degree at the U of I in three semesters (two semesters must be consecutive) of full-time residence work. The Office of the Dean of the Graduate College will provide further details upon request.





State Board of Regents

Officers of the Board:

Mrs. H. Rand Petersen, President Harlan

R. Wayne Richey, Executive Secretary
Des Moines

Members of the Board:

Terms expire June 1975 Ray V. Bailey, Clarion

Mrs. H. Rand Petersen, Harlan Donald H. Shaw, Davenport

Terms expire June 1977 John Baldridge, Chariton

Mrs. Margaret Collison, Oskaloosa Steven E. Zumbach, Coralville

Terms expire June 1979 Stanley Barber, Wellman

S. J. Brownlee, Emmetsburg Harry G. Slife, Cedar Falls

Administrative Staff 1973-1974

Officers of Administration

- JOHN J. KAMERICK—B.A., St. Ambrose College; M.A., Ph.D., University of Iowa President of the University Professor of History—1970**
- James G. Martin B.A., M.A., Indiana State College; Ph.D., Indiana University Vice-President and Provost Professor of Sociology –1971
- THOMAS W. HANSMEIER—B.A., M.A., University of Northern Iowa; Ed.D., Michigan State University Vice-President for Student Services and Special Assistant to the President Professor of Education—1971
- ROBERT D. STANSBURY—B.A., M.A., University of Northern Iowa; Ph.D., University of Iowa Vice-President for Administrative Services

 Associate Professor of Education—1968 (1973)
- EDWARD V. VOLDSETH—B.A., University of Montana; M.A., Teachers College, Columbia University; Ph.D., University of Iowa Vice-President for University Relations and Development—1964 (1971)

DIVISION OF INSTRUCTION

- James G. Martin—B.A., M.A., Indiana State College: Ph.D., Indiana University Vice-President and Provost Professor of Sociology—1971
- GORDON J. RHUM—B.A., Iowa Wesleyan College; M.A., Ph.D., University of Iowa Dean of the Graduate College Professor of Education—1948 (1970)
- FRED W. LOTT, JR. -B.S., Cedarville College, Ohio; M.A., Ph.D., University of Michigan Assistant Vice-President, Academic Affairs Professor of Mathematics-1949 (1971)
- Norris G. Hart—B.A., Huston-Tillotson College; M.A., Syracuse University
 Director of Educational Opportunity Programs and Special Community Services 1971
 (1972)
- Donald O. Rod—B.A. Luther College; B.A.L.S., University of Michigan Director of Library Services Professor of Library Science—1953 (1966)
- H. Wendell Alford—B.A., John B. Stetson University: B.S., Southwestern Baptist Theological Seminary, Texas; B.S., North Texas State College
 Assistant Director of Library Services (Technical Services)—1959 (1967)
- Donald W. Gray B.A., Asbury College; B.D., Emory University; M.A., University of Minnesota Assistant Director of Library Services (Public Services)—1967
- ROBLEY C. WILSON—B.A., Bowdoin College; M.F.A. University of Iowa Editor, North American Review
 Associate Professor of English—1963 (1970)
- EDWARD W. AMEND—B.A., Midland Lutheran College; B.D., S.T.M., Lutheran School of Theology; Ph.D., University of Chicago Director of Individual Studies
- Associate Professor of Religion and Humanities 1967 (1972)

 ROBERT R. HARDMAN B.S.Ed., Maryland State Teachers College; M.S. Ed., Ed.D., Indiana Univer-
 - Director of the Educational Media Center Associate Professor of Educational Media – 1970

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

Deans of the Colleges

ROBERT E. MORIN - B.S., M.S., Northwestern University; Ph.D., University of Wisconsin Dean of the College of Business and Behavorial Sciences Professor of Psychology - 1972

HOWARD KNUTSON -B.A., Luther College, M.A., Ed.D., University of Wyoming Dean of the College of Education Director of Teacher Education Professor of Education-1953 (1968)

FRANCIS E. SMITH-B.A., University of Massachusetts; M.A., Ph.D., University of Iowa Acting Dean of the College of Humanities and Fine Arts Professor of English-1950 (1973)

CLIFFORD G. McCollum-B.S., M.A., Ed.D., University of Missouri Dean of the College of Natural Sciences Professor of Science-1949 (1968)

DIVISION OF STUDENT SERVICES

THOMAS W. HANSMEIER - B.A., M.A., University of Northern Iowa; Ed.D., Michigan State University Vice-President for Student Services and Special Assistant to the President Professor of Education - 1971

Janice F. Abel - B.M.E., M.M.E., Drake University; Ed.D., Indiana University Coordinator of New Student Orientation and Advising-1972

MERRILL F. FINK -B.A., Central Michigan University; M.A., University of Michigan Registrar - 1946 (1972)

LEWIS E. GLENN-L.L.B., George Washington University Assistant Registrar - 1966 (1972)

JACK L. WIELENGA - B.A., M.A., Ed.S., University of Northern Iowa Director of Admissions-1959 (1972)

DENNIS L. HENDRICKSON-B.A., M.A., University of Northern Iowa Assistant Director of Admissions - 1971 (1972)

KENT A. OGDEN-B.A., University of Northern Iowa Admissions Counselor - 1969 (1972)

PHILLIP L. PATTON -B.A., University of Northern Iowa Admissions Counselor - 1972

ALDEN B. HANSON-B.A., St. Olaf College; M.Ph., University of Wisconsin Foreign Student Adviser

Associate Professor of English - 1946 (1970) WAYNE L. MORRIS -B.S., M.S., Indiana University Associate Dean of Students-1970 (1971)

JOANN CARLO CUMMINGS -B.A., M.A., Colorado State College Assistant Dean of Students and

Coordinator of Continuing Education-1963 (1972)

PAUL C. KELSO-B.A., Northeast Missouri State Teachers College; M.Ed., Ed.D., University of Missouri

Director of the Counseling Center - 1948 (1969) RICHARD D. CORNISH-B.S., M.S., University of Wisconsin, Milwaukee; Ph.D., University of Wisconsin, Madison

Counselor, Counseling Center - 1972 LEONARD R. DAVIS -B.A., Coe College; M.S., University of Iowa Counselor, Counseling Center - 1964

MARTIN R. EDWARDS -B.S., M.A., Central Michigan University Counselor, Counseling Center - 1973

*Norman L. Story -B.A., David Lipscomb College; M.A., Western Michigan University Counselor, Counseling Center-1968

DENNIS P. JENSEN-B.A., M.A., University of Northern Iowa Director of Financial Aids-1958 (1965)

CLIFFORD S. SWARTZ-B.A., Immaculate Conception College; M.A., University of Northern Iowa Coordinator of Veterans Affairs-1970 (1973)

on leave

HAROLD R. BERNHARD-B.A., Carthage College, Illinois; B.D., Chicago Lutheran Theological Seminary; Ph. D., University of Chicago Director of the Bureau of Religious Activities

Professor of Religion – 1949 (1956)

CLARK K. ELMER - B.A., University of Michigan; M.A., Michigan State University Director of Housing -1972

JOHN F. KETTER-B.S., George Williams College; M.A., Ohio State University Director of the Union Coordinator of Student Activities - 1967 (1972)

JOHN S. ZAHARI - B.A., Michigan State University Director of Dining Services – 1965 (1967)

R. Kent Ruby - B.S., Northwest Missouri State College Assistant Director of Dining Services-1967 (1971)

GAYLE A. HODGSON -B.S., Iowa State University

Dietitian - 1965 JOHN E. BLUMGREN - M.D., University of Iowa

Medical Director of Student Health Service-1969 (1970)

RODRIGO DOMINGO - M.D., Manilla Central University Staff Physician, Student Health Service-1973 FREDERIC C. LOOMIS -B.S., M.D., University of Iowa

Staff Physician - 1972

PAUL A. TENNEY - D.O., College of Osteopathic Medicine and Surgery, Des Moines, Iowa Staff Physician - 1971

DIVISION OF ADMINISTRATIVE SERVICES

ROBERT D. STANSBURY -B.A., M.A., University of Northern Iowa; Ph.D., University of Iowa Vice-President for Administrative Services Associate Professor of Education - 1968 (1973)

PHILIP C. JENNINGS - B.S., M.S., Iowa State University

Business Manager – 1942 (1945)

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

LELAND A. THOMSON-B.A., M.A., University of Northern Iowa; Ed.D., University of Denver Director of Planning-1968 (1972)

KENNETH A. WISEMAN-B.A., University of Nebraska Assistant to the Director of Planning-1973

MELVIN M. MANION - B.S., Iowa State University

Director of Department of Physical Plant-1961 (1962)

HERBERT M. SILVEY -B.S., Central Missouri State College; M.A., Ed.D., University of Missouri Director of Research and Examination Services-1947 (1949)

GERALD D. BISBEY-B.A., University of Northern Iowa; M.S., Iowa State University; Ph.D., University of Iowa Associate in Research-1964

JOHN F. GOLZ-B.A., M.A., University of Northern Iowa Assistant in Research-1971

DONALD F. TIERNAN-B.S., Iowa State University Director of Data Processing -1967

DONALD R. WALTON-B.A., Saint Ambrose College: M.A., University of Northern Iowa Director of Personnel -1966

DONALD R. BOSS Purchasing Agent-1964

DIVISION OF UNIVERSITY RELATIONS AND DEVELOPMENT

EDWARD V. VOLDSETH-B.A., University of Montana; M.A., Teachers College, Columbia University; Ph.D., University of Iowa

Vice-President for University Relations and Development-1964 (1971) RAYMOND J. SCHLICHER -B.A., Iowa Wesleyan College; M.A., Ph.D., University of Iowa

Director of Field Services Director of Extension Services - 1949 (1965)

LARRY R. ROUTH - B.A., Kearney State College, Nebraska; M.S., Ph.D., University of Kansas Director of Career Planning and Placement-1973

PAULINE L. SAUER - B.Ed., Chicago Teachers College; M.A., University of Michigan; Ph.D., Cornell University

Director of the Museum

Associate Professor of Biology - 1949 (1958)

DONALD A. KELLY -B.A., M.A., University of Iowa

Director of Public Information Services-1964 (1971)

VICKI KING GRIMES - B.A., University of Iowa

Assistant Director of Public Information Services-1970 (1972)

JOHN M. NICOL-B.J., University of Missouri at Columbia

Assistant in Publications-1971

LaVERN M. (LEE) Miller - B.A., University of Northern Iowa

Director of Alumni Affairs-1971

WILLIAM V. ANTHONY -B.S., Iowa State University Assistant Director of Alumni Affairs -1966

OFFICE OF EDUCATIONAL OPPORTUNITY PROGRAMS AND SPECIAL COMMUNITY SERVICES

Norris G. Hart—B.A., Huston-Tillotson College; M.A., Syracuse University
Director of Educational Opportunity Programs and Special Community Services—1971
(1972)

WILLIE CRIDDLE, JR.—B.A., Texas Southern University; M.A., University of Oklahoma at Norman Administrative Assistant for Talent Search and Upward Bound Projects—1973

ANTHONY STEVENS -B.A., Wartburg College

Administrative Assistant for On-Campus Educational Opportunity Programs-1972 (1973)

Assistants to Administrators

OFFICE OF THE PRESIDENT

DORIS L. MILLER

Administrative Assistant

OFFICE OF THE VICE-PRESIDENT AND PROVOST

RUTH G. FAIRBANKS

Academic Publications Editor

OFFICE OF BROADCASTING SERVICES

CARL R. JENKINS

Program Director

JENNIFER ROTH

Producer

JERROLD WAREHAM

Director of Special Projects

OFFICE OF PUBLIC INFORMATION SERVICES

GEORGE A. ELLIS

Information Assistant

JAMES R. GRASSMAN

Information Assistant

DAVID M. JORGENSON

Assistant in News and Graphic Arts

MARGARET J. MASTALERZ

Information Assistant

OFFICE OF CAREER PLANNING AND PLACEMENT

FRANCES L. HILL

Administrative Assistant

OFFICE OF EDUCATIONAL OPPORTUNITY PROGRAMS AND SPECIAL COMMUNITY SERVICES

ABRAM EMERSON

Administrative Assistant for UNI Ethnic Minority Cultural and Educational Center

DIAHNNE HORTON

Adviser-Counselor, On-Campus EOP and Administrative Assistant for Upward Bound Program

JEAN ANN NASH

Adviser-Counselor, On-Campus Educational Opportunity Program

RONALD J. MADSEN

Administrative Assistant, University of Northern Iowa Center for Urban Education (UNICUE)

DAVID L. PATTERSON

Administrative Assistant, University of Northern Iowa Center for Urban Education (UNICUE)

JASON BERNARD

Artistic Director of the Urban Theatre Project

MARGARET BASKERVILLE

Senior Counselor, Talent Search

MARY ANDERSON

Street Counselor, Talent Search

TARREY ANDERSON

Street Counselor, Talent Search

DIVISION OF STUDENT SERVICES

Residence Halls

GOLDIE C. FOX

Executive Housekeeper

JOSEPHINE R. GLEASON

Assistant Executive Housekeeper

JAN H. HOLLINS

Resident Manager, Married Student Housing

MICHAEL JUNGERS

Director, Bartlett Hall

STEVEN FAUST

Director, Bender Hall

CHRIS PENDLEY

Director, Campbell Hall

NOREEN HERMANSEN

Director, Dancer Hall

MARTHA DAVIS

Director, Hagemann Hall

LINDA MARTEN

Director, Lawther Hall

STEPHEN THORNTON

Director, Noehren Hall

RUSSELL DAVIS

Director, Rider Hall

RICHARD SAUNDERS

Director, Shull Hall

Counseling Center

JOYCE E. ALBERTS

Counselor

Financial Aids

EDWIN R. SCOTT

Assistant to the Director of Financial Aids

Student Health Service

JAMES J. HUGHES

Pharmacist

VIVIAN P. LINK

Registered Nurse-Superviser

ANGELINE KNOLL

Registered Nurse, Laboratory School

The University Union

DENNIS F. NELSON

Assistant Director

FRANCES M. WILSON

Business Supervisor

LOYDENE B. CAWELTI

Assistant Director, Union Programs

Safety and Security

ROLLIN G. EVERS

Director of Safety and Security

JOHN D. STALBERGER

Lieutenant

DIVISION OF TECHNICAL SERVICES

DONALD D. HENNINGS

Systems Analyst and Administrative Assistant, Data Processing

MERLIN D. TAYLOR

Operations Supervisor, Data Processing

DALE E. KIMES

Systems Analyst, Data Processing

PHYLLIS MICHAELIDES

Systems Analyst, Data Processing

TOBY L. McCLELLAN

Systems Analyst, Data Processing

ROBERT A. SLOAN

Programmer, Data Processing

LARRY W. PROEHL

Programmer, Data Processing

JOHN W. SELBY

Coordinator of Computation Services

KENNETH L. COX

Systems Analyst, Computation Services

DIVISION OF BUSINESS AND PLANT

JANNETTE D. BIRUM

Supervisor of Secretarial Pool

MANETTE THOMSON

Assistant in Purchasing

JOHN C. O'LEARY

Accountant

ROBERT M. SHERIDAN

Payroll Supervisor

ROGER POHLMANN

Accounts Receivable Supervisor

RICHARD COTTRILL

Personnel Assistant

MARY C. LINDAMAN

Personnel Assistant

Physical Plant

GEORGE E. SCHMIDT

Operations Superintendent

EDWARD L. BAILEY

Campus Services Supervisor

VICTOR GIBSON

Construction Architect

ALLEN D. PERRY

Assistant to the Director of the Physical Plant

MARY NEVLYN EVANS

Administrative Assistant

ROBERT H. ENGLEMAN

Building Services Supervisor

EUGENE S. EDDY

Foreman, Electrical Division

MARION R. WALKER

Foreman, Plumbing and Heating Division

HAROLD A. OWENS

Foreman, Carpenter Division

BERNARD M. HANSEN

Foreman, Painting Division

JOHN W. ACKERMAN

Foreman, Transportation Division

HENRY J. DODEN

Foreman, Grounds Division

VICTOR B. RHOADES

Chief Engineer, Heating and Power Plant

CLYDE A. COEN

Foreman, Building Services

GEORGE PEARCE

Foreman, Building Services

UNIVERSITY LIBRARY

JOAN LOSLO

Library Associate, Cataloging

COYLA E. McCANN

Library Associate, Circulation

NANCY HOUMES STAGE

Library Associate, Acquisitions

DELLA TAYLOR

Library Associate, Acquisitions

JUNE TALBOTT

Library Associate, Cataloging

VICKYE A. THOMPSON

Library Associate, Circulation

ELIZABETH VETTER

Library Associate, Reader Service

LINDA A. WOOD

Library Associate, Circulation

Emeritus Faculty

Verna J. Adney — B.A., University of Northern Iowa; M.A., Columbia University Associate Professor of Teaching—1927 (1961)

Lucile E. Anderson – B.A., University of Northern Iowa; M.A., University of Chicago Associate Professor of Teaching – 1930 (1962)

Paul F. Bender – B.A., University of Iowa; M.A., Columbia University; Ed.D., New York University Dean of Students – 1921 (1964)

E. Jean Bontz - B.A., M.A., Ph.D. University of Iowa Professor of Physical Education for Women

Head of the Department of Physical Education for Women-1949 (1972)

LENA P. BUCKINGHAM—B.S., Northeast Missouri State Teachers College; M.S., Iowa State University Associate Professor of Home Ecomonics—1953 (1968)

Louis Bultena—B.A., University of Dubuque; B.D., San Francisco Theological Seminary; M.Ph., Ph.D., University of Wisconsin

Professor of Sociology

Head of the Department of Sociology and Anthropology-1946 (1973)

KATHERINE BUXBAUM—B.A., University of Iowa; M.A., University of Chicago Associate Professor of English—1924 (1948)

E. E. Cole – B.S., Iowa State University

Director of Physical Plant - 1930 (1962)

JOHN PAUL COWLEY—B.A., Heidelberg College, Ohio; M.A., University of Wichita; Ph.D., Yale University
Professor of English—1945 (1973)

Walter D. DeKock-B.A., Western Michigan University; M.A., Ed., D., Columbia University Professor of Education-1956 (1971)

E. C. Denny -B.A., Indiana University; M.A., University of Chicago; Ph.D., University of Iowa Professor of Education and Head of the Department -1923 (1955)

MARY DIETERICH—B.A., Grinnell College; B.S.L.S., Columbia University

Reference Librarian (Social Science) Archives Librarian —1930 (1970)

MARGARET DIVELBESS -B.A., Grinnell College; M.A., Columbia University

Associate Professor of Teaching -1927 (1964)
LLOYD V. DOUGLAS -B.S., M.A., Ph.D., University of Iowa

Professor of Business Education

Head of the Department of Business Education and Office Administration - 1937 (1970)

R. R. Fahrney — B.A., Mt. Morris College; M.A., Ph.D., University of Chicago Professor of History—1929 (1965)

ERNEST C. Fossum—B.A., Augustana College, South Dakota; M.A., Ph.D., University of Iowa Associate Professor of Speech
Director of the Placement Bureau—1943 (1973)

V. D. French—B.S., Drake University; M.D., Rush Medical College Director, Student Health Service—1952 (1955)

Margaret G. Fullerton -B.A., University of Northern Iowa; B.S.L.S., M.A., Columbia University Catalog Librarian - 1947 (1972)

LAURA K. GILLOLEY — B.S., M.A., University of Minnesota Associate Professor of Teaching — 1950 (1971)

AGNES GULLICKSON—B.A., University of Northern Iowa; M.A., Columbia University Associate Professor of Teaching—1926 (1961)

HERBERT V. HAKE -B.A., Central Wesleyan College, Missouri; M.A., University of Iowa Director of Radio and Television -1938 (1973)

Rose L. Hanson—B.S., University of Nebraska; M.A., University of Iowa Assistant Professor of Teaching—1920 (1956)

Bernice Helff—B.A., University of Iowa; M.A., Columbia University Associate Professor of Teaching—1942 (1972)

S. C. Henn-B.A., Colorado College; M.S., University of Chicago; M.D., Rush Medical College Director, Student Health Service, and Staff Physician-1958 (1971)

Frank W. Hill—B.Mus., M.Mus., Eastman School of Music, University of Rochester Associate Professor of Violin, Viola, and Theory—1929 (1971)

GEORGE H. HOLMES—B.A., M.A., University of Michigan Director of University Relations—1929 (1971)

MAVIS L. HOLMES -B.A., M.A., Ph.D., Northwestern University

Dean of Students-1958 (1973)

ELISABETH SUTHERLAND Howes -B.S., M.S., University of Wisconsin; Ph.D., University of Minnesota Professor of Home Economics

Head, Department of Home Economics—1940 (1960)

ESTHER M. HULT—B.Ed., Wisconsin State University, Superior; M.Ph., Ph.D., University of Wisconsin

Professor of Education -1943 (1972)

DOROTHY MAE KOEHRING -B.A., Kansas State University; M.A., Columbia University; Ph.D., Yale University

Professor of Education

Regional Training Program Officer (Director) for Project Head Start-1933 (1973)

C. W. LANTZ - B.A., M.A., Ph.D., University of Illinois

Professor of Biology

Head, Department of Science - 1921 (1957)

EDNA L. MANTOR -B.A., University of Iowa; M.A., Columbia University

Associate Professor of Teaching -1923 (1968)

Frank E. Martindale-B.Ed., Wisconsin State University, Stevens Point; M.Ph., Ph.D., University of Wisconsin

Professor of Education

Head of the Department of Curriculum and Instruction-1948 (1972)

G. Douglas McDonald -B.S., University of Pennsylvania; M.S., University of Minnesota Assistant Professor of Marketing -1963 (1973)

EDNA O. MILLER -B.A., University of Northern Iowa; M.A., Columbia University Associate Professor of Latin - 1924 (1959)

EVELYN J. MULLINS—B.A., Grinnell College; B.S.L.S., Columbia University Order Librarian—1930 (1971)

Joseph P. Paul — B.A., Indiana University; M.A., Ph.D., University of Wisconsin Director, Bureau of Research — 1916 (1954)

Erma B. Plaehn—B.A., Cornell College; M.A., Ph.D., University of Iowa Professor of Political Science

Head of the Department of Political Science—1936 (1973)

MALCOLM P. PRICE—B.A., Cornell College; M.A., Ph.D., University of Iowa; LL.D., Cornell College

President of the College, 1940-50

Professor of Education (1963)
HOWARD O. REED—B.S., Bradley University; M.A., Northwestern University; M.Ed., Ed.D., University of Illinois

Professor of Industrial Arts

Head of the Department of Industrial Arts and Technology -1954 (1971)

H. WILLARD RENINGER -B.A., M.A., Ph.D., University of Michigan Professor of English

Head of the Department of English Language and Literature – 1939 (1968)

ELMER L. Ritter-B.A., Indiana University; M.A., Ph.D., University of Iowa Professor of Education and

Director, Bureau of Extension Service-1921 (1954)

George C. Robinson-B.A., University of Wisconsin; M.A., Ph.D., Harvard University

Professor of Political Science—1922 (1962)

Myron E. Russell—B.Mus., Kansas State University; M.Mus., Eastman School of Music, University of Rochester; Ph.D., University of Michigan

Professor of Woodwind Instruments Head of the Department of Music—1929 (1973)

LELAND L. SAGE -B.A., Vanderbilt University; M.A., Ph.D., University of Illinois Professor of History-1932 (1967)

GEORGE W. Samson-University of Northern Iowa Instructor in Organ and Piano-1916 (1954)

Lou A. Shepherd—B.A., University of Northern Iowa; M.A., Columbia University Professor of Primary Education—1924 (1953)

THELMA SHORT - B.S., M.A., Columbia University

Assistant Professor of Physical Education for Women-1929 (1960)

Ernestine L. Smith—B.A., M.S., University of Michigan Professor of Geography—1936 (1973)

NORMAN C. STAGEBERG—B.S., University of Minnesota; M.A., University of Iowa; Ph.D., University of Wisconsin
Professor of English—1946 (1973)

MYRTLE M. STONE-B.A., Washington State University; M.B.A., University of Washington; Ed.D., New York University

Professor of Teaching-1928 (1966)

MARGUIRETTE MAY STRUBLE -B.A., M.A., Ph.D., University of Iowa

Professor of Teaching-1924 (1969)

SELINA M. TERRY -B.Ph., M.A., Hamline University

Professor of English - 1922 (1947)

M. R. Thompson – B.A., Western Union College; M.A., Ph.D., University of Iowa Professor of Economics

Head, Department of Social Science-1921 (1955)

EULALIE TURNER - B.A., University of Iowa; M.A., Columbia University Assistant Professor of Teaching-1915 (1951)

GRACE VAN NESS -B.A., Cornell College; M.A., Columbia University

Assistant Professor of Physical Education for Women-1919 (1956)

GUY W. WAGNER-B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa Professor and Director of the Educational Media Center-1941 (1970)

EMILY JOSEPHINE YEAGER -B.S., Louisiana State University; M.S., University of Colorado Assistant Professor of Home Economics-1954 (1968)



Instructional Staff 1973-1974

JOHN J. KAMERICK—B.A., St. Ambrose College; M.A., Ph.D., University of Iowa President of the University Professor of History—1970

James G. Martin-B.A., M.A., Indiana State College; Ph.D., Indiana University Vice-President and Provost Professor of Sociology-1971

Faculty

ROBERT P. ABBOTT -B.S., Southeastern State College; M.A.E., University of Oklahoma Assistant Professor of Education - 1972

Fred A. Abraham-B.S., M.S., University of Wisconsin; M.A., University of Oregon Assistant Professor of Economics-1973

Charles W. Adams—B.A., University of Northern Iowa; M.A., University of Denver Assistant Professor of Library Science—1966 (1969)

HELEN I. Adams—B.A., William Penn College Instructor in Home Economics—1973

IRADGE AHRABI-FARD—B.A., M.A., University of Northern Iowa Assistant Professor of Teaching—1972

Sandra Lynn Alberg —B.A., M.S., University of North Carolina Assistant Professor of Home Economics—1972

Lyle K. Alberts -B.A., M.A., University of Northern Iowa
Assistant Professor of Political Science and Social Science - 1964 (1967)

James E. Albrecht —B.A., M.A., Ed.S., University of Northern Iowa; Ed.D., University of Indiana Professor of Teaching

Principal of Northern University High School – 1965 (1973)

JOHN F. ALDRICH – B.S., University of Rhode Island; M.Ed., Boston University

Associate Professor of Teaching —1955 (1970)

MARY NAN KOEN ALDRIDGE —B.S., M.S., Texas College of Arts and Industries; Ed.S., University of Northern Iowa

Assistant Professor of Education—1967 (1970)

Ashley H. Alexander - B.M.E., Oklahoma State University; M.M., North Texas University Assistant Professor of Music - 1972

Charles F. Allegre—B.S., Kansas State Teachers College; M.S., Ph.D., University of Iowa Associate Professor of Biology—1950 (1955)

EDWARD W. AMEND—B.A., Midland Lutheran College; B.D., S.T.M., Lutheran School of Theology; Ph.D., University of Chicago Director of Individual Studies Program

Associate Professor of Religion and Humanities – 1967 (1972)
HOWARD L. R. AMUNDSON – B.A., M.S.W., University of Kansas

Visiting Assistant Professor of Social Work-1968

B. Wylie Anderson-B.A., M.A., Colorado State College; M.A., University of Denver; Ph.D., University of Iowa

Associate Professor of Economics
Head of the Department of Economics—1966 (1973)

FLOYD R. Anderson—B.A., Concordia College, Minnesota; M.S., University of Montana Assistant Professor of Teaching—1966 (1968)

James D. Anderson—B.S., M.S., Eastern Illinois University
Assistant Professor of Physical Education for Men—1965 (1968)

OLIVER M. ANDERSON—B.B.A., B.S., University of Minnesota
Assistant Professor of Business Education

Teacher Educator and Director of Vocational Business Education—1963 (1967)

RUTH B. ANDERSON—B.A., University of California; M.S.W., Columbia University Associate Professor of Social Work—1969 (1973)

WAYNE I. ANDERSON - A.A., Keokuk Community College; B.A., M.S., Ph.D., University of Iowa Professor of Geology

Head of the Department of Earth Science-1963 (1972)

ROBERT M. Andrews—B.A., University of Northern Iowa; M.A., University of Iowa Assistant Professor of Teaching Coordinator of Student Teaching—1969 (1972)

ARNOLD ARONSON -B.S., M.A., Ph.D., University of Wisconsin

Visiting Professor of Speech Pathology and Audiology - 1973

WAYNE O. AURAND—B.A., University of Northern Iowa; M.Mus., University of Michigan; Ed.D.,
University of Illinois
Associate Professor of Teaching—1951 (1969)

C. MURRAY AUSTIN-B.A., M.A., Ph.D., University of Pennsylvania

Associate Professor of Geography and Regional Science -1973

George G. Ball -B.S., M.A., Kent State University; Ed.D., University of Wyoming Professor of Education and Psychology -1958 (1963)

Jackson Baty - B.A., Stanford University; M.A., Ed.S., University of Northern Iowa Instructor in Education - 1971

THOMAS M. BARRY -B.M.Ed., M.M., University of Colorado at Boulder Instructor in Music (Oboe) -1973

Kenneth E. Baughman-B.A., Lawrence University; M.A., Ph.D., University of Chicago Assistant Professor of English-1972

DIANE L. S. BAUM — B.A., M.A., University of Northern Iowa Assistant Professor of Mathematics — 1964 (1968)

Russell N. Baum—B.Mus., M.Mus., Eastman School of Music, University of Rochester Professor of Piano—1938 (1973)

RANDALL R. Bebb—B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of Teaching
Coordinator of Student Teaching—1947 (1969)

CARYL R. BECKER-B.M.Ed., Oberlin College Conservatory; M.M., New England Conservatory of Music

Assistant Professor of Music – 1969 (1973)

*James Edward Becker - B.A., Cornell College; M.A., Sorbonne, Paris Assistant Professor of Teaching - 1970

Judy Markham Beckman—B.A., M.A., University of Northern Iowa Instructor in Teaching—1969

MARY GREEN BECKMAN-B.Mus., Oberlin Conservatory of Music; M.Mus., Cleveland Institute of Music

Associate Professor of Theory and Harp-1947 (1967)

ROY RICHARD BEHRENS -B.A., University of Northern Iowa; M.A., Rhode Island School of Design Instructor in Art-1972

PATRICIA ANN BEITEL -B.A., University of Northern Iowa; M.S., University of Wisconsin Assistant Professor of Physical Education for Women - 1963 (1969)

THOMAS R. BERG-B.S., M.A.E., Ph.D., Ohio State University

Assistant Professor of Education - 1972

Paul E. Berger—B.A., University of California at Los Angeles; M.F.A., State University of New York at Buffalo Instructor in Art—1973

HAROLD E. BERNHARD—B.A., Carthage College, Illinois; B.D., Chicago Lutheran Theological Seminary; Ph.D., University of Chicago Director of the Bureau of Religious Activities Professor of Religion—1949 (1956)

James L. Berry – B.A., Creighton University; M.A., University of Northern Iowa Adjunct Assistant Professor of Physical Education for Men – 1973

MARIBELLE O. BETTERTON-B.A., University of Northern Iowa Instructor in Teaching-1973

JANE BIRKHEAD -B.A., M.A., University of Missouri

Professor of Voice-1941 (1966)

CLIFFORD L. BISHOP—B.A., Western State College of Colorado; M.A., University of Denver; Ed.D.,
University of Colorado
Professor of Education and Psychology—1950 (1956)

on leave

James T. Blanford—B.S., Central Normal College, Indiana; M.S., Ed.D., Indiana University Professor of Accounting—1946 (1956)

MARY E. BLANFORD—B.A., Central Normal College, Indiana; M.S., Indiana University Assistant Professor of Business Education—1961 (1966)

DAVID R. BLUHM—B.A., Princeton University; B.Th., Princeton Theological Seminary; M.A., Ph.D., University of Pittsburgh

Professor of Religion and Philosophy-1954 (1958)
Daniel W. Boals-B.A., M.A., University of Northern Iowa

Instructor in Physical Education for Men-1971

EMIL W. Bock-B.Mus., M.Mus., Northwestern University; Ph.D., University of Iowa Professor of Violin-1939 (1961)

ROBERT J. BOES - B.A., University of Northern Iowa; M.S., Purdue University; Ph.D., University of Iowa

Assistant Professor of Teaching -1973

WILLIAM H. BOGARTZ—B.A., Ph.D., University of California at Los Angeles Associate Professor of Psychology—1970

JERRY LEE BONHAM —B.A., Southwest Missouri State University; M.A., University of Illinois Assistant Professor of Political Science—1973

MYRA R. Davis Boots—B.A., Grinnell College; M.A., University of Northern Iowa Assistant Professor of Speech Pathology—1965 (1969)

RICHARD C. Brady—A.A., Glendale City College; B.S., University of Southern California; M.A., Fresno State College; Ph.D., University of Southern California Associate Professor of Education—1970

Howard L. Brewer-B.S., California State University; M.B.A., University of Southern California Assistant Professor of Accounting-1973

ROBERT PAUL BRIMM—B.Ed., Southern Illinois University; M.Ed., Ed.D., University of Missouri Professor of Education—1948 (1959)

Ronald Dean Bro -B.A., M.A., University of Northern Iowa; Ed.D., University of Nebraska Associate Professor of Industrial Arts and Technology - 1967 (1972)

ROBERTA M. BROEREN—B.Ed., Central State University, Wisconsin; M.Ed., Ed.D., Wayne State University
Associate Professor of Education—1972(spring) (1973)

PATRICK ALAN BROOKS—B.A., Yankton College; M.A., Redlands University, California; Ph.D.,
University of Minnesota
Associate Professor of English—1965 (1969)

Associate Professor of English—1965 (1969)

*EMILY CLARA Brown—A.B., Ohio State University; M.A. in Ed., Arizona State University; Ph.D.,
University of Arizona

Professor of History – 1966 (1969)

John C. Brown – B.A., University of Northern Iowa

Assistant Professor of Art –1969 (1973)

Leander A. Brown—B.A., Fisk University; M.A., Roosevelt University
Assistant Professor of Education—1970

GARY E. BROWNING—B.S., West Texas State University; M.S., Iowa State University Assistant Professor of Industrial Arts—1972

JOHN EDWARD BRUHA—B.S., Wisconsin State University, Stevens Point; M.S., University of Wisconsin Assistant Professor of Mathematics—1959 (1965)

Justene J. Bunting—B.A., University of Northern Iowa; M.A., University of Iowa Instructor in Teaching—1973

GAY ANN BURKE—B.A., Trinity University; M.F.A., University of Florida Instructor in Art—1972

Kenneth G. Butzier-B.A., University of Northern Iowa; M.S., University of Wisconsin Associate Professor of Teaching-1960 (1973)

MARY R. BUTZIER—B.A., University of Northern Iowa Instructor in Teaching—1973

CHARLES A. CACEK —B.A., University of Northern Iowa Instructor in Teaching—1968

Daniel J. Cahill —B.S., M.A., Loyola University; Ph.D., University of Iowa Professor of English Head of the Department of English Language and Literature—1968 (1972)

Tolliver C. Callison III—A.B., Duke University; M.A., University of Wisconsin Assistant Professor of English—1973

^{*}on leave

MARJORIE D. CAMPBELL - B.Sc. Ed., M.A., Ohio State University

Associate Professor of Art-1949 (1970)

ROY JOSEPH CARTER-B.F.A., M.F.A., San Francisco Art Institute

Assistant Professor of Art-1971 (1972)

MARY LEE CATHEY -B.S., Florence State College; M.A., Ed.S., George Peabody College Assistant Professor of Physical Education for Women-1967

GERALD SCOTT CAWELTI - B.A., M.A., University of Northern Iowa

Assistant Professor of English - 1968 (1973)

Henri L. Chabert—Institut des Sciences Politiques, Lic. en Droit; Bar exam (Paris) Lic es Lettres, Competitive exam du C.A. (Sorbonne) and of the U.N. Doctorat de l'Universite de Paris (Sorbonne)

Professor of French—1961 (1966)

James G. Chadney, Jr. –B.S., Portland State College; M.A., Michigan State University
Assistant Professor of Anthropology –1968

James C. Chang –B.S., Mt. Union College, Ohio; Ph.D., University of California, Los Angeles

Associate Professor of Chemistry –1964 (1969)

Delsie Darlene Charais—B.S., Moorhead State College, Minnesota; M.A., Colorado State College Assistant Professor of Teaching (Kindergarten Supervisor) —1966 (1969)

Hsi-Ling Cheng — B.Law, National Chengchi University; M.A., Columbia University Assistant Professor of History—1966

MARION LYLE CHIATELLO -B.S., M.A., M.S., Ph.D., Northern Illinois University

Assistant Professor of Management -1970

BRUCE ALAN CHIDESTER -B.M., Augustana College, Illinois; M.M., Northern Illinois University Assistant Professor of Music - 1969 (1972)

*Roy Chung -B.A., M.A., University of Wisconsin

Associate Professor of Geography and Demography - 1958 (1973)

ROBERT E. CLARK -B.A., Oklahoma State University, Stillwater; M.A., University of Oklahoma Assistant Professor of Geography -1965

ROBERT E. CLAUS -B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa Professor of Sociology -1959 (1970)

Bernard L. Clausen - B.A., Colgate University; M.S., University of Michigan Associate Professor of Biology - 1959 (1970)

PHYLLIS BOWMAN CONKLIN -B.S., Carson Newman College, Tennessee; M.S., Ohio University

Assistant Professor of Home Economics—1968

R. FORREST CONKLIN—B.A., Howard Payne College; M.A., Baylor University; Ph.D., Ohio University

Associate Professor of Speech

Director of Forensics—1968

Lee E. Courtnage—B.A., Wayne State Teachers College, Nebraska; A.M., Ed.D., Colorado State College

Professor of Education and Educational Psychology Director of Special Education – 1968 (1971)

ELINOR ANN CRAWFORD—B.A., M.A., University of California; Ph.D., University of Oregon Professor of Physical Education for Women—1949 (1966)

Anne O. Cronin - B.F.A., School of the Art Institute of Chicago; M.A.T., Harvard University Instructor in Art - 1973

JOHN S. Cross—B.S., M.S., University of Illinois Assistant Professor of Mathematics—1963

DAVID R. CROWNFIELD—B.A., Harvard University; B.D., Yale University; Th.M., Th.D., Harvard University
Professor of Philosophy and Religion—1964 (1971)

DONALD G. CUMMINGS -B.A., Coe College

Assistant Professor of Economics-1963

ROBERT C. DAILEY—B.S., Iowa State University; M.A., University of Northern Iowa Instructor in Management—1973

BARBARA J. DARLING -B.A., University of Northern Iowa; M.A., Colorado State College Assistant Professor of Physical Education for Women-1958 (1962)

Donald R. Darrow-B.A., M.A., University of Northern Iowa Assistant Professor of Teaching-1973

*DARREL W. DAVIS -A.A., Marshalltown Community College; B.A., M.A., University of Northern Iowa; C.P.A.

Assistant Professor of Accounting –1969 (1971)

George F. Day –B.A., Dartmouth College; M.A.T., Harvard University; Ph.D., University of Colorado

Associate Professor of English –1967 (1970)

Charles Van Loan Dedrick-A.B., Brown University; M.A.T., Rollins College; M.Ed., Ed.D., University of Florida

Assistant Professor of Educational Psychology - 1971

Bernard C. DeHoff-B.A., Franklin and Marshall College; M.A., Indiana University Associate Professor of English-1955 (1969)

Walter E. DeKock-B.A., Central College; M.A., University of Northern Iowa; Ph.D., Ohio State University

Associate Professor of Science Education—1964 (1973)
DAVID D. DELAFIELD—B.F.A., M.A., Ph.D., Ohio State University

Professor of Art-1951 (1963)

Kenneth J. DeNault -B.S., Stanford University; M.S., University of Wyoming Assistant Professor of Geology -1973

ERVIN A. DENNIS — A.A., Norfolk Junior College; B.A., M.A., Colorado State College; Ed.D., Texas Agricultural and Mechanical University Professor of Industrial Arts — 1973

GORDON B. DENTON -B.B.A., Texas Western College; M.B.A., University of Iowa Associate Professor of General Business - 1965 (1970)

T. Joan Diamond—B.A., Knox College; M.S., University of Illinois Associate Professor of Teaching Campus School Librarian—1957 (1973)

SAUL L. DIAMOND—B.A., Syracuse University; M.B.A., Wharton School of Business Assistant Professor of Marketing—1967

Roger Ditzenberger—A.A., Fort Dodge Community College; B.A., M.A., University of Northern Iowa

Assistant Professor of Business Education and Teacher Educator-Materials Specialist-1968

Douglas Doerzman-B.A., M.A., University of Northern Iowa

Assistant Professor of Teaching Coordinator of Student Teaching —1967 (1970)

H. Theodore Dohrman-A.B., Nebraska State College, Wayne; S.T.B., Ph.D., Harvard University Professor of Sociology-1966

GREGORY M. DOTSETH-B.A., Luther College; M.A., Western Washington State College Assistant Professor of Mathematics-1966 (1970)

James L. Doud-B.S.E., M.S.E., Drake University
Assistant Professor of Teaching

Principal of the University Elementary School - 1970

Virgil E, Dowell -B.S., M.S., Kansas State Teachers College; Ph.D., University of Oklahoma Professor of Biology -1956 (1968)

JOHN C. DOWNEY—B.S., M.S., University of Utah; Ph.D., University of California Professor of Biology Head of the Department of Biology—1968

WILLIAM H. DREIER-B.S., Iowa State University; M.A., Ph.D., University of Minnesota Professor of Education-1949 (1965)

Jacques F. Dubois -B.A., Kearney State College; M.A., University of Nebraska Assistant Professor of French-1966 (1971)

JERRY M. DUEA—B.A., M.A.E., University of Northern Iowa Assistant Professor of Teaching—1966 (1969) JOAN MEYER DUEA—B.A., M.A., University of Northern Iowa

Assistant Professor of Teaching —1965 (1969)

*Ann Mary Dunbar - B.A., Clarke College; M.A., Ed.S., University of Northern Iowa Associate Professor of Education - 1962 (1972)

David R. Duncan—B.S., M.S., North Dakota State University; Ph.D., University of Michigan Associate Professor of Mathematics—1963 (1972)

*Mary K. Eakin-B.A., Drake University; B.L.S., M.A., University of Chicago Associate Professor of Education-1958 (1968)

CHARLENE EBLEN - B.A., University of Wichita; M.A., University of Northern Iowa Assistant Professor of English - 1967 (1970)

Roy E. Eblen - B.A., Williams College, Massachusetts; M.A., University of Wichita; Ph.D., University of Iowa

Professor of Speech Pathology Director of Speech Clinic

Head of the Department of Speech Pathology and Audiology-1960 (1973)

^{*}on leave

FELIPE R. J. ECHEVERRIA - B.A., Florida Presbyterian College; M.F.A., University of Arkansas Instructor in Art - 1969

JAY ALLAN EDELNANT -B.A., MacMurray College; M.A., Northwestern University

Instructor in Speech-1971

JOHN L. EIKLOR - B.A., University of Wichita; M.A., Ph.D., Northwestern University Professor of History - 1963 (1970)

CHARLOTTE E. LAWTON EILERS -B.A., M.A., University of Northern Iowa Assistant Professor of Speech - 1965 (1970)

LAWRENCE JOHN EILERS -B.A., M.A., University of Northern Iowa; Ph.D., University of Iowa Associate Professor of Biology - 1968

Ivan L. Eland—B.A., University of Northern Iowa; M.A., University of Colorado Associate Professor of Education Director of Safety Education—1960 (1966)

ROBERT ELLER - B.A., M.A., University of Iowa

Assistant Professor and

Audio-Visual Specialist - 1961 (1966)

RALPH D. ENGARDT—B.S., Ph.D., Iowa State University Associate Professor of Physics—1965 (1973)

Donald English—B.S., Bucknell University; M.B.A., Indiana University Instructor in Marketing—1973

HARLEY E. ERICKSON-B.S., Wisconsin State University, LaCrosse; M.S., Ph.D., University of Wisconsin

Professor of Education – 1963 (1967)

Donald R. Erusha – B.A., Coe College; M.A., University of Iowa

Associate Professor of Physical Education for Men – 1963 (1972)

RUSSELL E. EUCHNER -B.A., M.A., University of Northern Iowa

Assistant Professor of Education - 1960
WAYNE R. EVENSON - B.A., B.S.E.E., J.D., University of Iowa

R. Evenson—B.A., B.S.E.E., J.D., University of Iowa Professor of Business Law—1966 (1972)

Manuel A. Febles—B.A., B.S., Instituto de Cardenas, Matanzas, Cuba; Doctor in Law, University of Havana; M.A., University of Iowa
Assistant Professor of Spanish—1967 (1969)

CLAUDIA JEAN FERGUSON—B.S., M.A., Texas Women's University Instructor in Physical Education for Women—1968

Rosa Maria Findlay —B.A.Ed., University of Puerto Rico Instructor in Teaching—1964

Donald G. Finegan - B.F.A., M.A., Ohio State University Professor of Art - 1955 (1966)

JUDITH R. Brewer Finkelstein—B.S.Ed., University of Illinois; M.A.E., University of Northern Iowa Assistant Professor of Teaching—1968 (1971)

D. Louis Finsand—B.S., Wisconsin State University, LaCrosse; M.A., University of Northern Iowa

Associate Professor of Teaching -1964 (1973)

GORDON B. FORD—A.B., Princeton; A.M., Ph.D., Harvard University
Associate Professor of English and Linguistics—1972

Louise C. Turner Forest—B.A., M.A., Bryn Mawr College; Ph.D., Yale University Professor of English—1948 (1960)

Josef W. Fox-B.A., Pennsylvania State University; M.A., Louisiana State University; Ph.D.,
University of Chicago
Professor of Philosophy and Humanities-1947 (1959)

ADOLFO MARIANO FRANCO-B.A., Instituto de Cardenas; Doctor of Law, Havana University; M.A., University of Iowa

Assistant Professor of Spanish—1967 (1969)

ROBERT LEE FRANK—B.S., M.Ed., Ed.D., University of Nebraska

Professor of Education and Psychology—1962 (1970)

MARY L. FRANKEN-B.S., Stout State University; M.S., University of Wisconsin

Assistant Professor of Home Economics—1969

JOSEPH E. FRATIANNI—B.A., Bridgewater State College, Massachusetts; M.S., University of Wisconsin Assistant Professor of Teaching

Coordinator of Student Teaching—1971 (spring)

ROBERTA FREED-B.S., M.A., Kent State University Instructor in Home Economics-1973

ARNOLD J. FREITAG -B.S., Purdue University; M.S., Iowa State University Assistant Professor of Industrial Arts-1968 Len A. Froyen-B.A., University of Northern Iowa; M.A., Michigan State University; Ed.D., Indiana University

Professor of Education

Head of the Department of Educational Psychology and Foundations-1963 (1970)

THOMAS MILTON FUNKE—B.A., M.A., Ed.S., Eastern Michigan University; Ph.D., University of Michigan
Assistant Professor of Education—1971

EDWARD J. GABRIELSE-B.S., M.S., Stout State University

Assistant Professor-Production Supervisor of the Educational Media Center - 1967 (1970)

ROBERT E. GANT -B.M., St. Andrews Presbyterian College; M.M., University of Oklahoma Assistant Professor of Organ-1973

Doris C. Gardner - B.S., Bennett College; M.E., University of North Carolina Assistant Professor of Management - 1972

JOYCE ALENE GAULT -B.A., University of Northern Iowa; M.Mus., D.Mus., Northwestern University Professor of Piano-1957 (1969)

Patricia L. Geadelmann-B.A., University of Northern Iowa Instructor in Teaching-1972

ALBERT R. GILGEN-B.A., Princeton University; M.A., Kent State University; Ph.D., Michigan State University
Professor of Psychology

Head of the Department of Psychology-1973

CHARLES C. GILLETTE—B.S., Iowa State University; M.A., University of Northern Iowa; Ph.D.,
Oklahoma State University
Associate Professor of Economics—1966 (1972)

JUDITH GISH-B.A., University of Northern Iowa

Instructor in Teaching -1972

ROBERT F. GISH-B.A., M.A., Ph.D., University of New Mexico

Assistant Professor of English—1967 (1970)

KATHLEEN M. GJERDINGEN—B.A., University of Minnesota; M.M., University of Colorado Instructor in Music—1972

GEORGE DAVID GLENN-A.B., Shimer College; M.A., Northern Illinois University, Ph.D., University of Illinois, Urbana

Assistant Professor of Speech – 1966 (1969)
Kenneth G. Gogel – B.S., M.A., Ohio State University
Associate Professor of Art – 1950 (1968)

WALTER J. GOHMAN-B.A., St. Cloud State College, Minnesota; M.A., University of Minnesota Associate Professor of Teaching-1951 (1967)

LOWELL R. GOODMAN-Ph.B., University of South Dakota; M.S., University of North Dakota Assistant Professor of Geography-1966 (1970)

RALPH M. GOODMAN-B.A., M.A., Ph.D., University of California at Los Angeles Associate Professor of English and Linguistics-1964 (1970)

TERRY DEAN GORO -B.A., M.S., Southern Illinois University

Assistant Professor of Education and Coordinator of Media Laboratories-1973

ROBERT C. Goss -B.S., Huntington College; M.S., Ph.D., Purdue University Professor of Biology-1961 (1968)

Jack Eldon Graham. Jr. –B.M.E., Wichita State University; M.M., North Texas State University Assistant Professor of Wind Instruments – 1967 (1972)

STANLEY C. GRANT -B.A., Coe College; M.A., University of Wyoming; Ph.D., University of Idaho Associate Professor of Geology -1970 (1973)

ELTON E, GREEN-B.S., M.S., Kansas State University; Ed.D., Colorado State College Professor of Physical Education for Men-1968 (1972)

Kenneth W. Green-A.A., Graceland College; B.S., Iowa State University; M.A., University of Northern Iowa; Ed.D., University of Arkansas Assistant Professor of Physical Education for Men-1967 (1970)

Wanda Kay Green—A.B., M.A., Colorado State College Instructor in Physical Education for Women—1967

MITCHELL A. GREENE, JR. -B.A., Dillard University; B.S., Case Western Reserve University; Ph.D., University of Iowa

Assistant Professor of Social Work-1972

JEAN MARIE HARVEY GRIFFITHS -B.A., M.A., University of Northern Iowa Instructor in Teaching -1968

Barbara J. Guenther -B.S., Nazareth College; M.A., University of Michigan Assistant Professor of English -1973

HARRY G. GUILLAUME - B.S., M.A., Ed.D., Columbia University

Professor of Art-1948 (1956)

*PHILLIP LEE HAHN-B.Mus., M.Mus., University of Michigan; D.M.A., American Conservatory of Music

Associate Professor of Organ - 1960 (1970)

*Ronald Dean Hahn-B.S., M.A., Northeast Missouri State College

Assistant Professor of Business Education-1969

LESLIE W. HALE, JR.-B.M.E., M.M.E., Drake University; D.M.A., University of Missouri at Kansas City

Associate Professor of Teaching-1960 (1970)

GARY JON HALL -B.A., Central State College, Oklahoma; M.A., Ph.D., Southern Illinois University
Associate Professor of Speech

Head of the Department of Speech-1973

Fred William Hallberg -B.A., M.A., Ph.D., University of Minnesota Associate Professor of Philosophy -1967 (1972)

GAYLON L. HALVERSON-B.A., Luther College; M.A., University of Northern Iowa; D.B.A., Indiana University; C.P.A.
Professor of Accounting-1963 (1972)

ALBERT CHARLES HAMAN-B.A., University of Iowa; M.A.T., Michigan State University

Associate Professor of Biology-1961 (1972)

ELBERT W. Hamilton-B.A., Tarkio College; M.A., Ph.D., University of Iowa Professor of Mathematics

Head of the Department of Mathematics - 1949 (1963)

NELLIE D. HAMPTON-B.S., Central Missouri State College; M.A., University of Iowa; Ph.D., University of Wisconsin

Professor of Education – 1945 (1959)

James Lee Handorf – B.A., University of Northern Iowa; M.A., Colorado State College; Ph.D.,

University of Northern Colorado

Associate Professor of Business Education-1966 (1973)

*GLENN L. HANSEN-B.A., M.A., University of Northern Iowa

Assistant Professor of Business Education

Field Instructor in Adult Distributive Education-1964 (1970)

Jon Edward Hansen - B.A., M.A., University of Northern Iowa Assistant Professor of Music and

Administrative Assistant –1969 (1973)

THOMAS W. HANSMEIER—B.A., M.A., University of Northern Iowa; Ed.D., Michigan State University
Professor of Education
Vice-President for Student Services and Special Assistant to the President—1971

ALDEN B. HANSON—B.A., St. Olaf College; M.Ph., University of Wisconsin Associate Professor of English

Foreign Student Adviser —1946 (1970)

Donald L. Hanson—B.A., M.A., University of Northern Iowa; Ed.D., University of Wyoming Professor of Education

Head of the Department of School Administration and Personnel Services-1966 (1973)

ROBERT W. HANSON—B.A., Bemidji State College, Minnesota; M.S., University of Minnesota; Ph.D.,
University of Iowa
Professor of Chemistry and Science Education—1963 (1966)

Roger J. Hanson—B.S., Gustavus Adolphus College; M.A., Ph.D., University of Nebraska Professor of Physics Head of the Department of Physics—1969

JAMES N. HANTULA -B.A., M.A., University of Michigan

Assistant Professor of Teaching-1965 (1968)

ROBERT R. HARDMAN-B.S.Ed., Maryland State Teachers College; M.S.Ed., Ed.D., Indiana University

Associate Professor and Director of the Educational Media Center-1970

MERRILL R. HARLAN -B.M., Arizona State University; M.M., D.M., Northwestern University Assistant Professor of Piano - 1968 (1970)

LETA NORRIS HARMON-B.S., Central State College, Oklahoma; M.Ed., University of Oklahoma

Associate Professor of Teaching Coordinator of Student Teaching – 1950 (1969)

on leave

E. JEANNE McLain Harms-B.A., M.A.E., Ed.S., University of Northern Iowa; Ph.D., Ohio State University

Associate Professor of Education - 1967 (1973)

CORINNE D. HARPER—B.S., Kansas City Teachers College; M.Ed., Ed.D., University of Missouri Professor of Teaching—1947 (1956)

GORDON M. HARRINGTON—B.E.E., Georgia Institute of Technology; Ph.D., Yale University Professor of Psychology—1963 (1968)

JUDITH E. FINKEL HARRINGTON — B.S., Boston University; M.A., University of Iowa Assistant Professor of Speech Pathology—1965 (1969)

Edwin Henry Harris—B.A., M.A., University of Northern Iowa

Assistant Professor of Art

Administrative Assistant, Department of Art-1970 (1971)

*VIRGINIA HASH—B.S., Iowa State University; M.A., Ed.S., University of Northern Iowa Assistant Professor of Education—1966 (1968)

LINDA MARIE FELDHACKER HASTINGS —B.A., M.A., University of Northern Iowa Instructor in Spanish—1971

SHIRLEY E. HAUPT -B.A.E., Art Institute of Chicago; M.F.A., University of Iowa Assistant Professor of Art -1966 (1968)

RICHARD R. HAWKES—B.S., University of Omaha; M.S., University of Nebraska, Omaha; Ph.D.,
University of Nebraska, Lincoln
Assistant Professor of Teaching
Coordinator of Student Teaching—1969 (1972)

Don Carlton Hawley —B.A.Ed., Kearney State College; M.A., Ph.D., University of Iowa Professor of Foreign Language Head of the Department of Foreign Languages—1966 (1970)

HARRIET M. HEALY -B.S., College of St. Catherine; M.A., University of Northern Iowa Instructor in Education - 1973

James S. Hearst Professor of Creative Writing —1943 (1969)

MARVIN O. HELLER -B.S., M.E., University of Nebraska; Ed.D., University of Northern Colorado Assistant Professor of Education - 1970

Louis R. Hellwig-B.A., M.A., New Mexico State University; Ph.D., University of Missouri Assistant Professor of Psychology-1964 (1965)

VIRGINIA G. HENDERSON—B.A., Louisiana State University; M.A., University of Kentucky Instructor in Art—1972

GLEN F. HENRY — B.S.Ed., M.S.Ed., Chadron State College Assistant Professor of Physical Education for Men—1966 (1969)

CLIFFORD H. HERROLD—B.A., Central State College, Oklahoma; M.A., Colorado State College; Ed.D., Stanford University
Professor of Art—1947 (1962)

GILBERT E. HEWETT-B.A., Parsons College; M.A., Ph.D., University of Iowa Associate Professor of Education-1972

James Joseph Hiduke-B.A., St. Joseph's College, Indiana; M.A., Marquette University Assistant Professor of English-1967 (1973)

ADOLF E. HIEKE-B.A., M.A., University of Colorado

Assistant Professor of English and Linguistics-1968 (1973)

LEAH F. HILAND—B.S., M.A.L.S., Ph.D., Indiana University Assistant Professor of Library Science—1972

THOMAS W. HILL—B.S., University of Wisconsin Assistant Professor of Anthropology—1972

DARREL B. HOFF-B.A., Luther College; M.A., University of Northern Iowa; Ph.D., University of Iowa

Associate Professor of Earth Science — 1964 (1972)
WESLEY DEAN HOGELAND—B.A., University of Northern Iowa; M.A., University of Iowa

Assistant Professor of Physical Education for Men-1967

JOSEPH F. HOHLFELD-B.A., Hastings College; M.B.S., University of Colorado; Ed.D., Indiana University

Associate Professor of Teaching –1958 (1972)

RANDY A. HOGANCAMP—B.A., University of Northern Iowa; M.M., Northwestern University Instructor in Music—1972

OLIVE J. HOLLIDAY—B.A., University of Northern Iowa; M.A., University of Illinois Associate Professor of Home Economics—1949 (1969)

^{*}on leave

TELFORD HOLLMAN-Ph.B., J.D., University of Chicago; L.L.M., John Marshall Law School; M.B.A., DePaul University

Associate Professor of General Business-1968 (1971)

Tom Gene Holst-A.B., Augustana College, Illinois; M.N.S., University of South Dakota; Ph.D., University of Northern Colorado

Assistant Professor of Earth Science - 1967 (1970)

ALBERT JOHN HOLSTAD—B.S., Northern State Teachers College, South Dakota; M.M., D.M., Northwestern University Associate Professor of Piano—1963 (1973)

CANDACE K. HOLT-B.S., M.A., Bowling Green University

Instructor in Teaching -1973

KARL M. HOLVIK—B.A., Concordia College, Minnesota; M.A., Eastman School of Music, University of Rochester; Ph.D., University of Iowa Professor of Woodwind Instruments—1947 (1965)

MARTHA T. HOLVIK -B.S.Ed., University of Minnesota; M.A., University of Northern Iowa Instructor in Music -1968

JOHN T. HOLZAEPFEL—B.F.A., Kansas City Art Institute; M.A., University of Michigan Instructor in Art—1973

James A. Hoobler-A.A., Emmetsburg Community College; B.A., M.A., University of Northern Iowa

Assistant Professor of Education – 1967 (1971)

JOYCE J. HORNBY – B.A., University of Minnesota; M.A., University of Northern Colorado

Assistant Professor of Teaching – 1973

Max M. Hosier-B.A., Nebraska State Teachers College, Peru; M.A., Ed.D., Colorado State College
Professor of Education and Psychology-1951 (1966)

James B. House—B.A., Kenyon College, Ohio; M.A., Ph.D., Ohio State University Associate Professor of Speech Pathology and Audiology—1972

*Grace Ann Hovet—B.A., College of St. Catherine; M.A., University of Minnesota Assistant Professor of English—1969 (1973)

THEODORE R. HOVET-B.S., North Dakota State College; M.A., University of Minnesota; M.Phil., Ph.D., University of Kansas
Associate Professor of English-1969 (1973)

Donald F. Howard—B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa Professor of History—1947 (1957)

HSIAO HUA HSU-B.S., National Taiwan University; M.S., Ph.D., Indiana University Assistant Professor of Physics-1968

SIN-TAO HSUE -B.S., M.S., Ph.D., Indiana University Associate Professor of Physics -1967 (1973)

Genevieve Erlene Hubly -B.A., Rice University; M.A., M.F.A, University of Iowa Assistant Professor of English - 1967 (1970)

Sharon Huddleston—B.S., M.A.E., Stephen F. Austin State University Instructor in Physical Education for Women—1973

WILLIAM ALLEN HUEMOELLER - B.S., University of Minnesota; M.S., North Dakota State University Assistant Professor of Management - 1971

KATHERINE S. HUMPHREY — B.S.C., M.A., University of Iowa Associate Professor of Business Education—1947 (1962)

George E. Immerzeel -B.A., M.A., University of Northern Iowa Professor of Teaching-1960 (1973)

Mary Ann Jackson—B.S., M.S., University of Arkansas Assistant Professor of Teaching—1953 (1957)

EDWARD JAMOSKY -B.A., M.A., in Russian, M.A., in Library Science, University of Wisconsin Assistant Professor of Russian - 1965

ALLEN A. JEDLICKA - B.A., San Diego State College; M.S., Ph.D., Northwestern University Assistant Professor of Management - 1973

JOHN H. JENNETT —B.S., M.A., Drake University
Associate Professor of Physical Education for Men—1962 (1971)

Dennis J. Jennings—A.A., Los Angeles City College; A.B., M.A., University of California, Los
Angeles

Assistant Professor of Art – 1967 (1972)

MARVIN D. JENSEN – B.A., Midland Lutheran College; M.A., University of Kansas

Assistant Professor of Speech – 1966 (1969)

on leave

Verner Jensen—B.S., University of Nebraska; M.S., Iowa State University Associate Professor of Physics—1956 (1965)

MALCOLM L. JERNIGAN—B.Mus., M.Mus., Southern Methodist University Assistant Professor of Theory—1971

Ross M. Jewell - B.A., Wabash College; M.A., Indiana University Associate Professor of English - 1951 (1969)

Delroy Edward Johnson—B.S., St. Cloud State College; M.A., University of Northern Iowa Assistant Professor of Biology—1967 (1971)

JOHN KEITH JOHNSON-A.B., North Texas State University; M.M., University of Illinois Assistant Professor of Brass Instruments-1966 (1969)

*Valdon L. Johnson—B.A., M.A., University of Northern Iowa Assistant Professor of English and Linguistics—1968

Howard V. Jones, Jr. -B.A., M.A., Ph.D., Harvard University Professor of History -1954 (1964)

James Marc Jones — B.A., M.A., Ph.D., University of Oklahoma Assistant Professor of Psychology — 1969

ELAINE BUSH KALMAR - B.A., M.A., Ph.D., University of New Mexico Assistant Professor of English - 1971

RUTH LEE KAO-B.A., M.A., University of Northern Iowa Instructor in Art-1969

ROBERT M. KAPLAN-B.A., University of British Columbia; M.A., Harvard University; Ph.D., Michigan State University
Associate Professor of Business-1973

LEONARD J. KEEFE - B.Ed., Illinois State University; M.A., Colorado State College Professor of Marketing - 1956 (1960)

THOMAS W. KEEFE, III—B.A., University of Colorado; M.A., Denver Graduate School of Social Work; D.S.W., University of Utah
Assistant Professor of Social Work—1973

James L. Kelly-A.A., Estherville Junior College; B.S., M.S., Mankato State College Assistant Professor of Teaching-1969 (1973)

DAVID E. KENNEDY - B.Mus., M.Mus., Eastman School of Music, University of Rochester; Ph.D., University of Iowa

Professor of Brass Instruments and Theory —1948 (1968)

JACK F. KIMBALL—B.A., University of Kansas City; M.A., Syracuse University; Ed.D., Columbia University

Associate Professor of Education—1967
CHRISTOPHER R. KING—B.A., Grinnell College; M.A., University of Wisconsin Assistant Professor of History—1973

KAREN MAE KING—B.S., Illinois State University; M.A., Baylor University Instructor in Speech—1971

AURELIA L. PRIOR KLINK—B.A., M.A., University of Northern Iowa Assistant Professor (Field) of Adult Office Education—1966 (1969)

JEROME KLINKOWITZ—B.A., M.A., Marquette University; Ph.D., University of Wisconsin Associate Professor of English—1972

ANN M. KNUTI-B.A., Hamline University; M.A., Mankato State College Instructor in Teaching-1972

Howard Knutson—B.A., Luther College; M.A., Ed.D., University of Wyoming Professor of Education
Director of Teacher Education

Dean of the College of Education -1953 (1968)

FRITZ HANS KÖNIG-Canditatus Magisterii, University of Oslo, Norway; M.A., Ph.D., University of Iowa

Associate Professor of German—1967 (1973)

JÜRGEN KOPPENSTEINER—Ph.D., University of Graz, Austria

Associate Professor of German—1968 (1972)

ELMER JOHN KORTEMEYER, JR.—B.S., M.A., University of Wyoming Assistant Professor of Physical Education—1965 (1968)

ROBERT E. KRAMER—Ph.B., M.A., University of North Dakota Assistant Professor of Sociology—1965 (1970)

Marian Elsie Krogmann-B.S., South Dakota State College; M.A., Ph.D., University of Iowa Associate Professor of Political Science-1967 (1970)

^{*}on leave

RAYMOND W. KUEHL-B.S., Upper Iowa College; M.A., University of Iowa; Ed.S., Drake University; Ph.D., University of Iowa

Associate Professor of Teaching

Coordinator of Student Field Experiences-1966 (1971)

ROGER A. KUETER-B.A., Loras College; M.A., Ed.D., Indiana University

Assistant Professor of Education-1970 LORETTA S. KUSE-B.S., Wisconsin State University at Stevens Point; M.A., Ph.D., University of

Assistant Professor of Education - 1972

JOSEPH F. LAMBERTI, JR.-B.S.Ed., Edinboro State College; M.A., San Fernando Valley State College; Ed.D., University of Florida Assistant Professor of Education

Coordinator of the Curriculum Laboratory -1972

WILLIAM C. LANG -B.A., Yankton College; M.A., Ph.D., University of Iowa

Professor of History -1949 (1952)

GERALDINE E. LaRocque-B.S., M.A., University of Minnesota; Ph.D., Stanford University Professor of English-1972

JAMES B. LaRue-B.S., Southeast Missouri State College; M.A., Colorado State College; Ed.D., Pennsylvania State University Professor of Industrial Arts-1956 (1971)

Kenneth Lash-B.A., Yale University; M.A., University of New Mexico Professor of Art

Head of the Department of Art-1970

RICHARD T. LATTIN-B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa Professor of Education-1947 (1969)

AGNES LEBEDA - B.A., Northwestern State College, Oklahoma; M.A., Oklahoma State University; Ph.D., University of Minnesota

Professor of General Business-1953 (1963)

JOSEPH A. LEE-B.A., University of Northern Iowa

Instructor in Teaching -1973

KEY TON LEE - B.S., Union College, Nebraska; M.A., Andrews University, Michigan; Ph.D., University of Oklahoma Associate Professor of Education-1967 (1972)

DONALD C. LITTLE-B.M., Peabody Conservatory of Music, Baltimore; M.M., Northwestern School of Music

Instructor in Music (Tuba and Brass)-1973

THOMAS L. LITTLE-B.A., Macalester College; M.A.E., University of Mississippi; Ed.D., Memphis State University Assistant Professor of Education-1973

Bonnie Helen Litwiller - B.S.Ed., M.S.Ed., Illinois State University; M.A.T., Ed.D., Indiana Univer-

Associate Professor of Mathematics-1968 (1972) JOHN C. LONGNECKER-B.A., M.A., University of Northern Iowa

Instructor in Mathematics-1966

FRED W. LOTT, JR. -B.S., Cedarville College, Ohio; M.A., Ph.D., University of Michigan Professor of Mathematics

Assistant Vice-President, Academic Affairs-1949 (1971)

JONATHAN J. LU-B.Ed., Taiwan University; B.D., Asbury Theological Seminary, Kentucky; M.A., Ohio State University; Ph.D., University of Washington Associate Professor of Geography-1973

*James L. Lubawski-B.S.B.A., M.B.A., Northwestern University

Assistant Professor of Marketing -1969 (1972)

WILLIAM ERNEST LUCK - B.S., M.S., Stout State College; Ed.D., Oklahoma State University Professor of Industrial Arts Director of Technical Education - 1962 (1970)

GENE M. LUTZ-B.S., M.S., Ph.D., Iowa State University

Assistant Professor of Sociology - 1973 H. LEWIS LYNCH-B.S., M.Ed., University of Nebraska; Ed.D., University of Wyoming

Associate Professor of Teaching Coordinator of Student Teaching-1951 (1969)

on leave

Howard William Lyon-B.A., M.S., University of Iowa Assistant Professor of Chemistry-1956 (1959)

Gregory MacDonald—A.B., M.A., University of Michigan Instructor in Speech—1973

JAMES G. MacMillan-B.A., Western Washington State College; Ph.D., Ohio State University Assistant Professor of Chemistry – 1972

DAVID V. McCalley—B.A., M.A., University of Northern Iowa Assistant Professor of Biology—1966 (1968)

CLIFFORD G. McCollum-B.S., M.A., Ed.D., University of Missouri Professor of Biology

Dean of the College of Natural Sciences—1949 (1968)

JANET MAE PARTELLO McCumsey—A.A., Fort Dodge Community College; B.A.Ed., Buena Vista College; M.A., University of Northern Iowa
Instructor in Teaching—1969

NORMAN L. McCumsey—B.S., Oregon College of Education; M.Ed., University of Oregon; Ed.D., Colorado State College
Associate Professor of Education—1967 (1970)

ELAINE E. McDavitt-B.S., M.A., Northwestern University; Ph.D., University of Michigan Professor of Speech-1947 (1964)

WILHELMINA D. McFee—B.S., Boston University; M.S., Smith College; Ph.D., Ohio State University Professor of Physical Education for Women Head of the Department of Physical Education for Women—1972

Mary Lou McGrew-B.A., University of Northern Iowa; M.A., University of Iowa Instructor in Library Science-1970

CLAUDE TRUMAN McIntosh—A.A., Arlington State College; B.A., M.A., Texas Christian University; Ph.D., Ohio State University
Assistant Professor of History—1971

GLENDA G. RILEY McIntosh—B.A., Western Reserve University; M.A., Miami University, Ohio; Ph.D., Ohio State University
Associate Professor of History—1969 (1972)

KENT ALAN McIntyre—B.A., University of Iowa; M.A., University of Denver Assistant Professor of Teaching—1968

KEITH F. McKean-A.B., Williams College; M.A., University of Chicago; Ph.D., University of Michigan
Professor of English-1968

HELEN GRAY McKinsey -B.S., M.S., Purdue University Assistant Professor of Home Economics - 1968

Joseph J. Marchesani—B.A., Fordham University; M.S., Brooklyn College; M.Ed., Temple University
Assistant Professor and Coordinator of Television Services—Educational Media Cen-

David H. Mardon—B.S., University of Minnesota; M.F.A., University of Oklahoma Instructor in Speech—1972

WILLIAM O. MARICLE—B.Ed., Southern Illinois University, Carbondale; M.A. University of Illinois; Ed.D., University of Colorado
Associate Professor of Teaching
Coordinator of Student Teaching—1949 (1970)

ELIZABETH ANN MARTIN-B.A., Wartburg College; M.A., University of Minnesota Associate Professor of Library Science

Head of the Department of Library Science –1962 (1972)

JERRY L. MASSMAN-A.A., Estherville Junior College; B.S., Northwestern College (Iowa); M.B.A., Mankato State College Assistant Professor of Accounting-1972 (1973)

Charles D. Matheson-B.Mus., M.Mus., University of Michigan Professor of Voice-1955 (1973)

A. Marleta Blitch Matheson—B.M.E., Simpson College (Iowa); M.Mus., University of Michigan Music Staff Accompanist—1964

R. Jane Mauck—B.Mus., M.Mus., Drake University Assistant Professor of Voice—1946 (1956)

JVONE L. MAXWELL -B.A., University of Northern Iowa; M.M., American Conservatory of Music Associate Professor of Piano - 1940 (1968)

PETER M. MAZULA-B.S., State University of New York, Cortland; M.A., Ed.D., Teachers College, Columbia University Professor of Teaching-1949 (1973)

PATRICK C. MEADE-B.A., Marquette University; M.A., Rice University

Assistant Professor of English - 1970

Josephine Megivern-B.A., M.A., University of Northern Iowa Assistant Professor of Home Economics - 1967 (1972)

JANE C. MERTESDORF - B.S., Mankato State College; M.A., Ball State University Instructor in Physical Education for Women-1969

WILLIAM K. METCALFE-B.S., M.A., Washington University, St. Louis; Ph.D., Syracuse University Professor of Political Science -1961 (1969)

PETER S. MICHAELIDES -B.Mus., Baldwin-Wallace College Conservatory of Music, Ohio; M.Mus., Oberlin College; D.M.A., University of Southern California Associate Professor of Theory –1965 (1970)

CARYL A. MIDDLETON-B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa Professor of Teaching Coordinator of Student Teaching -1949 (1970)

MICHAEL H. MILLAR-B.A., Harvard University; M.S., University of Chicago Associate Professor of Mathematics - 1962 (1970)

MICHAEL V. MILLER-A.Sc., Bismark Junior College; Ph.B., M.S., University of North Dakota Instructor in Geography - 1969

RONALD DEAN MOEHLIS - B.A., University of Northern Iowa; M.A., University of Illinois Assistant Professor of Mathematics - 1965 (1970)

MARDELLE L. MOHN-B.S., Bradley University; M.S., University of Wisconsin Associate Professor of Teaching Coordinator of Student Teaching-1948 (1971)

DOROTHY L. MOON-B.Ed., Northern Illinois University; M.A., Northwestern University Associate Professor of Physical Education - 1946 (1968)

DAVID L. MORGAN-B.A., Swarthmore College; M.A., Washington University Assistant Professor of Philosophy - 1969

Janice M. Morgan-B.S.E., M.S.E., University of Missouri; Ph.D., Iowa State University Assistant Professor of Home Economics - 1972

ROBERT E. MORIN-B.S., M.S., Northwestern University; Ph.D., University of Wisconsin Professor of Psychology Dean of the College of Business and Behavioral Sciences - 1972

MASUD M. MUFTI-B.A., M.A., Panjab University, Pakistan

Instructor in Sociology - 1973

BELA MUKHOTI - B.A., M.A., Calcutta University; Ph.D., London School of Economics Associate Professor of Economics - 1972

RAUL MUNOZ - B.A., M.A., University of Nebraska; M.A., Ph.D., Michigan State University Assistant Professor of Spanish - 1963 (1966) HYO CHUL MYUNG -B.S., M.S., Seoul National University, Korea; Ph.D., Michigan State University

Assistant Professor of Mathematics - 1970 CLINTON NELSON-B.A., Midland College; M.A., University of Nebraska

Assistant Professor of Speech - 1967

PHILLIP JAMES NELSON-B.S., Augustana College; M.A., University of Nebraska Instructor in Teaching - 1969

DALE R. NEUMANN-B.S., University of Wisconsin; M.A., University of Minnesota Assistant Professor of Speech - 1963 (1969)

*RICHARD S. NEWELL-B.A., M.A., University of Washington; Ph.D., University of Pennsylvania Associate Professor of History - 1967 (1970)

Ross A. Nielsen-B.A., Wartburg College; M.S., Ph.D., University of Iowa Professor of Teaching Head of the Department of Teaching-1947 (1962)

BASHEER K. NIJIM -B.A., Augustana College, Illinois; M.A., Ph.D., Indiana University Professor of Geography Head of the Department of Geography-1962 (1972)

VIRGIL C. NOACK-B.A., M.A., University of Northern Iowa Assistant Professor of Sociology - 1967 (1970)

Samuel Nodarse-Doctorate in Social Sciences, Doctorate in Law, University of Havana, Cuba; Ph.D., University of Illinois Associate Professor of Spanish - 1964 (1971)

on leave

Jon G. Norem—B.S., M.B.A., University of North Dakota; C.P.A. Assistant Professor of Accounting—1973

WILLIS P. NORTON-B.S., M.A., Ball State University

Assistant Professor of Industrial Arts and Technology-1973

MICHAEL DAVID OATES -A.B., Fairfield University; M.A.T., Assumption College; Ph.D., Georgetown University

Associate Professor of French-1967 (1970)

KARL EDWARD ODWARKA—"Diplom", Akademie fuer Welthandel, Frankfurt, Federal Republic of Germany; B.A., M.A., Wayne State University; Ph.D., University of Michigan Associate Professor of German—1964 (1973)

*Jack E. Olds—B.S., M.S., University of Wisconsin at Milwaukee Assistant Professor of Art Director of Iowa Arts Council, Des Moines—1966 (1967)

Dale Wilson Olson—B.A., Carleton College; Ph.D., University of Rochester Associate Professor of Physics—1968 (1973)

Alan R. Orr – B.A., Simpson College; M.S., Ph.D., Purdue University Associate Professor of Biology – 1965 (1971)

CHARLOTTE S. OSLUND—B.S., North Dakota State University; M.A., Colorado State University Assistant Professor of Home Economics—1972

JOHN H. PAGE, JR.—B. of Design, University of Michigan; M.F.A., University of Iowa Professor of Art—1961 (1964)

Mary Lou Page—B.A., Mankato State College; M.A., University of Northern Iowa Instructor in English—1966

Eugenia G. Parisho—B.A., University of Northern Iowa; M.A., University of Chicago Assistant Professor of Teaching—1968

HENRY H. PARKER -B.A., St. Thomas College, Minnesota; M.A., University of Minnesota Assistant Professor of Latin - 1965

CHARLES A. PATTEN-B.A., University of Northern Iowa; M.A., University of Oregon Associate Professor of Physical Education for Men-1964 (1972)

ROBERT L. PAULSON-B.S., M.A., University of Iowa Associate Professor of Teaching -1953 (1963)

Daryl Pendergraft -B.A., Buena Vista College; M.A., Ph.D., University of Iowa Professor of History -1946 (1954)

REX W. PERSHING—B.S., Western Illinois University; M.A., University of Northern Iowa; Ed.D., Colorado State College
Associate Professor of Industrial Arts—1965 (1972)

CECIL K. PHILLIPS—B.S., Southwest Missouri State College; M.Ed., Ed.D, University of Missouri Professor of Teaching
Coordinator of Student Teaching—1948 (1962)

WARREN E. PICKLUM—B.A., Colorado State College; M.S., Ph.D., Iowa State University Assistant Professor of Biology—1957

Douglas T. Pine—B.S., State University of New York at Oswego; M.A., Trenton State College; Ph.D., Ohio State University
Assistant Professor of Industrial Arts—1973

GEORGE R. POAGE-B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa Professor of History-1954 (1965)

ALISON ANNE POE - B.S., Oklahoma State University Instructor in Physical Education for Women - 1971

WILLARD J. POPPY —B.Ed., Wisconsin State University, Oshkosh; M.S., Ph.D., University of Iowa Professor of Physics—1949 (1953)

CATHERINE A. PORTER—B.A., M.A., University of Northern Iowa Instructor in Mathematics—1973

Paul J. Porter - B.A., M.A., Ed.S., University of Northern Iowa Assistant Professor of Education - 1967 (1970)

ALBERT A. POTTER—B.A., Nebraska State Teachers College; M.A., University of Iowa Associate Professor of Teaching—1946 (1968)

JEANNETTE ROGERS POTTER -B.A., University of Northern Iowa; M.S., University of Wisconsin; Ed.D.,
University of Oregon

Associate Professor of Physical Education for Women - 1955

Lois Shefte Potter-B.A., Yankton College; M.A., University of Iowa; Ph.D., University of Wisconsin
Professor of Teaching-1950 (1972)

^{*}on leave

PATRICIA B. POWELL-B.A., Kalamazoo College; M.A., Western Reserve University; Ph.D., Ohio State University

Assistant Professor of Teaching-1972

ROBERT BRUCE PRATT-B.A.Ed., M.E., Eastern Washington State College; M.A., Ed.D., University of Colorado

Associate Professor of Social Science-1970 (1973)

James William Price—B.S.Ed., B.A., University of Missouri; M.A., University of Northern Iowa Assistant Professor of Teaching—1964 (1970)

CLARENCE W. PRIES — B.A., Wartburg College; M.A., University of Iowa Assistant Professor of Teaching

Coordinator of Student Teaching-1968

W. DEAN PRIMROSE - B.A., M.A., University of Northern Iowa

Instructor in Teaching -1973

JERROLD E. PRITCHARD -B.A., M.A., Sacramento State College; D.M.A., University of Washington

Assistant Professor of Music-1969

Joe Przychodzin-B.Ed., Southern Illinois University; M.S., University of Illinois; Ed.D., University of Missouri

Professor of Education—1949 (1968)

CHARLES E. QUIRK—B.A., Carroll College, Wisconsin; B.D., McCormick Theological Seminary;

Ph.D., University of Iowa

Associate Professor of History—1963 (1969)

LORA LEE RACKSTRAW-B.A., Grinnell College; M.F.A., University of Iowa Assistant Professor of English-1966 (1969)

RICHARD B. RACKSTRAW - B.A., Hillsdale College; M.A., Miami University, Ohio

Assistant Professor of English—1966 (1969)

VIRGINIA RAMSAY—B.S., Northwest Missouri State College; M.A., University of Iowa

Assistant Professor of Physical Education for Women-1955 (1959)

GLORIA OWEN RAPINCHUK-B.A., University of Northern Iowa; M.A., University of Iowa
Instructor in English-1969 (1970)

NED HARRY RATEKIN-B.A., Parsons College; M.A., Ph.D., University of Iowa Professor of Education and Psychology-1965 (1971)

EDWARD C. RATHMELL—B.A., Central College; M.A., Western Washington State; Ph.D., University of Michigan
Assistant Professor of Mathematics—1972

EDWARD REDALEN -B.S., Winona State College; M.Ed., University of Toledo

Assistant Professor of Teaching – 1968 (1971)

BARRY LYNN REECE – A.A., Ellsworth Community College; B.A., M.A., University of Northern Iowa; Ed.D., University of Nebraska
Associate Professor of Business Education

Teacher Educator in Post-Secondary Distributive Education-1965 (1972)

JACK CHARLES REED-B.A., M.A., University of Northern Iowa

Associate Professor of Business Education

Teacher Educator in Office Education-1965 (1969)

THOMAS J. REMINGTON—B.A., Regis College, Colorado; M.A., Ph.D., Kansas State University Assistant Professor of English—1970

Dennis L. Remmert - B.A., M.A., University of Northern Iowa Assistant Professor of Physical Education for Men - 1964 (1969)

BASIL J. REPPAS -B.A., Athens University, Greece; M.A., American University of Beirut. Lebanon;
Ph.D., University of Iowa

Associate Professor of Education—1961 (1965)

THOMAS L. REUSCHLING—B.A., Hiram College; M.B.A., Kent State University; D.B.A., University of Colorado

Associate Professor of Marketing Head of the Department of Business-1973

ERWIN W. RICHTER—B.S.. Northern Michigan University; M.A., University of Northern Iowa; Ph.D.,
University of Iowa

Associate Professor of Chemistry – 1963 (1972)

PAUL EDWARD RIDER – B.A., Drake University; M.S., Iowa State University; Ph.D., Kansas State University

Associate Professor of Chemistry –1969 (1973)
FERDINAND C. RIECHMANN – B.A., M.A., University of Iowa
Associate Professor of Teaching –1960 (1971)

JOAN CARLSON RIESS - B.A., M.A., University of Northern Iowa

Assistant Professor of Teaching - 1968 (1972)

Dixon L. Riggs—B.A., Marietta College, Ohio; M.S., University of Michigan Associate Professor of Biology—1958 (1970)

James B. Roberson-B.S., Middle Tennessee State College; M.A., George Peabody College for Teachers

Associate Professor of Teaching

Coordinator of Student Teaching -1964 (1971)

RONALD EDWARD ROBERTS -A.A., Graceland College; B.A., Drake University; M.A., Ph.D., Louisiana State University

Associate Professor of Sociology - 1969 (1972)

Dale O. Robinson-B.A., Western Michigan University; M.A., Colorado State College; Ph.D., Wayne State University

Assistant Professor of Audiology - 1970

James B. Robinson—B.A., Wabash College; M.A., University of Wisconsin at Madison Assistant Professor of Philosophy and Religion—1971

MICHAEL O. ROD—B.A., Luther College; M.A., University of Northern Iowa Instructor in Accounting—1972

Walter R. Rogers—B.A., College of Wooster, Ohio; M.A., Ph.D., University of Iowa Assistant Professor of Psychology—1972

REX ALAN ROMACK-A.B., Illinois College; M.S., Eastern Illinois University; Ed.D., University of Nebraska

Associate Professor of Education and Psychology – 1969
TIMOTHY E. ROONEY – B.S., St. Louis University; M.S., University of South Forida

Assistant Professor of Speech Pathology – 1973

ROBERT L. Ross—B.A., University of Northern Iowa; M.A., Columbia University; Ph.D., Michigan State University
Professor of Political Science

Head of the Department of Political Science -1962 (1971)

Betts Ann Roth—B.S., George Peabody College for Teachers; M.A., Columbia University Associate Professor of Teaching—1951 (1965)

Julia J. Rozendaal — B.A., M.A., Ed.S., University of Northern Iowa Assistant Professor of Education — 1966 (1967)

ALVIN E. RUDISILL-B.S., Moorhead State College; M.S., University of North Dakota; Ed.D., University of Northern Colorado
Professor of Industrial Arts

Head of the Department of Industrial Arts and Technology-1971

ROBERT L. RULE-B.S., M.S., Iowa State University

Instructor in Mathematics-1966

EDWARD RUTKOWSKI—B.S., Marquette University; M.A., Ph.D., Michigan State University Professor of Education—1963 (1970)

THOMAS G. RYAN—B.S.C., M.A., University of Iowa Assistant Professor of History—1960 (1963)

BILLIE LOUISE SANDS—B.S., Northern Michigan University; M.A., Ph.D., Michigan State University Associate Professor of Home Economics Acting Head of the Department of Home Economics—1970 (1972)

ROY E. SANDSTROM—B.A., Williams College; M.A., Ph.D., State University of New York at Buffalo Assistant Professor of History—1969

Kenneth W. Schempf—B.A., Heidelberg College; B.S., M.A.E., Ph.D., Kent State University Assistant Professor of Marketing—1972

REX E. SCHMID—B.S., Northern Arizona University; M.Ed., University of Virginia Assistant Professor of Education—1973

OTIS RHEA SCHMIDT—B.M., M.J., University of Texas, Austin; M.A., Sam Houston State College Assistant Professor of English—1965 (1968)

Mary Margaret Schmitt-B.A., University of Northern Iowa; M.Ed., University of Minnesota Assistant Professor of Teaching-1946 (1955)

James O. Schnur-B.S., M.S., State University College of Fredonia, New York; Ed.D., State University of New York at Buffalo Professor of Education

Head of the Department of Curriculum and Instruction-1972

CHARLES B. SCHOLZ—B.S.Ed., M.A., Northern Illinois University Instructor in Speech—1969 Marshall Schools—B.S., Mary Washington College; M.A., George Peabody College for Teachers Associate Professor of Teaching—1949 (1967)

Augusta L. Schurrer — B.A., Hunter College; M.A., Ph.D., University of Wisconsin Professor of Mathematics—1950 (1963)

LYNN C. Schwandt -B.A., Coe College; M.A., University of Northern Iowa Associate Professor of Teaching -1964 (1973)

JANE K. SHERWIN SCHWARTZ -B.A., Rockford College; M.A., Middlebury College; Ph.D., University of Michigan

Professor of French-1962 (1972)

RALPH J. Schwartz-B.S., Northwestern University; M.A., Marquette University; Ph.D., Purdue University
Associate Professor of Speech Pathology and Audiology-1963 (1968)

LYLE E. SCHWARZENBACH - B.A., M.A., University of Northern Iowa

Assistant Professor of Physical Education for Men-1969 (1972)

RALPH S. SCOTT-B.A., Luther College; M.S.W., University of Wisconsin; Ph.D., University of Chicago

Professor of Education and Psychology Director of the Educational Clinic -1965 (1968)

Donald A. Scovell-B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa Associate Professor of Teaching-1961 (1969)

KEITH E. SEIFERT - B.A., M.A., University of Northern Iowa Instructor in Education - 1971

ROBERT W. Selwa-B.S.Ed., University of Alabama; M.Ed., Florida Atlantic University; Ed.D.,
University of Georgia
Assistant Professor of Education-1970

IRA J. SEMLER - B.A., University of Northern Iowa; M.A., Ph.D., University if Iowa

Professor of Psychology – 1968

THEODORE S. SERDIUK – B.A., University of Wyoming; M.S., Wisconsin State University, Platteville Assistant Professor of Industrial Arts and Technology – 1970 (1973)

RUTH SEVY—B.S., Central Missouri State College; A.M., Colorado State College Associate Professor of Physical Education for Women—1967 (1969)

DONALD E. SHEPARDSON—B.S., Eastern Illinois University; M.A., Ph.D., University of Illinois
Assistant Professor of History—1970

STANLEY B. SHERIFF—B.S., M.A., California State Polytechnic College Associate Professor of Physical Education for Men Director of Athletics—1958 (1971)

ALLAN SHICKMAN-B.A., Washington University; M.A., University of Iowa Instructor in Art-1970

MARGARET ROUSE SHONTZ-B.A., M.A., Ed.S., University of Northern Iowa Instructor in Business Education-1973

VERA Jo SIDDENS - B.A., M.A., University of Northern Iowa Assistant Professor of Art - 1968 (1971)

INA MAE BROWN SILVEY -B.S., Central Missouri State College; M.A., University of Northern Iowa Associate Professor of Mathematics - 1954 (1972)

ROBERT JOHN SIMPSON—B.A., Houghton College; M.S., Ph.D., University of Illinois Associate Professor of Biology—1965 (1968)

James C. Skaine-B.A., Sioux Falls College; M.A., University of South Dakota Assistant Professor of Speech-1965

Kenneth C. Slavett-B.A., University of California at Santa Barbara; M.A., Hartford College of Music, Connecticut
Instructor in Music-1973

DAVID T. SMALLEY -B.Mus., M.Mus., University of Michigan Assistant Professor of Voice -1964 (1969)

AUDREY L. SMITH—B.A., Kentucky Wesleyan College; M.A., Northwestern University; M.A.E., Ed.D., Ball State University
Assistant Professor of Education—1973

DARYL DEE SMITH—A.A., Keokuk Community College; B.A., University of Iowa; M.N.S., University of South Dakota; Ph.D., University of Iowa Associate Professor of Biology—1967 (1971)

Francis E. Smith—B.A., University of Massachusetts; M.A., Ph.D., University of Iowa Professor of English
Acting Dean of the College of Humanities and Fine Arts—1950 (1973)

JERRY NEIL SMITH-B.M., M.M., University of Texas; Ph.D., Eastman School of Music Professor of Music

Head of the Department of Music-1972

JOHN KENNETH SMITH-B.S., M.A., Ph.D., University of Wisconsin

Assistant Professor of Education - 1971 (1972)

M. B. Sмітн-B.S., Northern State Teachers College, South Dakota; M.A., Ph.D., University of Minnesota

Professor of Speech-1947 (1966)

ELOISE P. Soy—B.A., M.A., University of Northern Iowa Assistant Professor of Teaching—1965 (1971)

JULIA L. SPARROW — B.S., St. Cloud State College; M.A., Ph.D., University of Iowa Professor of Education—1944 (1958)

Louis Spinelli-B.A., B.S.Ed., Ph.D., Ohio State University

Assistant Professor of Education - 1971

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(Chairman's name is indicated by asterisk. Year in which faculty member's term expires is indicated in parentheses.)

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M. B. Smith, Chairman of the University Faculty, ex-officio.

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Howard Knutson, Dean of the College of Education

Francis E. Smith, Acting Dean of the College of Humanities and Fine Arts

Clifford G. McCollum, Dean of the College of Natural Sciences

Gordon J. Rhum, Dean of the Graduate College

Leland A. Thomson, Director of Planning

Merrill F. Fink, Registrar

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Mary Lou Page ('75) (vice-chairman)
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SENATE

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Ralph D. Engardt ('76)
Dean Clifford G. McCollum, ex-officio

Glossary

TERMS FREQUENTLY USED AT THE UNIVERSITY OF NORTHERN IOWA

Adviser, Advisee— Your adviser or counselor is the instructor assigned by the university to help you with your problems. You are called his advisee.

Audit—

To take a course without credit (See Visitor). A course audited cannot be counted for credit unless repeated on a credit basis.

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. See

pp. 47, 213.

Course — A particular subject being studied—for example, a course in English.

Credit—

The numerical reward you receive for completing a university course.

It is described in semester hours. The freshman student will ordinarily register for sixteen or seventeen hours of class work.

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 a required course which you must take.

Emphasis—

An area less than a minor, usually in a broad field with a core, with some degree of specialization. For example, a student whose major is Business Education will complete 30 or more hours in one of six areas: general business, accounting, marketing, secretarial, distributive education, or office education, to have that emphasis

indicated on his permanent record.

Extracurricular— Those activities which are part of student life but are not part of the course of study. Debate, dramatics, and athletics are extra-curricular

activities. See pp. 21-23.

Fee- A charge which the university asks you to pay for certain services it offers you; for example, a music fee, paid for private lessons in

music. See pp. 50-51.

General Education- The knowledge, skills, appreciations, and attitudes that any well

educated person should possess. More than one-third of the work required for graduation consists of general education courses which

are required of all students. See p. 67.

Grade Point— 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 figure your grade-point index, divide the total number of

grade points by the total number of credit hours attempted.

Graduate Study- Work beyond the bachelor's degree, usually toward a master's or

doctor's degree.

I.D. Card— Student identification card.

Load— The total hours for which you are registered. The normal undergraduate load is 16 or 17 hours per semester.

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-

Schedule-

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.

Pass/No Credit— A system of grading in which a student may take a course for credit without being graded. See p. 57.

Prerequisite— The preliminary requirement which must be met before a certain course can be taken.

Probation— A period of trial for a student whose work or conduct is unsatisfactory. See p. 56.

Registration— The act of enrolling in classes, usually at the beginning of a semester. This involves choosing your classes with the help of your advisor. See pp. 48, 205.

Registration Certificate— A receipt for payment of fees which a student receives for each semester or summer session which he attends. See p. 53.

Required Subjects—

Those subjects which are prescribed by the institution for the completion of your program. You choose your electives; your required subjects are chosen for you.

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.

Visitor—

One who is enrolled in a course for which no credit is desired. (See Audit.)



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