



UNIVERSITY
OF MINNESOTA
BULLETIN 1974-76

College of Education

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College of Education

UNIVERSITY OF MINNESOTA

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College of Education

I. GENERAL INFORMATION

USE OF THIS BULLETIN

This bulletin has been prepared to acquaint students with the program and activities of the College of Education and to help them as they plan programs. Section I of the bulletin contains information about the organization of the college, its basic programs, and special resources. In Section II, each of the undergraduate certification programs is described in detail. This section also contains the general requirements and procedures to be followed for admission, registration, and graduation, and information about advisers and advising in each of the departments. Each of the programs of the college in continuing and graduate education is described briefly in section III. This part of the bulletin will be of most interest to in-service teachers and administrators. Section IV contains a listing by departments of all courses offered in the college at both undergraduate and graduate levels.

Because new programs and courses are constantly being developed and requirements changed, the bulletin cannot be the only device used for planning. Students should consult frequently with their advisers or counselors in the Education Career Development Office at 1425 University Avenue S.E. Useful also for undergraduate students are the *General Information Bulletin* and the bulletins of other colleges, particularly the College of Liberal Arts, the Institute of Technology, and General College. Graduate and continuing education students will find the *Graduate School Bulletin* and the *Extension Classes Bulletin* very helpful.

THE COLLEGE

Its Basic Goals

The College of Education, established by the Board of Regents in 1905, prepares people for roles at all levels of professional education. Its statement of mission identifies three basic goals—to contribute ideas for the improvement of educational theories and processes, to provide high quality programs for present and future members of the education professions, and to provide leadership in applying tested insights to the problems of schools and colleges. The college seeks to move toward these goals by encouraging scholarly faculty activity in research, writing, and field services and by offering instructional programs in a wide range of majors. The college provides educational leadership and service not only to the large urban community of Minneapolis and St. Paul but also to the entire Northwest.

Organization

The basic unit of organization in the college is the department. Departments exercise considerable authority over decisions about curriculum, personnel, and budget matters, with final review by appropriate all-college committees and the Dean's Office. Because departments are responsible for the management of certification programs, students should become acquainted with departmental officers and advisers.

General Information

Governance of the College

The basic policy-making body of the college is an elected student/faculty group called the College of Education Senate. The Senate meets monthly during the academic year, and its meetings are open to the public. Two faculty/student standing committees (Educational Policy, and Personnel Policy) report to the Senate on policy changes that are needed.

Education Student Board

Students in the College of Education may play a significant role in governing the college through the Education Student Board. Members of the board are elected on a proportional basis from the departments of the college. Ten members of the ESB are also elected by that body to the College of Education Senate and thus become involved in all-college decision making. The ESB sets its own agenda and carries on its own action program. Students interested in election to ESB or in ESB activities should consult with officers of the board in the Education Career Development Office at 1425 University Avenue S.E.

STUDENT SERVICES

Education Career Development Office

The "first stop" for any student seeking direction or information is the Education Career Development Office (373-2234), located at 1425 University Avenue S.E.

The Education Career Development Office provides special facilities and staff to help students plan professional goals and meet personal needs. It provides a continuing relationship with students and graduates from prospective student contact and admission through placement and into educational careers. Coordination of admission, enrollment, counseling, record keeping, administration, field experiences (student teaching), information services, and job placement serve past, present, and future students, as well as faculty and administrators of the College of Education. Resources provided by the Education Career Development Office are available to all students in the College of Education as well as persons who are considering a career in education.

Student Assistance—Information Advisers are available full time to answer questions about transfer, college programs, policies and procedures, and to provide referral information on other University services. **Counselors** are available to provide special information and experienced help in assessing professional goals, dealing with personal problems, or developing personal skills. **Student Progress Committee Representatives** can help students adjust their programs to individual needs through exemption, substitution, or examination.

All new students to the University campus are invited and encouraged to attend the orientation-registration program of the College of Education. Coordinated by the Education Career Development Office, orientation is especially planned to help new students complete their first registration, meet with faculty advisers, and explore opportunities available at the University.

Field Experiences—Student teaching, with assignment to schools and agencies in Minneapolis, St. Paul, suburban communities, and other areas of the state, is coordinated by Field Experiences in the Education Career Development Office. The section on Procedures and Practices (see Section II) in this bulletin gives information about application and registration for student teaching.

Placement—The placement services of the Education Career Development Office are available to all students and alumni of the College of Education, listing positions in many states and some foreign countries. All graduating seniors (except majors in recreation and park administration) and candidates for the master of education degree who did not receive the bachelor of science degree in education at the University of Minnesota are required to register with the placement service for a nominal fee, or secure an official exemption from that office. The fee entitles the registrant to placement service for a 1-year period ending October 1.

Faculty Advisers—In addition to the assistance and services offered by the Education Career Development Office, all students are assigned a faculty adviser who teaches in the student's major field. Faculty advisers are the student's main resource in planning a program, preparing for registration each quarter, and for general academic questions.

Special Resources

The College of Education includes a number of divisions and special enterprises established to advance its work in the preparation of teachers, to extend professional knowledge in education, and to serve schools throughout the state and nation.

MPS/UM Teacher Center—The Minneapolis Public Schools and the University of Minnesota established a Teacher Center as a vehicle for the preparation and renewal of educational personnel. The primary focus of the center is on development of alternative education serving primarily, but not exclusively, the Southeast Alternatives Experimental Schools Project (SEA). Students and faculty of the college who wish to have an affiliation with SEA schools must use the center as the facilitator. Other cooperative relationships between the college and the Minneapolis Public Schools not involving the Southeast Schools can be facilitated through center staff and resources. The center also serves as an information and dissemination vehicle for a variety of programs within the state of Minnesota and the nation.

Bureau of Field Studies and Surveys—The bureau is a component of the Department of Educational Administration within the College of Education. It provides research services to local school districts and other educational agencies in solving school problems of instruction, administration, finance, and physical plant planning. In performing these services the bureau functions as a resource center for instruction and clinical experiences in educational administration.

Educational Research and Development Council—The council includes public school systems of the metropolitan Twin Cities area and the College of Education. It conducts research relating to the conditions of learning for children and classroom practice. Additional activities focus on the development of school personnel and instructional programs through curriculum studies and in-service clinics. Students in the Department of Educational Administration have the opportunity to work closely with the council.

Education Library—Located on the second floor of Walter Library, the College of Education library offers rich print resources with access to government publications, newspapers, serials, and subscriptions located in libraries elsewhere on campus. To make searching easier, the library has personnel available for help and on-line computerized searches of the files of the Education Resources Information Center (ERIC), Psychological Abstracts, National Technical Information Services (NTIS), Exceptional Children Abstracts, and Abstracts of Instruc-

General Information

tional and Research materials in Vocational and Technical Education. This search capability produces a bibliography tailor-made to meet student needs. The library also collects materials related to psychology and library science; maintains three special collections of instructional materials, published tests, and college bulletins; and provides playback facilities for audio tapes, slides, filmstrips, and video tapes. The Kerlan Collection of Children's Books is housed on the first floor of Walter Library.

Instructional Systems Resource Center—The ISRC is the unit in the College of Education which is responsible for degree and certification programs in media and audio-visual services. In addition, it performs a learning resources service function for students and faculty of the college.

Minnesota Research Coordinating Unit for Vocational Education—The Minnesota RCU is cooperatively sponsored by the College of Education and the State Board for Vocational Education to enhance the quality and quantity of research efforts in the field within the state. Its four functions are to stimulate and facilitate research, to disseminate information, to increase the number and improve the competence of researchers, and to create knowledge and useful products having long-range potential affecting careers in vocational education. The unit is a noninstructional activity of the Department of Vocational and Technical Education serving career educators in the field.

Center for Early Education and Development—This newly established inter-departmental instructional unit of the college is planned to coordinate and expand early childhood training, provide continuing education for persons already in the field, and expand and disseminate research that has direct application to programs for young children. Graduate and undergraduate students wishing to complete work toward teacher certification or develop expertise in early childhood education will major in some related department, completing courses in early development and education. Further information may be obtained in the office of the center, 226 Child Development Building.

Institute of Child Development—The Institute of Child Development of the University of Minnesota has been a prominent center for research and study in child psychology since its founding in 1925. In its academic instructional program, the institute offers both undergraduate and graduate majors in child psychology. The undergraduate major is administered by the College of Liberal Arts. The graduate major is administered jointly by the College of Education and the Graduate School. The institute operates a laboratory nursery school for observation, research, and the training of nursery school teachers. The research programs deal with personality and social development, language and cognitive development, perceptual development, psychophysiological processes, and learning and motivation in children.

Educational Research and Development Office—This office supports a number of college-wide research and development activities. Included among its programs are (1) external funding; (2) promotion of educational research; (3) development, including innovative training models, facilities, and equipment; (4) program evaluation assistance; and (5) limited support for faculty research.

FINANCIAL ASSISTANCE

Students seeking financial assistance should direct inquiries to the Office of Student Financial Aid, 107 Armory Building. Applications filed during the winter quarter will receive priority consideration. Graduate students should consult the

Graduate School Bulletin for information about assistantships, fellowships, and scholarships. Students who are interested in special education programs should consult the office of that unit, 101A Pattee Hall, about possible traineeships and fellowships.

HUMAN RIGHTS

The Board of Regents has committed itself and the University of Minnesota to the policy that there shall be no discrimination in the treatment of persons because of race, creed, color, sex, or national origin. This is a guiding policy in the admission of students in all colleges and in their academic pursuits. It is also to be a governing principle in University-owned and University-approved housing, in food services, student unions, extracurricular activities, and other student and staff services. This policy must also be adhered to in the employment of students either by the University or by outsiders through the University and in the employment of faculty and civil service staff.

II. UNDERGRADUATE PROGRAMS IN THE COLLEGE OF EDUCATION

PROGRAMS OF THE COLLEGE

This part of the bulletin contains a description of the undergraduate certification programs offered by the various units of the college. All students who wish to be recommended for a teacher's certificate from the state of Minnesota upon graduation from the University of Minnesota (Minneapolis and St. Paul Campuses) must apply for admission to a teacher education program in the College of Education and must complete the requirements of that program. Students in all majors take 1 or 2 years of preprofessional work in another college before transferring to the College of Education.

Teaching certificates are awarded by the Minnesota State Department of Education, *not* by the University. After completion of an approved program, a student is recommended by the college for certification in his field of specialization. All certification programs described in this bulletin are approved by the State Board of Education and are accredited by the National Council for the Accreditation of Teacher Education.

Detailed information about entrance requirements, University admission, procedures, and estimated expenses will be found in the *General Information Bulletin*, available upon request from the Office of Admissions and Records.

Liberal Education

The College of Education, together with other units of the University, believes that all of its students should hold in common the search for a liberal education. Toward this end, the college subscribes to the all-University policy of the Council on Liberal Education which states the objectives of liberal education and describes the minimal distribution requirements to be completed by all students.

Listed below are the specific credit distributions for all students in education except those majoring in music education. These requirements are similar in nature to those established by the College of Liberal Arts for the B.A. degree and may, of course, be met by selection from a large number of College of Liberal Arts courses. Students are encouraged to take work in areas which will help them to develop interpersonal skills (e.g., speech-communications, child psychology, educational psychology) and to understand racial and cultural diversities in the United States and the world (Afro-American studies, American Indian studies, anthropology, Chicano studies).

Courses which meet the major and minor requirements of programs in the College of Education may usually be used toward the Liberal Education Distribution Requirements. For example, students with a major in anthropology may use courses in that area to fulfill the Man and Society requirement. Students should read the program description of the intended major in this section of the bulletin with care, so they may plan programs in the most efficient way possible.

Liberal Education Distribution Requirements—Completion of freshman English or exemption and, in addition, 48 credits from the following groups as indicated:

Group A. Communication, Language, or Symbolic Systems—8 credits

History and structure of English, foreign language, and communication skill; linguistics, rhetoric, logic, philosophic analysis; mathematics

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Group B. Physical and/or Biological Science—12 credits

Group C. Man and Society—16 credits including Psy 1001

Group D. Artistic Expression—12 credits

Literature, humanities, art, music, dance

Programs in Which Students Normally Spend the Freshman Year In a College of Liberal Arts

Art Education

Business Education

Distributive Education

Industrial Education

Music Education

Music Therapy

Physical Education

Recreation and Park Administration

Student apply for transfer to these programs in the College of Education very early in the third quarter of the freshman year and should check admission requirements under the chosen curriculum major.

Programs in Which Students Normally Spend Two Years In a College of Liberal Arts

Elementary Education

School Health Education

Secondary Education

Language arts with majors in English, speech-communication, theatre arts

Mathematics

Foreign languages with majors in French, German, Hebrew, Latin, Russian, Spanish

Science with majors in earth science, biological science, chemistry, physics

Social studies with majors in anthropology, economics, geography, history, political science, sociology

Students apply for transfer to these programs in the College of Education very early in the third quarter of their sophomore year and should check admission requirements under the chosen curriculum major.

Combined Programs with the Institute of Technology

Students with majors in physics, chemistry, or mathematics in the Institute of Technology may plan a program leading to a baccalaureate degree from the Institute of Technology and a master of education degree from the College of Education, and be recommended for a teaching certificate and both degrees upon completion of a 5-year program. Such students should apply at the Office of Admissions and Records, 6 Morrill Hall, for admission to the combined program early in the third quarter of their third (junior) year. The student carries courses in both colleges concurrently during the fourth and fifth years and is awarded both degrees when he meets the graduation requirements that include (a) the prescribed courses in both colleges and a total of 245 credits; (b) 45 credits with a 2.80 grade point average in graduate-level courses (numbered 5000 or higher), including a minimum of 24 credits in the major and 9 in the minor with a maximum of 12 in education; (c) a research or expository paper; and

(d) a minimum of 45 credits earned while in residence in the College of Education. The residence requirement is to be met by transferring to the College of Education for the fifth year of the combined program. For additional information, see the *Institute of Technology Bulletin* and inquire at the Education Career Development Office, 1425 University Avenue S.E.

Reserve Officers' Training Corps

Reserve training programs in military science, air science, and naval science are open to students in the College of Education as well as to students in other colleges of the University (see the *Army, Navy, Air Force ROTC Bulletin*).

Youth Studies Program

The Center for Youth Development and Research is an administrative unit within the College of Home Economics. The youth studies program is designed to augment established degree programs through the Colleges of Education, Home Economics, Liberal Arts, and University College by coordinating an interdisciplinary sequence of courses and experiences for juniors and seniors preparing to work with youth. For further information and application, contact the Youth Studies Coordinator, Center for Youth Development and Research, 325 Haecker Hall, St. Paul Campus.

ADMISSION TO THE COLLEGE OF EDUCATION

Admission to the College of Education is granted on the basis of academic standards and an appraisal of other factors related to the preparation of teachers. Admission criteria specific to each program are established with attention to the knowledge and skill requirements of the field. Experience in youth work or leadership may be considered, with differing degrees of importance, by each department. The student who plans to enter the College of Education should read carefully the requirements for the program of his choice in this section. He should discuss transfer with a counselor in the Education Career Development Office as early as possible in his planning.

The following general guidelines are applied for admission to the college:

1. Students who apply for admission to the College of Education must satisfactorily complete certain clearance procedures as listed in the instruction sheet issued at the time of application. One of the clearances requires a certificate from the University Health Service indicating that the student has no physical limitations or health conditions which would prevent successful pursuit of educational work.
2. Students applying for admission must present a record of success in previous academic work. To be considered for admission, a student must have earned at least a C (2.00) average in all of his previous college work. In addition, a student must have earned at least a C+ (2.50) average in all work completed in the major field prior to admission. In some fields preference may be given to applicants who surpass these minimal requirements.
3. All fields admit students for initial enrollment in the fall quarter. Each field may accept additional applicants either for winter or spring quarter. Those who wish to transfer in midyear should obtain current transfer information for the major field of interest. Admission decisions are made during the academic year in the quarter prior to the quarter of proposed

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entry. Applications should be received in the Office of Admissions and Records early in the quarter preceding the quarter in which admission is desired.

4. For some fields the number of applicants which can be accepted each year is limited, based on the resources available to the college (facilities, faculty, and field experience opportunities), the number of students required to plan coherent, systematic, quality programs, and the placement opportunities for graduates. During the past year, the college has been able to accept most qualified applicants.

Continuation in teacher education is subject to a review of qualifications before entrance to student teaching, and at other points in the training which may be necessary in individual cases.

Admission of Students from Colleges Outside of the University

It is policy of the college to give equal consideration to applicants applying from within and from outside of the University. Information about transfer may be obtained by writing to the Education Career Development Office, 1425 University Avenue S.E., or by talking with an adviser in that office.

Students who have not completed the amount and kind of course work necessary for admission to a program in the College of Education will generally be expected to complete the prescribed work prior to admission.

Admission of Students with Three or More Years of College Work

Those who have completed 3 or more years of college, including those who already hold the B.A. or B.S. degree, may enter the College of Education for work toward an additional degree and a teacher's certificate. Such students will be expected to earn a minimum of 45 credits while in residence in the College of Education and to fulfill the specific requirements of the curriculum in which they are enrolled. Courses transferred may be used to meet curriculum course requirements upon approval of the Student Progress Committee. The time needed to complete the program will be influenced by the extent and strength of preparation in the major field. Ordinarily, a quarter preceding a September-to-June registration will be needed.

PROCEDURES AND PRACTICES IN THE COLLEGE OF EDUCATION

Procedures for the most efficient use of college facilities are described generally in the following paragraphs; more detailed information and help on specific points may be secured at the information desk of the Education Career Development Office, 1425 University Avenue S.E.

Admission Procedures

1. Students applying for transfer to the College of Education from other divisions of the University should apply at the Office of Admissions and Records in Morrill Hall, where they will receive printed instructions.

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2. Students applying for transfer from other collegiate institutions should write to the Office of Admissions and Records for application materials and have a transcript of previous college credits sent to that office from each college they have attended. Students will be notified of acceptance and receive further instructions by mail.
3. All degree students must complete clearances before or shortly after admission in accordance with printed instructions distributed by the Office of Admissions and Records.
4. Persons of adult age and experience who desire to take specific courses in the college but are not candidates for a degree should apply at the Office of Admissions and Records for admission in adult special status. An adult special student who wishes to become a candidate for a degree must complete the regular college admission procedure.

Readmission Policy—The student previously admitted to one of the undergraduate degree programs in the College of Education whose day-school registration has been discontinued for 2 or more consecutive calendar years must apply for readmission at the Education Career Development Office. Readmission may be granted for any quarter, as appropriate to the student's program planning, and applicants will be considered according to the admission criteria in effect at the time of readmission. Students who apply for readmission will be held accountable for graduation requirements current at the time of readmission. Prior course work will be evaluated by the education department representing the applicant's major field, and the student may be required to supplement course work in areas where course content has undergone change since earlier work was completed.

Examinations for Advanced-Standing Credit—Students who believe themselves sufficiently prepared in a subject to pass an examination in it upon entrance may take such an examination without charge during the first quarter of University residence. Thereafter a \$20 fee is charged for each course examination for advanced-standing credit. The student should apply to a representative of the Student Progress Committee in 1425 University Avenue S.E. early in his first quarter in residence.

Examination for Credit—Credit for material mastered outside of class may be obtained by special examination. A student who believes that he is as well prepared in a particular subject as students successfully completing the course should apply to the Student Progress Committee for a special examination. If the request is approved, the department concerned will appoint a special faculty committee to administer the examination. During the first quarter in University residence, no fee is charged for this examination; thereafter the fee is \$20 for each examination.

Registration Procedures—Dates for registration in the college and the specific procedures to be followed are published each quarter in the Official Daily Bulletin contained in the *Minnesota Daily*. Students registering in the College of Education for the first time should obtain their admission certificates, registration materials, and instructions in the Education Career Development Office, 1425 University Avenue S.E.

Change of Registration—The student who finds it necessary to change his program should obtain a change in registration form ("cancel-add slip") at the information desk in the Education Career Development Office. The student may add a course or change to a different course during the first week of the quarter. Subsequent addition of a course requires the written consent of the instructor

Undergraduate Programs in the College of Education

and approval of the Student Progress Committee. Prior to the end of the sixth week in a quarter, the student may cancel registration in any course. After the sixth week, cancellation of a course in which the student is failing will result in a grade of N in the course. Cancel-add slips must be signed by the major adviser.

A student is not permitted to change his registration in a course to a different grading system after the second week of classes.

Change of Major—The student who wishes to change his major within the College of Education should see an adviser in the Education Career Development Office.

Application for a Degree—The student should file an application for a degree at the information window, Office of Admissions and Records, 1 full year before he expects to graduate.

Senior Balance Sheet—The senior balance sheet is mailed to the student approximately 1 quarter after application for a degree. It lists the required courses the student has completed, the total number of credits earned, and any deficiencies that must be removed before the student may graduate. It is to be used by the student and his adviser as a checklist of completed requirements.

Senior Physical Examination—A physical examination is required for teacher certification in the state of Minnesota. It is the responsibility of the student to make an appointment at the University Health Service and take the physical examination within 1 year prior to the date the degree is to be granted.

Application and Registration for Student Teaching—Admission to student teaching is not automatic. Students obtain applications and information in the Education Career Development Office, 1425 University Avenue S.E. For assignment in any quarter of an academic year, application should be filed during the spring quarter of the *preceding* year at dates which are announced in the Official Daily Bulletin of the *Minnesota Daily* and which are posted in the Education Career Development Office. Student teaching is not available during summer terms.

The programs listed in this section of the bulletin indicate the courses in which students register for student teaching. Admission, subject to final approval of the coordinator of field experiences, involves the following:

1. Completion of a satisfactory pattern of courses in the major field and the recommendation of the major adviser.
2. An average of C+ (2.50) in courses in the major, except in agricultural education which has special requirements, and in elementary education which requires a C (2.00).
3. Satisfactory progress toward degree requirements of the college, including an average of C in courses in the teaching minor.
4. Completion of basic junior courses (SeEd 3150 and 3155 for secondary education and Elem 3100 for elementary education).
5. Completion of admission clearances for the College of Education, including psychological tests and a recent satisfactory health clearance.
6. In modern languages, passing a special proficiency examination.

A student may be required at any time to cancel his registration in student teaching if he fails to meet the requirements or if his work is unsatisfactory.

Unsatisfactory Progress—Any student who is not making satisfactory progress in the curriculum in which he is registered may be placed on probation by the Student Progress Committee. This committee reviews the overall academic performance of students as well as their performance in major courses. In all cases,

the committee will attempt to counsel and advise individual students on academic progress before recommending probation.

Teaching Certification—When a senior student who wishes to teach in Minnesota registers for the final quarter in the College of Education, he is expected to apply for a teacher's certificate. He obtains the application form in the Education Career Development Office, attaches a money order for the certification fee (payable to the Commissioner of Education, State of Minnesota), and leaves the application and money order at the College of Education window in the Office of Admissions and Records. All other details are handled by the University, and at the time the degree is awarded, the qualified graduate is recommended for the appropriate certificate to teach in Minnesota schools in the area of his preparation.

Graduation Requirements

Students who complete the following requirements graduate from the College of Education with the bachelor of science degree and receive, upon application, the recommendation for an appropriate Minnesota teaching certificate.

In some specialized curricula, the number of credits required is more than 186. The student should read carefully the credit requirements of the curriculum in which he is interested in this section of the bulletin.

Amount and Quality of Work—A minimum of 186 credits with a C (2.00) average, including the required courses in physical education and public health, is needed for graduation. In a teaching minor, a grade of C (2.00) is required. In the student's major subject, excepting elementary education, a grade average of C+ (2.50) is required. For elementary education, a grade average of C (2.00) is required. These grade averages are based on University of Minnesota work exclusive of General College courses.

The College of Education permits its students to register for courses offered on an S-N basis, but interested students should check the restrictions on the use of S-N courses that are posted in the Education Career Development Office. Some departments have made provision for credit to be granted for independent study under a specified course number. Interested students should check with the department concerned.

Professional Requirements—Professional education courses are reserved for students admitted to an approved certificate program. The requirements for these programs are outlined in the descriptions of the specific curricula in this section of the bulletin.

Special Requirements—State law requires that all candidates for teaching certificates complete course work in public health, drug education, and physical education. Students in the College of Education must complete these requirements before graduation but need *not* complete them before making application for transfer to the college. The drug education requirement may be met by completing PubH 3004, Basic Concepts in Personal and Community Health (4 credits). The physical education requirement of 3 credits may be met by completing appropriate courses offered by the Department of Physical Education.

A State Department of Education regulation requires that all applicants for teacher certification complete a program in human relations prior to graduation. Students in the College of Education meet a portion of this requirement through methods courses and other experiences and the balance by completing PsyF 3380, Introduction to Human Relations, 3 credits.

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Residence Requirements—A minimum of 45 credits must be earned while in residence in the College of Education. Thirty of the last 45 credits of the degree program must be earned in residence. These are minimum residence requirements for graduation and, thus, for a degree and recommendation for a teaching certificate.

The required courses in education are arranged in a sequence for the junior and senior years. A student who does not enter the College of Education by the fall or winter quarter of his junior year may need to register for the summer terms preceding his senior year in order to complete the professional sequence.

Degrees and Honors—College of Education graduates receive the bachelor of science degree upon completion of an undergraduate program. Graduation with honors applies only to students whose first 4-year degree is received from this college; those entering with a previously earned Bachelor's degree are not eligible.

Application by the student for graduation with honors is not necessary. For consideration, a minimum of 45 credits in residence must be completed before the final quarter of the senior year. In determining eligibility for honors, grades for the final quarter of work required for graduation, and any subsequent grades, cannot be included in the computation. Eligibility for honors will be computed one time only and is initiated at the time of application for graduation. For graduation with distinction, an average of at least 2.95 is required for all credits earned in the University and 3.00 (B) for the work of the junior-senior years; for graduation with high distinction, these averages must be at least 3.45 and 3.50 (B+), respectively.

CURRICULA

CHILD PSYCHOLOGY

Willard W. Hartup, Chairman, 190 Child Development Building

A major in child psychology is offered through the College of Liberal Arts. Students interested in the B.A. degree in that area should consult the *College of Liberal Arts Bulletin*. The College of Education offers a program in nursery school and kindergarten education. For information, see Elementary Education in this section. Students interested in a postbaccalaureate program in child psychology should see the section on that field in Section III of this bulletin or consult the *Graduate School Bulletin*.

CURRICULUM AND INSTRUCTION

Robert Dykstra, Chairman, 130 Peik Hall

Art Education

The field of art education coordinates the varied facilities of the University available for art education training through program planning and advice for education majors at the undergraduate level. Upon graduation from the program, the student is recommended for Minnesota certification for teaching art in elementary and secondary schools. This curriculum includes basic training in art; an opportunity to specialize, through selection of electives, in the area of particular interest in art; a balanced general education; and professional preparation for teaching.

Students register for courses in liberal arts areas for the first year and should apply for admission early in the quarter in which they have completed 45 credits, 15 of which must be in the major field. Application for fall admission must be

received by the Office of Admissions and Records early in the previous spring quarter; applications for spring admission are due early in winter quarter. No students are admitted for winter quarter or summer terms.

The criteria for consideration for admission are: (a) completion of clearance procedures; (b) completion of 45 credits including 15 credits in the major with courses from three of five areas: art history, design theory, drawing and painting, sculpture, and design in materials; (c) minimum grade point average of C+ (2.50) in the major and C (2.00) overall; and (d) submission of a portfolio which is a representative sample of the applicant's work for departmental review. In addition, the nature and scope of the applicant's prior work with children and an assessment of personal characteristics are considered.

The C+ (2.50) major average, which is required for admission to the college, for admission to student teaching, and for graduation, is computed on all art and art education courses. Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward those requirements. A minor in a teaching subject, as listed in this bulletin, is recommended. As an alternative, 15 credits at the 3000 and 5000 levels outside both the major field and professional education courses may be chosen. In either case, a C (2.00) average is required for this part of the program.

Major in Art Education

Related Course Requirements

12 credits from humanities and/or history
Soc 1001—Introduction to Sociology (4)

Major Courses (minimum 48 credits)

Courses chosen to meet this requirement will be selected with departmental approval, to meet the needs of the individual art education student. A minimum of 12 credits in studio art course work must be taken in residence. The following courses are recommended to provide a well-balanced program:

Art History and Theory—minimum of 8 credits from:

ArtH 1001—Introduction to Visual Arts (4)
ArtH 1015—Art of Western Civilization (4)
ArtH 3008—History of Ancient Art (4)
ArtH 3012—History of 19th- and 20th-Century Art (4)
ArtS 1401—Introduction to Studio Art (4)

Design and Its Application—minimum of 24 credits from:

ArEd 1207—Experiences with Pictorial Expression (3)
ArEd 1208—Experiences with Design and Materials (3)
ArEd 1209—Experiences with Functional Design and Crafts (3)
ArEd 3009—Weaving Without a Loom (4)
ArEd 3010—Introduction to Weaving (3)
ArEd 3020—Contemporary Crafts (3)
ArEd 3030—Puppetry (3)
ArEd 5020—Advanced Contemporary Crafts (4)
ArtS 1104—Color (4)
ArtS 1701—Introduction: Photo Medium (4)
ArtS 1801—Ceramic Processes (4)
ArtS 3116—Commercial Art Media (3)
Th 1504—Elements of Technical Theatre (4)

Drawing, Painting, Sculpture, and Printmaking—minimum of 16 credits from:

ArtS 1101—Basic Drawing (4)
ArtS 1102—Drawing (4)
ArtS 1103—Introduction to Studio Arts (4)

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ArtS 1301, 1302—Basic Sculpture (4 cr each)

ArtS 1510—Intaglio (4)

ArtS 1520—Lithography (4)

ArtS 3121, 3122, 3123—Painting (4 cr each)

Professional Education Courses (minimum 45 credits)

ArEd 1501—Introduction to Art Education (2)

ArEd 3306, 3307, 3308—Principles and Experiences in Art Education (4 cr each)

ArEd 3506, 3507, 3508—The Teaching and Supervision of Art (2 cr each)
(juniors)

ArEd 3606, 3607, 3608—Student Teaching and Supervision of Art (3 cr each)
(seniors)

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
(seniors)

HEd 3090—School and Society (3)

Electives in education—3 credits

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (3)

Physical Education—3 credits

Electives to complete a total of 186 credits. Recommended are the continuation of a language begun in high school, speech and theatre arts, philosophy, history, sociology, psychology, sports, dance, journalism, music, or literature. Electives may be in art courses beyond the minimal requirements.

Minors in Art Education

Minor in Elementary School Art (minimum 27 credits)

Minor Courses

ArEd 1207—Experiences with Pictorial Expression (3)

ArEd 1208—Experiences with Design and Materials (3)

ArEd 1209—Experiences with Functional Design and Crafts (3)

6 credits in drawing and design

10 credits from studio art, related arts, or art history

Professional Courses

ArEd 3414—Teaching Art in the Elementary School (2)

Note: Completion of 5 additional credits in studio art courses will satisfy the requirement of an academic minor in the elementary education major for undergraduate students.

Minor in Secondary School Art (minimum 28 credits)

Minor Courses

ArEd 3306, 3307—Basic Principles and Experiences in Art Education (4 cr each)
4 credits in art history and theory

Electives—12 credits including a minimum of 8 in drawing and design

Professional Courses

ArEd 1501—Introduction to Art Education (2)

ArEd 3507—The Teaching and Supervision of Art (2)

Elementary Education

The curricula outlined in this section prepares students for our recommendation for certification to teach in the elementary school. Two basic programs are offered for persons of differing backgrounds in education, training, and experience: a major in elementary education for undergraduate students and a major in elementary education for students who already hold a B.A. or B.S. degree. Upon completion of the chosen program, students are eligible for recommendation for certification to teach grades 1 through 6 in the state of Minnesota. The kindergarten program is offered for those who wish to add this endorsement to their certificate.

Elementary education is a limited enrollment field, and applications must be received in the Office of Admissions and Records no later than the close of the first week of the quarter before entry. Students seeking admission should inquire at the Education Career Development Office, 1425 University Avenue S.E., for current information on admission procedures and assistance in making a choice of curriculum. After admission to the College of Education, the student will be assigned an adviser in the area of elementary education.

Major in Elementary Education for Undergraduate Students

Students should register for courses in liberal arts areas for the first 2 years and may apply for admission to the program early in the quarter in which they will have completed 90 quarter credits. Applications for fall admission must be received by the Office of Admissions and Records no later than the end of the first week of the previous spring quarter; applications for winter admission no later than the end of the first week of fall quarter. No students are admitted for the spring quarter or summer terms.

The criteria for consideration for admission are:

1. Completion of freshman English and the general psychology requirement.
2. Completion of 90 quarter credits with a grade point average of C (2.00). Preference will be given to applicants with a higher grade point average.
3. Within 12 credits of completion of items 1 through 5 of the Related Course Requirements listed below.

The nature and scope of the applicant's prior work with children and an assessment of personal characteristics are also considered. Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements.

Related Course Requirements

1. Spch 1101—Fundamentals of Speech (5) (or) Spch 1102—Communication in the Modern World: Interpersonal (4)
2. Math 1005 and 1006—Foundations of Arithmetic (3 cr each)
3. 13 credits in science including courses in physical and biological science
4. 12 credits from at least two of the following areas: anthropology, economics, geography, history, political science, social science, and sociology
5. Mus 1001—Fundamentals of Music (4)
6. 18 credits in academic courses at the 3000 or 5000 level including Engl 3851—The English Language (4). (The student may also count PubH 3004, any credits accumulated in 1000-level courses in physical and biological science in

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excess of the 13-credit requirements, and credits in mathematics courses numbered 1142 or above to meet this requirement)

7. A concentration of 30 credits in any one of the following fields: anthropology, art, economics, English, a foreign language, geography, history, humanities, mathematics, music, philosophy, science, political science, psychology, sociology, speech. Courses from items 1 through 6 may be included.

Major and Professional Courses

Elem 3100—Psychological Foundations of Elementary Education (5)

Elem 3102—Orientation to Teaching in the Elementary School (1)

Elem 3103—The Teacher and the Elementary School (2)

Basic Methods Courses:

Elem 3300—Children's Literature (3)

Elem 3316—Teaching English in the Elementary School (3)

Elem 3331—Teaching Reading in the Elementary School (3)

Elem 3346—Teaching Science in the Elementary School (3)

Elem 3361—Teaching Social Studies in the Elementary School (3)

Elem 3391—Teaching Mathematics in the Elementary School (3)

(A student may use only two basic methods courses taken outside of the College of Education. It is strongly recommended that students complete 9 credits of the methods courses prior to the first quarter of student teaching.)

Minimum of 10 credits in student teaching from Elem 3600, 3601, 3603, 3605, 3606, 3607, 3610, 3630, 3631, 3633, 3634, 3636, 3639

ArEd 3001—Survey of Art Activities (4)

HEd 3090—The School and Society (3)

MuEd 3011—Teaching Music in the Elementary School (3)

Hlth 3330—Teaching Health in the Elementary School (3)

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

PE 3327—Teaching Physical Education in the Elementary School (3), which completes the physical education requirement

Electives to complete 186 credits

Quality of Work—The student must earn a C (2.00) average for the total program and an average of C (2.00) separately for the major and professional education courses, excluding MuEd 3011 and ArEd 3001.

Major in Elementary Education for Postbaccalaureate Students

Completion of this program will culminate in a B.S. degree with a major in elementary education and recommendation by the college for certification to teach grades 1 through 6 in the state of Minnesota.

A limited number of students will be accepted into the program each academic year. Applications are considered for fall quarter admission only and must be received in the Office of Admissions and Records no later than the end of the first week of the previous spring quarter. Criteria for consideration for admission include a baccalaureate degree from an accredited institution with a minimum overall grade point average of C+ (2.50).

The content of the baccalaureate program must meet the minimum Liberal Education Distribution Requirements (see this section of the bulletin) and must contain the liberal arts prerequisites for professional education courses; or the student must plan to complete these deficiencies during the summer terms prior to the fall quarter in which he enters the program. The liberal arts prerequisites

are completion of one course in each of the following areas: general psychology, foundations of arithmetic, fundamentals of music, linguistics, and a course in public health which will satisfy the certification requirement of the State Department of Education.

Students admitted to this program are required to complete a minimum of 12 credits per quarter with a minimum grade point average of C (2.00).

Major and Professional Courses (minimum 45 credits)

- Elem 3100—Psychological Foundations of Elementary Education (5)
- Elem 3101—Introduction to Elementary School Teaching (3)
- Elem 3300—Children's Literature (3)
- Elem 3316—Teaching English in the Elementary School (3)
- Elem 3331—Teaching Reading in the Elementary School (3)
- Elem 3346—Teaching Science in the Elementary School (3)
- Elem 3361—Teaching Social Studies in the Elementary School (3)
- Elem 3391—Teaching Mathematics in the Elementary School (3)
- Elem 3607—Student Teaching in the Elementary School: Full Days (10)
- MuEd 3011—Teaching Music in the Elementary School (3)
- PE 3327—Teaching Physical Education in the Elementary School (3)

Kindergarten Endorsement Program

Students who wish to be certified for kindergarten teaching are required to complete the following courses with an average of C (2.00) in addition to the major for undergraduate students or the major for postbaccalaureate students as outlined:

- Elem 3376—Nursery School-Kindergarten Curriculum I (3)
- Elem 3377—Nursery School-Kindergarten Curriculum II (3)
- CPsy 3301—Child Psychology (4)
- Elem 3603—Student Teaching in the Kindergarten (6)—substituted for Elem 3601 in the elementary major

Teaching Educationally Disadvantaged Children

Elementary education advisers will assist interested students in planning for a special emphasis on the teaching of the disadvantaged, through course selection and student teaching assignment. Such students should consult their advisers as early as possible in the junior year.

Nursery School Certification

Note—Students wishing to enter this program should consult Professor Shirley Moore, Institute of Child Development. A minimum grade point average of C+ (2.50) is required for admission to this program, and a limited number of students will be accepted each academic year.

Elementary education majors wishing to qualify for teacher certification at the nursery school level must complete the following courses as part of, or in addition to, preparation for elementary and kindergarten teaching:

Early Childhood Education—15 credits

- Elem 3376—Nursery School-Kindergarten Curriculum I (3)
- Elem 3377—Nursery School-Kindergarten Curriculum II (3)
- Elem 3378—Social Learning in Early Childhood Education (3)
- Elem 3604—Student Teaching in the Nursery School (3-6)
- Electives—3 credits

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Childhood Psychology—12 credits

CPsy 3301—Child Psychology (4)

Two additional courses in Child Psychology from the following list:

CPsy 5311—Behavior Problems (4)

CPsy 5330—Directed Experiences with Children

Option A**—Case Study of Children (4)

Option B**—Social Behavior of Children (4)

Option C**—Cognitive Stimulation of Children (4)

CPsy 5331—Processes of Socialization of Children (4)

CPsy 5333—Personality Development (4)

CPsy 5335—Peer Relations (4)

CPsy 5339—Parent-Child Relations (4)

CPsy 5341—Perceptual Development (4)

CPsy 5343—Cognitive Development (4)

CPsy 5345—Language Development (4)

CPsy 5347—Learning in Children (4)

Mathematics Education

Major in Mathematics

A minimum of 3 years of high school mathematics which includes a foundation in solid geometry is a prerequisite for both majors and minors in mathematics. Four years of high school mathematics are recommended. Students will take course work for the first 2 years in liberal education areas and meet the requirements for admission to a secondary education major, including courses prerequisite to Math 1211 (Analysis I—One-Variable Calculus) and a satisfactory mathematics placement test score, or Math 1201 (Pre-Calculus). One or more minors must be selected from those subjects commonly taught in the high school. Requirements for admission to a secondary education program are listed in this section of the bulletin. Students are expected to complete the Liberal Education Distribution Requirements as specified in this section of the bulletin. Appropriate major courses may be used toward these requirements.

Major Courses (minimum 48 credits)

Math 1211, 1221, 1231—Analysis (One-Variable Calculus) I, II, III (5 cr each)
(or) Math 1311, 1321, 1331—Computer Calculus I, II, III (5 cr each) (or)

Math 1611, 1621—Accelerated Calculus I, II (5 cr each)

Math 3161—Synthetic Metric Geometry (4) (and) one other course from geometry list

Math 3611—Analysis III (5) (or) Math 3211—Analysis IV (5)

One course in analysis from analysis list

One course in algebra from algebra list

One additional course in either analysis or algebra from the list

One course in probability or mathematical statistics from list

Computer programming: CICS 3101 or equivalent

Courses to complete 48 credits chosen from the following lists:

Analysis: Math 3066, 3581, 3675, 5151, 5601, 5602, 5603, 5606, 5607, 5612, 5613, 5614, 5625

Algebra: Math 3142, 3582, 5152, 5209, 5242, 5243, 5244, 5282, 5283, 5284, 5154

Geometry: Math 3583, 5341, 5342, 5357, 5359, 5366, 5367, 5368, 5375, 5376, 5377

Probability and Statistics: Stat 3091, 5131, Math 5679, 5681

** Strongly recommended for students with no previous experience with groups of young children.

Professional Education Courses (minimum 29 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- HEd 3090—The School and Society (3)
- 5 credits from SeEd 3365, 3366, 3367—Teaching Secondary School Mathematics (or) appropriate substitute for 3366 and/or 3367
- 9 credits in SeEd 3661—Student Teaching in Mathematics (1, 3, 6, or 9)
- 2 credits in education electives selected in consultation with an adviser (MthE 5322 or 5366 recommended)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Minor in Mathematics

Minor Courses

- Math 1211, 1221, 1231—Analysis (One-Variable Calculus) I, II, III (5 cr each) (or) Math 1311, 1321, 1331—Computer Calculus I, II, III (5 cr each) (or) Math 1611, 1621—Accelerated Calculus I, II (5 cr each)
- Math 3611—Analysis III (5) (or) Math 3211—Analysis IV (5)
- One course in algebra and one course in analysis from listing of major courses in mathematics
- Math 3161—Synthetic Metric Geometry (4)
- Electives—4 credits

Professional Education Courses

- SeEd 3365—Teaching Secondary School Mathematics (3)

Music Education

For the undergraduate curriculum in music education, a student normally enters the College of Education after completing 45 credits with at least a C (2.00) average in liberal arts courses. The freshman year's work must include 6 credits in materials and structure of music, 6 credits in ear-training and sight-singing, 4 credits in history of music, 6 credits in applied music, 2 credits in Introduction to Public School Music Teaching (MuEd 1201), and membership in performing organizations for 3 quarters. The student should apply for admission to the College of Education early in the quarter in which he will meet these requirements. See this section of the bulletin for admission procedures.

The following programs are offered in music education: (1) vocal-general concentration; (2) instrumental concentration, wind emphasis; and (3) instrumental concentration, string emphasis. Common and special requirements for the several concentrations are listed below, following the information concerning applied music which relates to all concentrations.

Applied Music Entrance Requirements—In order to take applied music for credit, a student must qualify on the basis of an entrance examination. Guidelines for examinations on the various instruments are:

Piano—A student should be able to play (1) major and minor scales in a moderate tempo; (2) three pieces in different styles, such as a Bach invention or dance from one of the suites; one of the less difficult sonatas by Haydn, Mozart, or Beethoven; and one of the shorter pieces by a 19th- or 20th-century composer.

Organ—Same as for piano, and sight-reading of hymns.

Voice—Sing on pitch, with correct phrasing and musical intelligence, standard songs in good English (the simpler classics recommended); demonstrate ability

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to read a simple song at sight; and have a knowledge of the rudiments of music. A knowledge of piano is also recommended.

Violin—Major and minor scales, arpeggios, the simple Kreutzer Etudes; a sonata by Handel, Haydn, Mozart, Schubert; a more modern work displaying special techniques peculiar to the violin. A knowledge of piano is also recommended.

Other Orchestral Instruments—A student should be able to play, with good tone, phrasing, and style, two solo numbers of good musical quality. He will be examined in sight-reading as well as in the playing of scales. A knowledge of piano is also recommended.

Course Credits and Classification—Courses in applied music carry 2 credits per quarter for a minimum of 10 private half-hour lessons or 4 credits for a minimum of 10 one-hour lessons. They are classified according to three modes: *elective* (with or without credit), *applied*, and *performance*; and four levels: prefix 1, or 0 for no credit; prefix 3; and two graduate levels of prefixes 5 and 8. A student may not register for a course in applied music for credit until he has passed the required applied entrance examination. The examining committee will determine the mode(s) for which a student may register. The student should consult the Department of Music regarding the mode and level of applied music appropriate for fulfilling his specific requirements.

Major Requirements for All Students—At least 18 credits in the principal applied medium, selected from Mus 1201 through 1225 (or 1301 through 1325) and 3201 through 3225 (or 3301 through 3325); at least 6 credits at the 3000 level required, for which a student may register after completing 12 credits at the 1 or 0 designated level on the same instrument, passing a qualifying examination, and satisfactorily completing sophomore clearance. All students are required to pass a piano proficiency examination prior to admission to student teaching. It is recommended that a student complete the applied music requirements by the end of the junior year and register for applied music credits beyond the requirements if possible.

Major in Music Education

Students are expected to complete the Liberal Education Distribution Requirements as follows:

Completion of freshman English or exemption and, in addition, a total of 28 credits in Groups A, B, and C:

- A. Communication, Language, Symbolic Systems (minimum 8 credits)
Linguistics, rhetoric, logic, philosophic analysis, mathematics, statistics, foreign languages
- B. Physical and Biological Sciences (minimum 12 credits) (no laboratory required)
- C. Man and Society (minimum 8 credits including Psy 1001)
- D. Artistic Expression (minimum 12 credits)
Requirements in Group D are satisfied by course work in the major.

In addition, for a major in music education, a student must complete the following requirements.

REQUIREMENTS COMMON TO ALL CONCENTRATIONS

Major Courses

Mus 1501 through 1506—Materials and Structure of Music I, II (2 cr each)

Mus 1511 through 1516—Ear-Training and Sight-Singing I, II (2 cr each)
18 credits in applied music from Mus 1201 through 1225 (or 1301 through 1325) and 3201 through 3225 (or 3301 through 3325)
Mus 1603 through 1606—History of Music (4 cr each)
Ensemble experience during every quarter of on-campus study, to be determined in consultation with an adviser

Professional Education Courses

MuEd 1201—Introduction to Public School Music Teaching (2)
SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each) (or)
Elem 3100—Psychological Foundations of Elementary Education (5) (and)
Elem 3101—Introduction to Elementary School Teaching (3)
HEd 3090—The School and Society (3)
12 credits in MuEd 3650—Student Teaching and Supervision of Music (3-12)

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)
PubH 3004—Basic Concepts in Personal and Community Health (4)
Physical Education—3 credits

Admission to Student Teaching—All applicants must have completed SeEd 3150 and 3155 in the special music section in spring quarter of the junior year and, with an average of C+ (2.50), all required courses in music theory, history, principal applied medium, and all courses listed for the student's concentration.

Grade Point Average Requirement—An average of C+ (2.50) is required in applied music, principal medium: 18 credits from Mus 1201 through 1225, 1301 through 1325, 3201 through 3224, 3301 through 3325; Mus 1501 through 1506, 1511 through 1516, 1603 through 1606; MuEd 1201, plus all courses listed for the student's concentration.

Concentration Requirement—In addition to the common requirements, a student is expected to complete one of the following concentrations:

VOCAL-GENERAL CONCENTRATION

Major Courses

Major in voice or piano or organ or guitar (minimum of 18 credits in the major performing medium, plus a minimum of 6 credits in voice for non-voice majors)
Mus 5741 or 5742—Vocal Literature (4)

Professional Education Courses (minimum 31 credits)

MuEd 3301—Teaching Music in Grades K-3 (4)
MuEd 3302—Teaching Music in Grades 4-6 (4)
MuEd 3311—Teaching Music in the Secondary School I (4)
MuEd 3312—Teaching Music in the Secondary School II (4)
MuEd 3322—Techniques of Classroom Instruments (4)
MuEd 3331—Teaching Choral and Instrumental Music in the Public Schools (4)
MuEd 3415, 3416—Choral Laboratory I, II (4 cr each)
MuEd 5432—Adolescent Singing Voice (3)

Additional courses are available for students who desire further specialization in elementary, general, or secondary choral music. Students desiring further specialization should consult with a departmental adviser.

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INSTRUMENTAL CONCENTRATION, WIND EMPHASIS

Major Courses

Applied major on a standard band instrument

Professional Education Courses (minimum 30 credits)

- MuEd 1504—String Techniques I (4) (or) MuEd 1505—String Techniques II (4)
- MuEd 1515—Woodwind Techniques (4)
- MuEd 1525—Brass Techniques (4)
- MuEd 1535—Percussion Techniques (4)
- MuEd 3331—Teaching Choral and Instrumental Music in the Public Schools (4)
- MuEd 3515, 3516—Instrumental Laboratory I, II (5 cr each)

INSTRUMENTAL CONCENTRATION, STRING EMPHASIS

Major Courses

Applied major on a string instrument

Professional Education Courses (minimum 30 credits)

- MuEd 1504—String Techniques I (4) (or) Mus 5361, 5362, 5363—Violin Pedagogy (2 cr each)
- MuEd 1505—String Techniques II (4)
- 8 credits from MuEd 1515—Woodwind Techniques (4), MuEd 1525—Brass Techniques (4), MuEd 1535—Percussion Techniques (4)
- MuEd 3331—Teaching Choral and Instrumental Music in the Public Schools (4)
- MuEd 3515, 3516—Instrumental Laboratory I, II (5 cr each)

Minor in Music Education

This teaching minor is for secondary education majors only. An interview and written approval from a music education adviser are required before the student begins course work in the minor. A minimum of 33 credits is required in music and music education.

Minor Courses

- Mus 1021—Introduction to Music (5) (or) Mus 3021—Introduction to Music (5)
- Minimum of 4 credits from Mus 5027, 5028, 5029—History of Musical Styles (4 cr each) (or) Mus 1804—World Music (4)
- Minimum of 4 credits from Mus 1501, 1502, 1503—Materials and Structure of Music (2 cr each)
- Minimum of 4 credits from Mus 1511, 1512, 1513—Ear-Training and Sight-Singing (2 cr each)
- Minimum of 2 credits from Mus 1101, 1201—Applied Piano (2-4 cr each) (or) Mus 1151, 1152, 1153—Class Piano (2 cr each)
- Minimum of 2 credits from Mus 1104, 1204—Applied Voice (2 or 4 cr each) (or) Mus 1161, 1162, 1163—Class Voice (2 cr each)
- Minimum of 2 credits from Mus 1430 or 5430—University Chorus, Women's Chorus, Men's Chorus (1) (or) Mus 5490—Chamber Singers (2)

Professional Education Courses

- MuEd 3415, 3416—Choral Laboratory I, II (5 cr each) (or) MuEd 3311, 3312—Teaching Music in Secondary School I, II (4 cr each)

Major in Music Therapy

For the undergraduate curriculum in music therapy, a student normally enters the College of Education after completing 45 credits with at least a C (2.00) average in a liberal arts area. The freshman year's work must include 6 credits in materials and structure of music; 6 credits in ear-training and sight-singing; 4 credits in history of music; 6 credits in applied music at the major level; MuEd 1801, Introduction to Music Therapy; Biol 1001, General Biology; Psy 1001, General Psychology; a piano proficiency examination; and a personal interview with the coordinator of the music therapy program.

Additional clearances include:

1. Junior Year Clearance—minimum of 90 credits with an overall average of C (2.00) and C+ (2.50) in music and education including at least 12 credits in applied music.
2. Senior Standing—minimum of 135 credits with an overall average of C (2.00) and C+ (2.50) in music, music education, and MuEd 3801, 3802, 3803; completion of Psy 3604, Phys 1002; and guitar proficiency.
3. Internship Clearance—completion of all course requirements with an average of C+ (2.50) in MuEd 1801, 3801, 3802, 3803, 3804, 3805.

Related Course Requirements

Biol 1001—General Biology (5)

Phys 1002—Human Physiology (4)

Psy 1001—General Psychology (5)

Psy 3604—Abnormal Psychology (4)

Minimum of 20 additional credits in the behavioral sciences, social sciences, and special education selected in consultation with the music therapy adviser

Major Courses

Mus 1501 through 1506—Materials and Structure of Music I, II (2 cr each)

Mus 1511 through 1516—Ear-Training and Sight-Singing I, II (2 cr each)

Mus 1603 through 1606—History of Music (4 cr each)

At least 18 credits in applied music with 6 in the principal applied medium selected from Mus 1201 through 1225 (or 1301 through 1325). Students with principal medium other than voice must complete at least 4 credits in voice through private or class lessons. Additional applied credits may be elected in piano and guitar.

Minimum of 8 credits in music or music education to be selected in consultation with the music therapy adviser

Professional Education Courses (minimum 54 credits)

MuEd 1504—String Techniques I (4) (or) MuEd 1505—String Techniques II (4)

MuEd 1515—Woodwind Techniques (4)

MuEd 1525—Brass Techniques (4)

MuEd 1535—Percussion Techniques (4)

MuEd 1801—Introduction to Music Therapy (1)

MuEd 3322—Techniques of Classroom Instruments (4)

MuEd 3415—Choral Laboratory I (4) (and) MuEd 3515—Instrumental Laboratory I (5)

MuEd 3801, 3802, 3803—Psychology of Music I, II, III (4, 4, 2 cr)

MuEd 3804, 3805, 3806—Music Therapy Techniques I, II, III (4, 4, 2 cr)

MuEd 3851, 3852—Clinical Internship (2 cr each)

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits; courses in dance and dance therapy recommended

For certification by the National Association for Music Therapy, the minimum number of credits required in the music therapy program is 192.

Secondary Education

Admission to Secondary Education—The student planning to teach in language arts, foreign languages, mathematics, science, or social studies must complete 2 years of preprofessional work in liberal education areas before transferring to the College of Education. Applications for fall admission must be received by the Office of Admissions and Records early in the previous spring quarter; applications for spring admission must be received early in the previous winter quarter. No students are admitted for the winter quarter or summer terms.

Criteria for admission include:

1. Completion of 90 quarter credits, including 15 quarter credits in a major field and 10 quarter credits in a minor field.
2. A minimum grade point average of C (2.00) overall, C+ (2.50) in major courses, and C (2.00) in minor courses. Since a minor is not required with a major in any of the social studies fields, students must have completed a minimum of 25 credits in courses in the major and supporting fields with a C+ (2.50) grade point average.
3. Completion of general psychology and most of the Liberal Education Distribution Requirements.

Requirements for Certification and Graduation—University students who seek recommendation for Minnesota certification in their subject area in the secondary schools (grades 7-12) must complete that program within the College of Education. A student wishing to teach outside of Minnesota may have his program modified to meet the specific requirements of that state. In selecting a major or minor, the student should (a) choose from those subjects commonly taught in high schools, with regard to placement opportunities; (b) study the requirement in the chosen field described in this section, noting that some majors require a specific minor; and (c) make the decision as early as possible in his academic career.

English, Speech-Communication, Theatre Arts

Major in English

Students intending to major in English should take course work for the first 2 years in liberal education areas. During this time they must complete a minimum of 16 credits in English courses beyond freshman English, including Comp 1027 or 3030. Requirements for admission to a secondary education program are listed in this section of the bulletin.

English majors have the option of completing a presently defined minor or declaring a supporting area of study developed by the individual student in cooperation with his program adviser and approved by the Student Progress Committee.

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements.

Major Courses (minimum 61 credits)

- 8 credits in history and development of English literature: 4 credits at 1000 level and 4 credits at 3000 or 5000 level
- 8 credits in history and development of American literature: 4 credits at 1000 level and 4 credits at 3000 or 5000 level

- 4 credits in the study of a single major English or American literary figure (a course in Shakespeare is strongly recommended)
- 8 credits in the English Language: Engl 5851—Structure of Modern English (4) (and) one course from Engl 5815—History of the English Language (4), Engl 5831—American English (4), Engl 5843—American Social Dialects (4)
- 8 credits in composition: Comp 1027—Intermediate Writing (4) (or) Comp 3030—Topics in Advanced Composition (4) (and) 4 credits from Comp 1027, 3030, or Comp 5107—The Writing Experience (4) (or) Comp 5108—The Writing Experience (4) (or) any 1000-level creative writing course
- 13 credits in speech and theatre: Spch 1101—Fundamentals (5) (and) one course from Spch 3401, 3605, 3641, 5431 (and) one course from Th 1101, 3801, 1504
- Electives—12 credits in 3000- and 5000-level courses chosen from English; humanities; AmSt 3111, 3112, 3113; Arth 3921, 3922, 3923

Professional Education Courses (minimum 34 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- SeEd 3320—Bases for Instruction in Secondary English Curricula (3)
- SeEd 3325—Instructional Practice in English, Speech, and Theatre Arts (3)
- SeEd 3326—Teaching Adolescent Literature in Secondary Schools (3)
- SeEd 3327—Teaching Writing in Secondary Schools (3)
- SeEd 3621—Directed Experience in Teaching English, Speech, and Language Arts (6-9)
- HED 3090—The School and Society (3)
- Electives—one course from SeEd 3331, 5324, 5325, 5326, 5340

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Note—Students are encouraged to elect enrollment in SeEd 3151—Directed Study to explore problems and issues beyond the scope of required courses. Individual faculty members will advise.

Minor in English

Minor Courses (minimum 33 credits)

- 8 credits in history and development of English literature: 4 credits at the 1000 level and 4 credits at 3000 and 5000 levels
- 8 credits in history and development of American literature: 4 credits at the 1000 level and 4 credits at the 3000 and 5000 levels
- Engl 5851—Structure of Modern English (4)
- Comp 1027—Intermediate Writing (4) (or) Comp 3030—Topics in Advanced Composition (4)
- Spch 1101—Fundamentals (5)
- Th 1101—Introduction to Theatre Arts (4) (or) Th 1504—Elements of Technical Theatre (4) (or) Th 3801—Oral Interpretation of Fiction (4)

Major in Speech-Communication

The student majoring in speech-communication will take course work for the first 2 years in liberal education areas, completing a minimum of 17 credits in speech including Spch 1101.

Requirements for admission to a secondary education program are listed at the beginning of this section. Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appro-

Undergraduate Programs in the College of Education

appropriate related and major courses may be used toward these requirements. An average of C+ (2.50) in major courses and C (2.00) in minor courses is required.

Major Courses (minimum 52 credits)

Spch 1101—Fundamentals (5)

33 credits from the listed courses distributed in the following areas of study:

1. Theory and practice in advanced public speaking
Spch 3605—Advanced Public Speaking (4)
 2. Speech science
CDIs 3101—Introduction to Speech Pathology and Audiology (4)
 3. Theory and practice in the deliberative processes
Spch 3641—Discussion and Conference Methods (4) (or) Spch 3615—Argumentation (4)
 4. Theory and practice in oral interpretation
Th 3801—Oral Interpretation of Fiction (4)
 5. Communication theory, language and human behavior
Spch 3401—Process of Interpersonal Communication (4) (or) Spch 5404—Speech and Language in Human Behavior (4)
 6. Theory and practice in broadcast media
Spch 3201—Introduction to Broadcasting Production (4)
 7. Rhetorical theory, history, and criticism of public address
Spch 5611—Classical Rhetoric (4) (or) Spch 5615—Introduction to Rhetorical Criticism (4) (or) Spch 5616—Public Address in Britain and the Commonwealth (4) (or) Spch 5617—History and Criticism of American Public Address (4) (or) Spch 5618—History and Criticism of American Public Address (4)
- 12 elective credits from at least two of the above seven areas of study, but not restricted to those specific courses listed above

Professional Education Courses (minimum 34 credits)

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 or each)

SeEd 3325—Instructional Practice in English, Speech, and Theatre Arts (3)

SeEd 3621—Directed Experiences in Teaching English, Speech, and Language Arts (6-9)

SeEd 5340—Teaching of Speech and Forensics in Secondary Schools (3)

HED 3090—The School and Society (3)

Electives—three courses from SeEd 3320, 3326, 3327, 3331, 5324, 5325, 5326

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits

Because of the close relationship between English and speech in Minnesota high schools, *students majoring in speech must minor in English*. Modification of the minor requirement may be made on recommendation of the program area adviser with the approval of the Student Progress Committee, but all speech majors must complete Comp 1027 or 3030 and one course from Engl 5831, 5843, 5851. In addition to the course work listed above, all speech majors are required to participate in one or more activities such as debate, theatre, and broadcasting.

Minor in Speech-Communication

Minor Courses (minimum 29 credits)

Spch 1101—Fundamentals (5)

24 credits from six of the seven areas of study listed in the speech-communication major above

Note—English majors who are minoring in speech-communication may count the speech-theatre component of the English major as part of this minor if course work is properly selected. Such students should take Spch 1101, Th 3801, and 4 credits from Spch 3401, 3605, or 3641 to satisfy both major and minor requirements.

Major in Theatre Arts

A student majoring in theatre arts will take courses for the first 2 years in liberal education areas, completing a minimum of 16 credits in the theatre courses listed below. Requirements for admission to a secondary education program are listed at the beginning of this section. Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements. An average of C+ (2.50) in major courses and C (2.00) in minor and related courses is required. In addition to the listed course work, majors and minors are required to participate in theatre and/or oral interpretation activities.

Major Courses (minimum 45 credits)

- Th 1101—Introduction to Theatre Arts (4)
- Th 1321—Beginning Acting: Creative Approach (4)
- Th 1504—Elements of Technical Theatre (4)
- Th 3311—Voice Production for the Theatre (2)
- Th 3708—Play Production: Secondary School (4) (or) Th 3711—Stage Direction (4)
- Th 3709—Play Production: Secondary School (4) (or) Th 3712—Stage Direction (4)
- Th 3801—Oral Interpretation of Fiction (4)
- Spch 1104—Communication in the Modern World: Performing Arts (4)
- Electives—15 credits in theatre courses selected with CLA and College of Education theatre advisers

Professional Education Courses (minimum 34 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- SeEd 3325—Instructional Practice in English, Speech, and Theatre Arts (3)
- SeEd 3621—Directed Experience in Teaching English, Speech, and Language Arts (6-9)
- SeEd 5324—Curriculum Problems and Issues in Teaching Theatre Arts in Secondary School (3)
- HED 3090—The School and Society (3)
- Electives—three courses from SeEd 3320, 3326, 3327, 3331, 5325, 5326, 5340

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Because of the close relationship between English and theatre arts in Minnesota high schools, *students majoring in theatre arts must minor in English*. Modification of the minor requirement may be made on recommendation of the program area adviser with the approval of the Student Progress Committee, but all theatre arts majors must complete Comp 1027 or 3030 and one course from Engl 5831, 5843, 5851.

Undergraduate Programs in the College of Education

Minor in Theatre Arts

Minor Courses (minimum 24 credits)

- Th 1101—Introduction to Theatre Arts (4)
 - Th 1321—Beginning Acting: Creative Approach (4)
 - Th 1504—Elements of Technical Theatre (4)
 - Th 3708—Play Production: Secondary School (4) (or) Th 3711—Stage Direction (4)
 - Th 3801—Oral Interpretation of Fiction (4)
 - Spch 1104—Communication in the Modern World: Performing Arts (4)
- One theatre course to be elected—4 credits

Foreign Languages

The College of Education and the language departments of the College of Liberal Arts offer programs of study for teaching majors in French, German, Hebrew, Latin, Russian, and Spanish; and minors in French, German, Hebrew, Italian, Russian, and Spanish. A student intending to major in any one of these areas will take course work in liberal education areas for the first 2 years. During this time the student should meet requirements for admission to a secondary education program as listed at the beginning of this section, as well as all of the requisites for junior-senior courses in the specific language.

Students are expected to complete the Liberal Education Distribution Requirements as specified in this section of the bulletin. Appropriate major and related courses may be used toward these requirements. It is strongly recommended that the student take courses in the areas Man and Society and Artistic Expression which relate to the specific language. One or more minors must be selected from those subjects commonly taught in the high school.

Experience in an appropriate foreign country is *strongly recommended* before student teaching. The student's proficiency in listening comprehension, speaking, reading, writing, culture and civilization, linguistics, and professional preparation will be tested before entrance into SeEd 3334 (Teaching Foreign Languages) and SeEd 3631 (Student Teaching in Foreign Languages).

Major in French

Note—Students may choose to participate in the honors program if they wish. Consult the *College of Liberal Arts Bulletin*.

Major Courses (minimum 54 credits)

- Fren 3015—French Conversation and Composition (5)
 - Fren 3016—Advanced French Conversation and Composition (5)
 - Fren 3104—Introduction to French Literary Texts (5)
 - Fren 3201—The French Literary Tradition (5)
 - Fren 3501—French Civilization and Culture (5)
 - Fren 3502—Contemporary French Civilization and Culture (5)
 - Fren 3701—The Development of the French Language (5)
 - Fren 5701, 5702—Structure of Modern French Phonology, Morphology, Syntax (5 cr each)
- One course in literature

Professional Education Courses (minimum 38 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- 9 cr in SeEd 3334, 3335—Teaching Foreign Languages
- 12 cr in SeEd 3631—Student Teaching in Foreign Languages (3-6-9)
- HEd 3090—The School and Society (3)
- SeEd 5122—Language Conversation for Teachers (4)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Minor in French

Minor Courses (minimum 25 credits)

- Fren 3015—French Conversation and Composition (5)
- Fren 3016—Advanced French Conversation and Composition (5)
- Fren 3104—Introduction to French Literary Texts (5)
- Fren 3201—The French Literary Tradition (5)
- Fren 3501—French Civilization and Culture (5) (or) Fren 3502—Contemporary French Civilization and Culture (5)

Professional Education Courses

- SeEd 3334—Teaching Foreign Languages (6)
- SeEd 5122—Language Conversation for Teachers (4)

Major in German

Major Courses (minimum 56 credits)

- Ger 3011, 3012, 3013—Composition and Conversation (4 cr each)
- Ger 3104—Reading and Analysis of Literary Texts: Selected Prose and Drama (4)
- Ger 3105—Reading and Analysis of Literary Texts: Selected Drama and Poetry (4)
- Ger 3501—Contemporary Germany (4) (and) 12 credits in literature beyond Ger 3104
- Ger 3512, 3513—German Civilization and Culture (4 cr each)
- Ger 3701—History of the German Language (4)
- Ger 5101—The Structure of Modern German: German Phonology (4) (or) Ger 5102—German Structure (4)
- Ger 5011—Advanced Conversation and Composition (4)

Professional Education Courses

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each) 9 cr in SeEd 3334, 3335—Teaching Foreign Languages
- 12 cr in SeEd 3631—Student Teaching in Foreign Languages (3-6-9)
- SeEd 5122—Language Conversation for Teachers (4)
- HEd 3090—The School and Society (3)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Minor in German

Minor Courses (minimum 32 credits)

- Ger 3011, 3012, 3013—Composition and Conversation (4 cr each)
- Ger 3104—Reading and Analysis of Literary Texts: Selected Prose and Drama (4)
- Ger 3501—Contemporary Germany (4)
- Ger 3512, 3513—German Civilization and Culture (4 cr each)
- Ger 5011—Advanced Conversation and Composition (4)

Professional Education Courses

- SeEd 3334—Teaching Foreign Languages (6)
- SeEd 5122—Language Conversation for Teachers (4)

Undergraduate Programs in the College of Education

Major in Hebrew

Major Courses (minimum 65 credits)

- Ling 3005—Linguistics for Foreign Language Teachers (4)
- Hebr 3015, 3016, 3017—Advanced Modern Hebrew (4 cr each)
- 2 courses from Hebr 3201, 3202 (or) 3201H, 3202H—A Book of the Bible (4 cr each) (or) Hebr 5104, 5105—Problems in Biblical Studies (4 cr each)
- Two courses from Hebr 3111, 3112—Rabbinical Texts (4 cr each) (or) Hebr 3131, 3132—Talmudic Texts (4 cr each)
- Two courses from Hebr 3301—Modern Hebrew Essay (4), Hebr 3304—Modern Hebrew Short Story (4) (or) Hebr 3307—Modern Hebrew Poetry: 1880 to the Present (4)
- Hebr 3121, 3122, 3123—Medieval Hebrew Literature (3 cr each)
- MidE 3107, 3108—Emergence of Classical Judaism (4 cr each)
- MidE 3501, 3502—Ancient Israel (4 cr each)
- Summer study or a year in Israel is strongly recommended

Professional Education Courses (minimum 31 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- 9 cr in SeEd 3334, 3335—Teaching Foreign Languages
- 9 cr in SeEd 3631—Student Teaching in Foreign Languages (3-6-9)
- HEd 3090—The School and Society (3)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Minor in Hebrew

Minor Courses (minimum 32 credits)

- Hebr 3015, 3016, 3017—Advanced Modern Hebrew (4 cr each)
- One course from Hebr 3201, 3202 (or) 3201H, 3202H—A Book of the Bible (4 cr each) (or) Hebr 5104, 5105—Problems in Biblical Studies (4 cr each)
- One course from Hebr 3111—Rabbinical Texts (4) (or) Hebr 3131—Talmudic Texts (4)
- One course from Hebr 3301—Modern Hebrew Essay (4) (or) Hebr 3304—Modern Hebrew Short Story (4) (or) Hebr 3307—Modern Hebrew Poetry: 1880 to the Present (4)
- MidE 3107, 3108—Emergence of Classical Judaism (4 cr each)
- Summer study in Israel is recommended

Professional Education Courses (minimum 6 credits)

- SeEd 3334—Teaching Foreign Languages (6)

Minor in Italian

Minor Courses (minimum 25 credits)

- Ital 3031—Writing Techniques and Grammar Review (5)
- Ital 3045—Advanced Composition and Conversation (5)
- Ital 3502—Modern Italian Civilization and Culture (5)
- Ital 3201—Italian Literary Traditions (5)
- One course in Italian literature above Ital 3201

Major in Latin

Students who have had Latin in high school will be placed in an appropriate level of Latin courses by the major adviser. College credit is given for successful completion of advanced placement programs in high schools. Students who have had no Latin in high school will take Lat 1101, 1102, 1103, 1111, 1122, or Lat 3051 and 3052 before registering in Latin courses numbered 3461 and above.

Curriculum and Instruction

Related Course Requirements (minimum 16 credits)

16 credits in classics, linguistics, or courses in the area of classical civilization offered by the Departments of Art History, History, and Philosophy

Major Courses (minimum 32 credits)

Two courses from Lat 3462—Advanced Undergraduate Latin: Livy (5), Lat 3464—Advanced Undergraduate Latin: Catullus (5), Lat 3469—Intermediate Latin: Virgil (5)

3 credits from Lat 5701, 5702, 5703—Structure of Latin

One course from:

Clas 5101—Introduction to Prehistoric Greek Archaeology (4)

Clas 5102—Greek Sculpture (4)

Clas 5103—Hellenistic Art and Archaeology (4)

Clas 5104—Roman Archaeology (5)

Clas 5105—Roman Painting and Mosaics (5)

Clas 5106—Greek Painting (5)

15 credits in Latin in courses numbered Lat 3460 and above

Professional Education Courses (minimum 34 credits)

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)

9 cr in SeEd 3334, 3335—Teaching Foreign Languages

12 cr in SeEd 3631—Student Teaching in Foreign Languages (3-6-9)

HEd 3090—The School and Society (3)

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits

Major in Russian

Major Courses (minimum 50 credits)

Russ 3011, 3012, 3013—Russian Composition (3 cr each)

Russ 3021, 3022, 3023—Russian Conversation (2 cr each)

Russ 3104, 3105, 3106—Fourth-Year Russian (5 cr each)

Russ 3501, 3502, 3503—Russian Civilization and Culture (4 cr each)

Russ 5701, 5702—Structure of Modern Russian (4 cr each)

Note—Russ 5021, Soviet Union Study Tour, is strongly recommended (12-24 cr).

Professional Education Courses

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)

9 cr in SeEd 3334, 3335—Teaching Foreign Languages

12 cr in SeEd 3631—Student Teaching in Foreign Languages (3-6-9)

HEd 3090—The School and Society (3)

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits

Minor in Russian

Minor Courses (minimum 42 credits)

Russ 3011, 3012, 3013—Russian Composition (3 cr each)

Russ 3021, 3022, 3023—Russian Conversation (2 cr each)

Undergraduate Programs in the College of Education

Russ 3104, 3105, 3106—Fourth-Year Russian (5 cr each)

Russ 3501, 3502, 3503—Russian Civilization and Culture (4 cr each)

Note—Russ 5021, Soviet Union Study Tour, is recommended (12-24 cr).

Professional Education Courses

SeEd 3334—Teaching Foreign Languages

Major in Spanish

Major Courses (minimum 54 credits)

Span 3014—Composition and Communication Skills (5)

Span 3021—Advanced Composition and Communication Skills: Polishing Speeds and Writing Skills (5)

Span 3104 or 3104H—The Art of Reading Literary Texts (4)

Span 3501—Spanish Civilization: An Overview of Culture, Thought, and Art (4)

Span 3502—Culture and Language of Modern Spain and Spanish America (4)

Span 3512—Latin American Civilization: The Diverse Americas (4)

Span 3712—Origin and History of Spanish and Portuguese (4)

Span 5012—Advanced Problems in the Spanish Language (4)

Span 5711, 5712, 5713—The Structure of Modern Spanish: Phonology, Morphology, Syntax (4 cr each)

8 credits in literature courses

Professional Education Courses

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)

9 cr in SeEd 3334, 3335—Teaching Foreign Languages

12 cr in SeEd 3631—Student Teaching in Foreign Languages (3-6-9)

SeEd 5122—Language Conversation for Teachers (4)

HEd 3090—The School and Society (3)

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits

Minor in Spanish

Minor Courses (minimum 26 credits)

Span 3014—Composition and Communication Skills (5)

Span 3021—Advanced Composition and Communication Skills: Polishing Speeds and Writing Skills (5)

Span 3104—The Art of Reading Literary Texts (4)

Span 3501—Spanish Civilization: An Overview of Culture, Thought, and Art (4)

Span 3502—Culture and Language of Modern Spain and Spanish America (4)

Span 3512—Latin-American Civilization: The Diverse Americas (4)

Professional Education Courses

6 cr in SeEd 3334—Teaching Foreign Languages

SeEd 5122—Language Conversation for Teachers

Journalism

Journalism is a desirable minor for teachers who are called upon to supervise school publications, to teach subjects related to the field, or to assist with school public relations. It is recommended as a minor for students in the English, language arts, and social studies curricula.

Minor in Journalism

Minor Courses (minimum 23 credits)

- Jour 1011—Journalistic Techniques for Nonmajors (5)
- Jour 1701—Mass Communications Law (2)
- Jour 3021—Mass Communications and the News (4)
- Jour 3182—Supervision of School Publications (4)
- Jour 5221—Graphic Arts: Processes (4)
- One course from Jour 1201, 1301, 5501, 5601, 5606

Science

A student planning to teach science in Minnesota high schools will be recommended for appropriate certification upon completion of one of these major programs: earth science, biological science, chemistry, or physics. Students will take course work for the first 2 years in liberal education areas. Appropriate subject area advisers should be consulted in selecting freshman and sophomore science courses.

Requirements for admission to a secondary education program are listed at the beginning of this section. Early consultation with an undergraduate program coordinator is strongly recommended because required education methods and student teaching courses may not be available every quarter.

Major in Earth Science

A student completing the earth science program will be recommended for Minnesota certification to teach earth and general science full time in junior and senior high schools. Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements. An average of C+ (2.50) in major courses and C (2.00) in minor and related science courses is required. The related science courses are taken in lieu of a teaching minor.

Related Course Requirements

- Two courses in biological science
- Two courses in chemistry
- Two courses in physics (students planning advanced degree work should take calculus-based courses)

Major Courses (minimum 40 credits)

- 40 credits selected with the consent of an adviser from the following fields with at least one course in each: physical and historical geology, mineralogy, oceanography, astronomy, meteorology, and soil science

Professional Education Courses (minimum 30 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- SeEd 3356—Teaching Secondary School Science (1)
- SeEd 3357—Teaching Secondary School Science (3)
- SeEd 3358—Teaching Secondary School Science (1)
- 9 cr in SeEd 3651—Student Teaching in Science (1-3-6-9)
- HED 3090—The School and Society (3)
- Electives in Education—3 credits

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Undergraduate Programs in the College of Education

Minor in Earth Science

Minor Courses (minimum 27 credits)

27 credits selected with the consent of an adviser from the following fields with at least one course in each: physical and historical geology, astronomy, meteorology

Professional Education Courses (minimum 6 credits)

SeEd 3352—Teaching Secondary School Science (3) (science majors exempt)
3 credits in SeEd 3651—Student Teaching in Science (1-3-6-9)

Major in Biological Science

Students completing the program will be recommended for Minnesota certification to teach biological and general science full time and physical science part time in junior and senior high schools. Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements. An average of C+ (2.50) in major courses and C (2.00) in minor and related science courses is required.

Related Course Requirements

Two courses in physics
Two courses in general chemistry
Two courses in organic and/or biochemistry
One course in geology and one in astronomy

Students may elect to complete an earth science minor and thereby reduce the major to 38 credits, and eliminate the second course in organic or biochemistry in the biology major. Students completing the earth science minor will qualify for recommendation for certification to teach biological and general science full time and, in addition, earth science and physical science half time or less in junior and senior high schools. This pattern is strongly recommended to improve placement possibilities.

Major Courses (minimum 41 credits)

41 credits selected with the consent of an adviser from the following fields with at least one course in each: biology, botany, genetics, microbiology, physiology, zoology

Professional Education Courses

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
SeEd 3356—Teaching Secondary School Science (1)
SeEd 3357—Teaching Secondary School Science (3)
SeEd 3358—Teaching Secondary School Science (1)
9 cr in SeEd 3651—Student Teaching in Science (1-3-6-9)
HEd 3090—The School and Society (3)
Electives in Education—3 credits

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)
PubH 3004—Basic Concepts in Personal and Community Health (4)
Physical Education—3 credits

Minor in Biological Science

Minor Courses (minimum of 27 credits)

27 credits selected with the consent of an adviser from the following fields: biology, botany, zoology, physiology, and microbiology

Professional Education Courses (minimum 6 credits)

SeEd 3352—Teaching Secondary School Science (3) (science majors exempt)
3 credits in SeEd 3651—Student Teaching in Science (1-3-6-9)

Major in Chemistry

Students completing the chemistry program will qualify for recommendation for Minnesota certification to teach chemistry and physical science full time and half time in the selected physics or mathematics minor. Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related science and major courses may be used toward these requirements. An average of C+ (2.50) in major courses and C (2.00) in minor and related science courses is required.

Related Course Requirements

A three-course sequence of calculus-based physics
A minor in either physics or mathematics

Major Courses (minimum 35 credits)

35 credits selected with the consent of an adviser from the following fields with at least one course in each: general, solution, organic, analytical, and physical chemistry

Professional Education Courses (minimum 30 credits)

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
SeEd 3356—Teaching Secondary School Science (1)
SeEd 3357—Teaching Secondary School Science (3)
SeEd 3358—Teaching Secondary School Science (1)
9 credits in SeEd 3651—Student Teaching in Science (1-3-6-9)
HEd 3090—The School and Society (3)
Electives in Education—3 credits

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)
PubH 3004—Basic Concepts in Personal and Community Health (4)
Physical Education—3 credits

Minor in Chemistry

Minor Courses (minimum 27 credits)

27 credits selected with the consent of an adviser from the following fields with at least one course in each: general, solution, organic, and physical chemistry

Professional Education Courses (minimum 6 credits)

SeEd 3352—Teaching Secondary School Science (3) (science majors exempt)
3 credits in SeEd 3651—Student Teaching in Science (1-3-6-9)

Major in Physics

A student completing the physics program will qualify to be recommended for Minnesota certification to teach physics and physical science full time and half time in the selected chemistry or mathematics minor. Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements. An average of C+ (2.50) in major courses and C (2.00) in minor and related science courses is required.

Undergraduate Programs in the College of Education

Related Course Requirements

- Two courses in general chemistry
- One course in organic chemistry
- A minor in chemistry or mathematics

Major Courses (minimum 36 credits)

- A sequence of calculus-based general physics courses including laboratory (15)
- Minimum of 9 credits in wave concepts and quantum physics with laboratory
- Minimum of 4 credits in calculus-based courses in atmospheric physics, astronomy, or meteorology
- A course in history of science
- Electives to complete 36 credits

Professional Education Courses (minimum 30 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- SeEd 3356—Teaching Secondary School Science (1)
- SeEd 3357—Teaching Secondary School Science (3)
- SeEd 3358—Teaching Secondary School Science (1)
- 9 credits in SeEd 3651—Student Teaching in Science (1-3-6-9)
- HEd 3090—The School and Society (3)
- Electives in Education—3 credits

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Minor in Physics

Minor Courses (minimum 27 credits)

- 27 credits selected with the consent of an adviser, including calculus-based courses in general physics (including laboratory), wave concepts, quantum physics, and electives from atmospheric physics, astronomy, or history of science

Professional Education Courses (minimum 6 credits)

- SeEd 3352—Teaching Secondary School Science (3) (science majors exempt)
- 3 credits in SeEd 3651—Student Teaching in Science (1-3-6-9)

Social Studies

Those interested in social studies majors should see individual social science major requirements (anthropology, history, geography, economics, sociology, and political science). A minor in social studies may be taken only by students *not* majoring in one of the social sciences and should be carefully planned with an adviser. Requirements for admission to a secondary education program are listed at the beginning of this section.

Minor in Social Studies

Minor Courses (minimum 52 credits)

- 26 credits in one of the following core fields, including 9 credits in courses at the 3000 or 5000 level: anthropology, economics, geography, history, political science, or sociology
- 26 credits in other social sciences, including one course in each of the fields listed above

One course each on Russia, the Far East, and Africa from the fields listed above, one survey course in American history, and one survey course in American government. These courses may be used as part of the core and other special science requirements.

Professional Education Courses

SeEd 3342—Teaching Social Studies in the Secondary School (3)

Major in Anthropology

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate major courses may be used toward these requirements. A minimum of C+ (2.50) is required in all social science courses. A student completing the anthropology program will qualify for recommendation for Minnesota certification to teach anthropology or social studies full time in junior and senior high schools.

Because of the anthropology teacher's need for a broad social studies background and because most social studies positions require teaching in more than one subject within the area, the anthropology major must complete supporting courses in the social sciences. A teaching minor is not required, but anthropology majors are urged to complete a minor outside the social sciences to improve placement possibilities. Programs should be planned with the help of an adviser.

Major Courses (minimum 75 credits)

Area Requirement

A course taken in anthropology or in any of the other social sciences in each of the following areas: the Soviet Union, Asia, and Africa. These courses may be counted toward credit requirements for the major and supporting field.

Anthropology—30 credits, including:

- One course in ethnology
- One course in culture change
- One additional topical course
- One course on methodology
- 15 credits at the 3000 or 5000 level

Supporting Fields—45 credits, including

One course in each of the following core fields: history, geography, sociology, political science, and economics. It is strongly recommended that these include a survey course in American history and one in American government, both frequently required by other states for certification.

Professional Education Courses (minimum 30 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- 5 credits in SeEd 3348, 3349—Teaching Social Studies in the Secondary School
- 9 credits in SeEd 3641—Student Teaching in Social Studies (3-6-9)
- HEd 3090—The School and Society (3)
- Electives—3 credits

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Major in Economics

Students are expected to complete the Liberal Education Distribution Requirements as specified in this section of the bulletin. Appropriate major courses may be used toward these requirements. An average of C+ (2.50) is required in

Undergraduate Programs in the College of Education

all social science courses. Programs should be planned with the help of an adviser. A student completing the economics program will qualify for recommendation for Minnesota certification to teach economics or social studies full time in junior and senior high schools.

Major Courses (minimum 75 credits)

Area Requirement

One course taken in economics or in any of the other social sciences in each of the following areas: the Soviet Union, Asia, and Africa. These credits are counted toward the total listed below. Econ 5307 or 5313 may be used to satisfy the Soviet Union requirement.

Economics—36 credits, including

Econ 1001—Principles of Macroeconomics (4) (and) 1002—Principles of Microeconomics (4) (or) Econ 1014—Scope, Methods, and Application of Economics (5) (and) 1015—Introduction to Economic Analysis (3) (or) Econ 3001, 3002—Problems of the American Economy (5 cr each)

Econ 3101—Microeconomic Theory (4)

Econ 3102—Macroeconomic Theory (4)

One course in each of these fields: labor economics, comparative economics, public finance, and either economic development or international economics

12 credits in electives at the 3000 or 5000 level

Supporting Fields—39 credits

One course each in anthropology, geography, history, political science, and sociology. A survey course in American history (required for certification in many states) and a course in cultural anthropology are strongly recommended.

Professional Education Courses (minimum 30 credits)

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)

5 credits in SeEd 3348, 3349—Teaching Social Studies in the Secondary School

9 credits in SeEd 3641—Student Teaching in Social Studies (3-6-9)

HEd 3090—The School and Society (3)

Electives—3 credits

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits

Major in Geography

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate major courses may be used toward these requirements. An average of C+ (2.50) in all social science courses is required. Because a geography teacher needs a broad social studies background and because most social studies positions require teaching in more than one subject within the area, the major includes supporting courses in other social science fields. A teaching minor is not required, but geography majors are urged to complete a minor outside the social sciences to improve placement possibilities. Programs should be planned with the help of an adviser. A student completing the major in geography will qualify for recommendation for Minnesota certification to teach geography or social studies full time in junior and senior high schools.

Major Courses (minimum 75 credits)

Area Requirement

One course taken in geography or in any of the other social sciences in each of the following areas: the Soviet Union, Asia, and Africa. These credits may count toward the total listed below.

Geography—34 credits

Two of the following:

Geog 1301—Human Geography (5)

Geog 1311—Economic Geography I: Introductory (5)

Geog 1401—Physical Geography (5)

Two regional courses or one regional course and one field course

One technique course

Two topical courses

One course in history and philosophy of geography

2 additional courses at the 3000 or 5000 level

Supporting Fields—41 credits

One course each in anthropology, economics, history, political science, and sociology

Survey courses in American history and in American government are strongly recommended because they are often required for certification in other states.

Professional Education Courses (minimum 30 credits)

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)

5 credits in SeEd 3348, 3349—Teaching Social Studies in the Secondary School

9 credits in SeEd 3641—Student Teaching in Social Studies (3-6-9)

HEd 3090—The School and Society (3)

Electives—3 credits

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits

Major in History

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate major courses may be used toward these requirements. An average of C+ (2.50) is required in all social science courses. Because a history teacher needs a broad social studies background and because most social studies positions require teaching in more than one subject within the area, the major includes supporting courses in other social science fields. A teaching minor is not required, but history majors are urged to complete a minor outside the social sciences to improve placement possibilities. Programs should be planned with the help of an adviser. A student completing a history major will qualify for recommendation for Minnesota certification to teach history or social studies full time in junior and senior high schools.

Major Courses (minimum 75 credits)

Area Requirement—One course taken in history or in any of the other social sciences in each of the following areas: the Soviet Union, Asia, and Africa. These credits may be counted toward the totals listed below.

History—40 credits selected with the consent of an adviser (23 of which should be at the 3000 or 5000 level), including Hist 1001, 1002, 1003—Introduction to Modern European History (4 cr each) (or) Hist 3001, 3002, 3003—Introduction to Modern European History (4 cr each) (or) other courses which provide a survey of modern European history (or) Hist 1301, 1302 or other courses which provide a survey of American history

Supporting Fields—35 credits

One course in each of the following core fields: anthropology, economics, geography, political science, and sociology. It is strongly recommended that these include a survey course in American government (frequently required by other states for certification) and a course in cultural anthropology.

Undergraduate Programs in the College of Education

Professional Education Courses (minimum 30 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- 5 credits in SeEd 3348, 3349—Teaching Social Studies in the Secondary School
- 9 credits in SeEd 3641—Student Teaching in Social Studies (3-6-9)
- HED 3090—The School and Society (3)
- Electives—3 credits

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Major in Political Science

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate major courses may be used toward these requirements. An average of C+ (2.50) in all social science courses is required. Because a political science teacher needs a broad social studies background and because most social studies positions require teaching in more than one subject within the area, the major includes supporting courses in other social science fields. A teaching minor is not required, but political science majors are urged to complete a minor outside the social sciences to improve placement possibilities. Programs should be planned with the help of an adviser. A student completing the major in political science will qualify for recommendation for Minnesota certification to teach political science or social studies full time in junior and senior high schools.

Major Courses (minimum 75 credits)

Area Requirement—At least one course taken in political science or in any of the other social sciences in each of the following areas: the Soviet Union, Asia, and Africa. These credits may count toward the totals listed below.

Political Science—36 credits, including

Pol 1001—American Government and Politics (5) (and) 18 credits in courses at the 3000 and 5000 levels, including one course in each of the following fields: American government, international relations, comparative government, and political theory.

Supporting Fields—39 credits, including

One course in each of the following core fields: anthropology, economics, geography, history, and sociology. It is strongly recommended that these include a survey course in American history (frequently required for certification in other states) and a course in cultural anthropology.

Professional Education Courses (minimum 30 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- 5 credits in SeEd 3348, 3349—Teaching Social Studies in the Secondary Schools
- 9 credits in SeEd 3641—Student Teaching in Social Studies (3-6-9)
- HED 3090—The School and Society (3)
- Electives—3 credits

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Major in Sociology

Students are required to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate major courses may be used toward these requirements. An average of C+ (2.50) is required in all of the social science courses. Because a sociology teacher needs a broad social studies background and because most social studies positions require teaching in more than one subject within the area, the major includes supporting courses in other social science fields. A teaching minor is not required, but sociology majors are urged to complete a minor outside the social sciences to improve placement possibilities. Programs should be planned with the help of an adviser. A student completing the major in sociology will qualify for recommendation for Minnesota certification to teach sociology or social studies full time in junior and senior high schools.

Major Courses (minimum 75 credits)

Area Requirement—One course taken in any of the social sciences in each of the following areas: the Soviet Union, Asia, and Africa. These credits may count toward the total listed below.

Sociology—30 credits, including

Soc 3505, 3506—Principles of Social Psychology (5 cr each)

One course in sociological methods

9 credits at the 3000 or 5000 level

Supporting Fields—45 credits, including

At least one course each in anthropology, economics, and geography

One survey course in American history

One survey course in American government

Professional Education Courses (minimum 30 credits)

SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)

5 credits in SeEd 3348, 3349—Teaching Social Studies in the Secondary Schools

9 credits in SeEd 3641—Student Teaching in Social Studies (3-6-9)

HEd 3090—The School and Society (3)

Electives—3 credits

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits

EDUCATIONAL ADMINISTRATION

Van D. Mueller, Chairman, 218 Health Services Building, St. Paul Campus

The Department of Educational Administration offers only postbaccalaureate degree work in the field, but undergraduates may use appropriate courses in the curriculum as part of their professional preparation. See Section III of this bulletin or the *Graduate School Bulletin* for information on preparation of elementary and secondary school principals, supervisors, and administrative personnel.

PHYSICAL EDUCATION, RECREATION, AND SCHOOL HEALTH EDUCATION

Eloise Jaeger, Director, 110 Cooke Hall

The School of Physical Education and Recreation offers professional programs of instruction in physical education, dance education, recreation and park administration, camping and outdoor education, and school health education. Listed below are requirements for the B.S. degree, minors, and special certification programs.

Nonprofessional activity courses are open to any University student who may elect them as a part of his general education in accordance with the regulations of the college in which he is enrolled. Many sections of these courses are co-educational while others are for men only or for women only. See Section IV of this bulletin and the *Class Schedule* for further information about each activity course including the prerequisite health activity rating, or consult Eva Lou Dillin, 219 Cooke Hall.

Physical Education

Major in Physical Education

Students should apply for admission to the College of Education *early in the quarter in which they will meet admission requirements*. Applications for fall admission must be received by the Office of Admission and Records early in the previous spring quarter; applications for winter admission early in the fall quarter. No students are admitted for spring quarter. Minimum requirements for consideration are: 45 credits completed prior to transfer with a C (2.00) average if the transfer is from a liberal arts or junior college, or 7.00 numeric average if transfer is from General College; (2) completion of freshman English or equivalent; (3) activity rating of 1 or 2; and (4) 3 credits in physical education activity courses. Consideration will be given to entrance examination test scores and background experience.

This curriculum prepares a student for a B.S. degree in physical education and recommendation for Minnesota certification in physical education (grades K-12). A total of 186 credits must be completed with a C+ average (2.50) in major courses and a C (2.00) average in the teaching minor.

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward those requirements.

Related Course Requirements

One course in speech

Chem 1004, 1005—General Principles (5 cr each) (or) NSci 1004, 1005—The Physical World (4 cr each)

Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2) (or) current Standard American Red Cross First Aid card

Anat 1027—Anatomy for Physical Education Students (4) (or) PE 3110—Human Anatomy (3)

PubH 3385, 3386—Physiological Hygiene (4 cr each) (or both) Phsl 3051—Human Physiology (5) (and) PE 3115—Physiological Application to Sports

PsyF 3370—Human Relations and Group Dynamics (3) (or) approved equivalent

Physical Education, Recreation, and School Health Education

Major Courses (minimum 49 credits)

1. Activities—10 credits

7 credits to demonstrate competency at the beginning level to include two team sports, two individual or dual sports, one form of dance, aquatics, and one new activity not included above, through registration in approved physical education activities courses or in PE 1980

3 credits to demonstrate competency at an advanced level through registration in three approved physical education activities or in PE 1981

2. Required of All—12 credits

PE 1521—Gymnastics (1)

PE 1522—Gymnastics (1)

PE 1561—Physical Education Activities for the Elementary School (3) (or) selection of the elementary physical education area of emphasis

PE 1580—Orientation and Appraisal (1)

PE 1870—Orientation to Movement (3)

PE 3111—Mechanics of Movement (3)

3. 18 credits from PE 3100, 3113, 3114, 3120, 3130, 3150, 3160

4. Area of Emphasis or Electives

Each student must complete one of the following areas:

a. Adapted Physical Education—9 credits

PE 3100—Adapted Physical Education (3)

PE 3625—Supervised Practical Experience (3)

SpEd 5101—Education of Exceptional Children (3)

b. Advanced Study Preparation—9 credits

With the consent of the department, the student completes 9 credits in one or more areas such as motor learning, history, mechanics of movement, or research. PE 3900 may be used to meet this requirement.

c. Aquatics—10 credits

PE 1410—Water Safety Instructor (2)

PE 1801—Aquatics Administration (2)

1 credit from PE 1004, 1205, 1309

5 credits from PE 1004, 1204, 1205, 1309, Rec 1530 (and) PE 3176 (or) PE 3900

d. Coaching—9 credits

Men: Coaching emphases are available for baseball, basketball, football, golf, gymnastics, ice hockey, swimming, tennis, track and field, and wrestling. Each area will require the following:

1 credit in an approved activity course for the sport selected

2 credits in a coaching course for the sport selected

Pe 3624—Student Teaching: Coaching (3) (or) for varsity squad members 3 credits in PE 3900

PE 3625—Supervised Practical Experience (3)

Women: See Minnesota Public Secondary School Coaching Certification for Girl's Interscholastic Sports

e. Dance—10 credits

PE 1023—Folk and Square Dance (1)

PE 1515, 1615—Modern Dance Technique and Improvisation I, II (2 cr each)

PE 3395—Advanced Improvisation (1)

One of the following: PE 3321, 3326, 3394

f. Elementary School Physical Education—10 credits

PE 1563—Games, Sports, Track, and Field for the Elementary School Child (2)

PE 1564—Educational Gymnastics for Children (2)

PE 1565—Dance for the Elementary School Child (2)

PE 3324—Teaching Physical Education in the Elementary School (4)

Undergraduate Programs in the College of Education

- g. Gymnastics—9 credits
PE 1564—Educational Gymnastics for Children (2)
PE 3174—Gymnastics Coaching (2)
PE 5123—Analysis of Movement in Gymnastics (3)
Required for women: PE 1017—Rhythmic Gymnastics (1) (and) PE 1524—Gymnastics Composition (1)
Required for men: completion of Regional Judging Certification for 2 credits through registration in PE 1990
- h. Intramurals-Extramurals—10 credits
Men:
PE 3160—Programming Intramural-Extramural Sports (3)
PE 3270—Sports Officiating and Supervision (3)
4 credits from PE 3161, 3625, 3900
Women:
PE 3160—Programming Intramural-Extramural Sports (3)
PE 3161—Coaching Women in Competitive Sports (3)
2 credits from PE 1650, 1651, 1656
2 credits from PE 3625, 3900
- i. Electives—10 credits selected from physical education courses not applied elsewhere in the program

Professional Education Courses (minimum 32 credits)

- PE 1875—Orientation to Teaching Physical Education (1)
PE 3323—Teaching Physical Education (5)
PE 3607—Student Teaching: College (1)
12 credits in student teaching from PE 3621 and 3622
SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each) (or)
Elem 3100—Psychological Foundations of Elementary Education (5) (and)
SeEd 3150—Introduction to Secondary School Teaching (5)
HEd 3090—The School and Society (3)

Special Requirements of All Students

- PsyF 3380—Introduction to Human Relations (3)
Physical Education—3 credits (satisfied by the major)
PubH 3004—Basic Concepts in Personal and Community Health (4)
The student must also complete 12 credits at the 3000 and 5000 levels in one department outside of the School of Physical Education, Recreation, and School Health Education, for a regular teaching minor of the College of Education
Electives to complete 186 credits

Minnesota Public Secondary School Coaching Certification For Boy's Interscholastic Sports

A teacher in a Minnesota public secondary school who is head coach in baseball, basketball, football, hockey, track, or wrestling may be certified either by completion of the major in physical education or by the following special coaching preparation. This certificate is only available to students admitted to a program in the College of Education or to certified teachers. Before starting the program, prospective students must apply to the department of physical education for admission. Students who successfully complete this program will be recommended for certification for interscholastic athletic coaching in Minnesota public secondary schools. A minimum of 19 credits from groups A, B, and C is required.

A. All Required

- HLth 1500—American Red Cross Standard First Aid and Personal Safety (2)
(or) current American Red Cross Standard First Aid card

Physical Education, Recreation, and School Health Education

Anat 1027—Anatomy for Physical Education Students (4) (or) PE 3110—Human Anatomy (3)
PE 3114—Prevention and Care of Injuries (3)
PE 3115—Physiological Application to Sports (3)
PE 3624—Student Teaching: Coaching (3) (not required for those with public school coaching experience)

B. Select 2 courses from PE 3111, 3113, 3130

C. Select 2 courses from PE 3170, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3625

Minnesota Public Secondary School Coaching Certification For Girl's Interscholastic Sports

A teacher in a Minnesota public secondary school who is coach of girl's interscholastic sports must be certified by completion of the following special coaching preparation. Students who complete this program will be recommended for certification for coaching girl's interscholastic sports in Minnesota public secondary schools. This certificate is only available to students admitted to a program in the College of Education or to certified teachers. Before starting the program, prospective students must apply to the department of physical education for admission. A minimum of 24 credits is required plus completion of the requirements of Item D below.

A. All Required

Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)
(or) current American Red Cross Standard First Aid card

Anat 1027—Anatomy for Physical Education Students (4) (or) PE 3110—Human Anatomy (3)

PE 3113—Motor Learning and Motor Development (4) (or) CPsy 5303—Adolescent Psychology (4)

PE 3114—Prevention and Care of Injuries (3)

PE 3161—Coaching Women in Competitive Sports (3)

PE 3360—The Intramural-Extramural-Interscholastic Sports Program (3) (or) PE 3160—Programming Intramural-Extramural Sports (3)

PE 3624—Student Teaching: Coaching (3)

PubH 3385, 3386—Physiological Hygiene (4 cr each) (or) PE 3115—Physiological Application to Sports (3)

B. One of the following: PE 1650, 1651, 1656 (or) any current DGWS rating or equivalent

C. One of the following: PE 3173, 3174, 3176, 3177, 3178, 3370, 5123

D. One season of participation in the Extramural Program at the the University

Dance Minor

The minor in dance requires a minimum of 30 credits and is open to all College of Education students. Programs should be planned with a dance adviser as early as possible.

Minor Courses (minimum 30 credits)

A. Required of All—10 credits

PE 1515, 1615, 1715—Modern Dance Technique and Improvisation I, II, III
(2 cr each)

PE 3390, 3391—Dance Composition (2 cr each)

Undergraduate Programs in the College of Education

B. 10 credits from

- PE 1022, 1122—Ballroom Dance (1 cr each)
- PE 1023, 1123—Folk and Square Dance (1 cr each)
- PE 1517—Ethnic Dance Heritage I (2)
- PE 1518—Ballet I (2)
- PE 3180—History and Trends in Dance (3)
- PE 3181—Dance Therapy (2)
- PE 3321—Teaching of Folk Dance and Social Forms (4)
- PE 3326—Teaching of Modern Dance (4)
- PE 3392—Dance Production (3)
- PE 3394—Creative Dance for Children (4)
- PE 3395—Advanced Improvisation (1)
- PE 3397—Dance Accompaniment (3)

C. 10 credits selected from the following courses with consent of the dance adviser: Anat 1027; ArEd 3001, 3009, 3010, 3011, 3030; Mus 1001, 1503, 1506, 3708, 3709, 3807, 5027, 5028, 5029; PE 3100, 3111, 3113, 3115; Th 1321, 1326, 1328, 1504, 3111, 3112, 3113, 3326, 3513, 3515

Recreation and Park Administration

Students should apply for admission to the College of Education early in the quarter in which they will meet admission requirements. Applications for fall admission must be received by the Office of Admissions and Records no later than the end of the first week of the previous spring quarter; applications for spring admission no later than the end of the first week of winter quarter. No students are admitted for winter quarter or summer terms. Admission will be based on the following criteria:

1. Completion of the appropriate admission procedures
2. Completion of a minimum of 1 year of liberal education (not less than 45 quarter credits) including the freshman English requirement
3. An overall grade point average of at least C (2.00), with preference given to applicants with higher averages
4. Assessment of personal and professional characteristics through recommendations and interviews, with preference given on the basis of an evaluation of the nature and scope of previous recreation and/or related experiences

The program provides professional preparation in recreation and park administration leading to the B.S. degree. During the junior or senior year the student must select one area of specialization from the following:

Option I: Recreation Program Leadership—Emphasis on developing activity leadership skills and techniques for those interested in a career where direct involvement with program participants is a major portion of the work.

Option II: Public Recreation and Parks—Emphasis on preparing for supervisory and beginning administrative positions in governmental tax-supported agencies.

Option III: Therapeutic Recreation—Emphasis on preparing for work with the ill and disabled in hospitals, institutions, and community agencies.

Option IV: Voluntary and Youth-Serving Agencies—Emphasis on preparing to assume positions in YMCA's, scouting, boys' clubs, and other youth-serving agencies.

Physical Education, Recreation, and School Health Education

Students who graduate from the major program in recreation and park administration are qualified to receive Minnesota certification to direct recreation recreation programs in public school facilities. This program does not culminate in a teaching certificate; however, a student may prepare for teaching in the many other programs outlined elsewhere in this bulletin.

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate major courses may be used toward these requirements. For graduation, the student must complete 186 credits and earn a grade point average of C+ (2.50) in course work with a "Rec" prefix. A minor is not required of majors in this program.

COMMON REQUIREMENTS

Related Course Requirements

- Spch 1101—Fundamentals of Speech (5)
- Jour 1011—Journalistic Techniques for Nonmajors (5)
- Mus 1001—Fundamentals of Music (4)
- Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)
- MuEd 3001—Music for Recreational Leadership (4)
- 31 credits from anthropology, classics, economics, geography, history, humanities, philosophy, political science, social science, and sociology, including Soc 1001—Introduction to Sociology (4) (and) Soc 1002—American Community (4)
- 10 credits from theatre arts, speech, physical education, studio arts, art education, industrial education

Major Courses (minimum 37 credits)

- Rec 1520—Orientation to Leisure and Recreation (5)
- 4 credits in Rec 1525—Field Observation (1-4)
- Rec 1540—Camp Counseling (4)
- Rec 1600—Leadership in Social Activities (3)
- 12 credits in Rec 3700—Senior Internship (1-12)
- Rec 3701—Senior Seminar (3)
- Rec 5130—Recreation and Park Areas and Facilities (5)
- Rec 5140—Recreation Programming (5)
- Rec 5150—Principles and Practices of Recreation Administration (5)
- 5 credits in courses numbered PE 1001 through 1174, including one course in aquatics

Professional Education Courses (minimum 19 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- SeEd 5105—Audio-Visual Materials in Education (3)
- Educ 5104—Adult Education (3)
- HEd 3090—The School and Society (3)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits (satisfied by the major)

Electives to complete 186 credits

PROFESSIONAL OPTIONS

In addition to the common requirements, the student, in consultation with a major adviser, will complete one of the four options listed below:

Option I—Recreation Program Leadership—31 credits

Undergraduate Programs in the College of Education

Related Course Requirements

9 credits from disciplines related to the major

8 credits from art education, theatre arts, physical education, music, industrial education

Major Courses

14 credits from Rec 1530, 3150, 5170, 5180, 5190, 5200, 5210, 5230, 5240, 5250, 5983

Option II—Public Recreation and Parks—31 credits

Related Course Requirements

6 credits in political science courses at the 3000 or 5000 level

Major Courses

FRD 5232—Management of Recreational Lands (3)

FRD 5233 (or) LA 5010—Principles of Outdoor Recreation Design and Planning (4)

6 credits from Rec 5170, 5180, 5200, 5210, 5983

12 credits from LA 1024, FRD 5257, 5258, 5259, Acct 1050

Option III—Therapeutic Recreation—31 credits

Related Course Requirements

17 credits from child psychology, educational psychology, social work, and sociology, including Soc 5201—Introduction to Social Psychology (4) (and) CPsy 3301—Child Psychology (4) (and) one course from PsyF 3370—Human Relations and Group Dynamics (4) (or) Anat 1004—Elementary Anatomy (4) (or) Psy 1004 (or) 1005—Introductory Laboratory Psychology (3 cr each)

Major Courses

Rec 5210—Introduction to Therapeutic Recreation (3)

Rec 5220—Programming in Therapeutic Recreation (5)

6 credits from Rec 5170, 5230, 5240, 5983

Option IV—Voluntary and Youth-Serving Agencies—31 credits

Related Course Requirements

CPsy 5303—Adolescent Psychology (4)

9 credits from psychology, sociology, social work

Major Courses

Rec 5170—Camp Administration (3)

3 credits from Rec 3150, 5210, 5230, 5240, 5983

12 credits from SW 3005, Soc 5201, 5311, 5401

Minor in Recreation and Park Administration

The minor in recreation and park administration is designed to prepare individuals for part-time and volunteer work of a general recreational nature. It is a nonteaching minor and cannot be used to meet minor requirements in any curriculum. Courses should be chosen with the minor adviser's approval.

Related Course Requirements

Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)

12 credits in skills, techniques

Physical Education, Recreation, and School Health Education

Minor Courses (minimum 15 credits)

- 3 credits in Rec 3700—Senior Internship (1-12)
- 12 credits in recreation theory

Professional Education Courses (minimum 3 credits)

- Psy 5201—Social Psychology (4) (or) Educ 5104—Adult Education (3)

Minor in Camping and Outdoor Education

Related Course Requirements

- CPsy 3301—Child Psychology (4)
- Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)
- 1 cr from PE 1001 through 1498 (or) Th 1101—Introduction to Theatre Arts (4) (or) 3 credits to be completed by registration in Rec 3700 in a camp leadership position during the summer

Minor Courses (minimum 24 credits)

- Rec 1530—Camp Aquatics (2)
- Rec 1540—Camp Counseling (4)
- Rec 1600—Leadership in Social Activities (3)
- Rec 3150—Leadership in Nature Recreation (3)
- Rec 5140—Recreation Programming (5)
- Rec 5170—Camp Administration (3)
- MuEd 3001—Music for Recreational Leadership (4)

School and Community Health Education

The major curriculum outlined in this section prepares the student for recommendation for Minnesota certification for teaching health education full time in the public school and/or serving as a health educator in a community health agency.

Before applying for admission to the College of Education, a student must have satisfactorily completed 90 credits in liberal arts areas with at least a C (2.00) average in all his previous work and a C+ (2.50) average in all health and public health courses that will apply toward the major. The minor curriculum meets the minimum state of Minnesota certification standards for teaching health in the public school. Students should consult their major or minor adviser in these programs for requirements which must be met prior to student teaching.

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements. For a major in school and community health education, additional requirements are listed below.

Major in School and Community Health Education

Related Course Requirements (minimum 31 credits)

- Spch 1101—Fundamentals (5) (or) 1102—Communication in the Modern World: Interpersonal (4)
- Biol 1011—General Biology (5) (or) EBB 3001—Introduction to Ecology (4) (and) GCB 3022—Genetics (4)
- Chem 1004, 1005—General Principles of Chemistry (5 cr each) (or) NSci 1004, 1005—The Physical World (4 cr each)

Undergraduate Programs in the College of Education

- MicB 3103—General Microbiology (5)
Soc 1001—Introduction to Sociology (4)
Anth 1002—Introduction to Anthropology (5)

Major Courses (minimum 44 credits)

- Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)
Hlth 3100—Curriculum: School Health Education (3)
Hlth 5120—Role of the School Health Educator in Health Appraisal (3)
Hlth 5140—Administration of the School Health Program (3)
PubH 3385, 3386—Physiological Hygiene (4 cr each) (or) Phsl 3051—Human Physiology for Nursing and Physical Therapy Students (5)
PubH 3600—Human Nutrition (3) (or) FScN 1012—Food for Thought (4) (or) FScN 1602—Principles of Nutrition (4)
PubH 5069—Community Health Education Laboratory (6)
PubH 5070—Communication Skills for Health Professionals (3)
PubH 5072—Community and School Health Education (3)
PubH 5152—Introduction to Environmental Health (3)
Anat 1027—Anatomy for Physical Education Students (4) (or) PE 3110—Anatomy (3)
FSoS 5001—Human Sexual Behavior (4)
PsyF 5162—Personality and Social Development (3) (or) CPsy 3301—Child Psychology (4) (or) CPsy 5303—Adolescent Psychology (4)

Professional Education Courses (minimum 37 credits)

- Hlth 3300—Instructor's Course in Basic First Aid and Standard First Aid and Personal Safety (3)
Hlth 3320—Methods and Materials of School Health Education (3)
9 credits in student teaching from Hlth 3601, 3602, 3603; recommended in addition Hlth 3600—Prefall Student Teaching (3)
Hlth 5150—Family Life and Sex Education in Secondary Schools (3)
HEd 3090—The School and Society (3)
SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
CSPP 5130—Introduction to Guidance (3)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
Physical Education—3 credits
PubH 3004—Basic Concepts in Personal and Community Health (4)

The student is expected to complete 186 credits, including a teaching minor, and earn a C+ (2.50) average in the major courses and a C (2.00) average overall.

Minor in School Health Education

Related Course Requirements (minimum 13 credits)

- Biol 1011—General Biology (5) (or) GC 1132—Biological Science and the Human Body (5) (or) EBB 3100—Introduction to Ecology (4) (and) GCB 3022—Genetics (4)
Chem 1004, 1005—General Principles of Chemistry (5 cr each) (or) NSci 1004, 1005—The Physical World (4 cr each)

Minor Courses (minimum 29 credits)

- Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)
Hlth 3100—Curriculum: School Health Education (3)
Hlth 5120—Role of the School Health Educator in Health Appraisal (3)
Hlth 5140—Administration of the School Health Program (3)
PubH 3385, 3386—Physiological Hygiene (4 cr each) (or) Phsl 3051—Human Physiology for Nursing and Physical Therapy Students (5)

Vocational and Technical Education

- PubH 3600—Human Nutrition (3) (or) FScN 1012—Food for Thought (4)
(or) FScN 1602—Principles of Nutrition (4)
Anat 1027—Anatomy for Physical Education Students (4) (or) PE 3110—Human
Anatomy (3)
PsyF 5162—Personality and Social Development (3) (or) CPsy 3301—Child
Psychology (4) (or) CPsy 5303—Adolescent Psychology (4)
FSoS 5001—Human Sexual Behavior (4)

Professional Education Courses (minimum 12 credits)

- Hlth 3300—Instructor's Course in Basic First Aid and Standard First Aid and
Personal Safety (3)
Hlth 3320—Methods and Materials of School Health Education (3)
Hlth 5150—Family Life and Sex Education in the Secondary Schools (3)
3 credits in student teaching from PE 3600, 3621, 3622 (or) registration in
Hlth 3601, 3602 or 3603

PSYCHOEDUCATIONAL STUDIES

Maynard Reynolds, Chairman, 249 Burton Hall

The Department of Psychological Studies does not offer undergraduate teacher certification programs, but undergraduates may use appropriate courses from special education and counseling as part of their professional preparation. Undergraduate students at the junior and senior levels are invited to take course work in special education as elective credit. Course listed below might be particularly interesting to students majoring in elementary or secondary education.

- SpEd 5101—Education of Exceptional Children
SpEd 5120—Introduction to Mental Retardation
SpEd 5123—Methods and Materials for Severely Retarded Preschool and School-
Age Pupils

Undergraduate students are reminded that whether or not they have taken such courses as listed above, they may be admitted to a program *only* after they have completed the baccalaureate degree, submitted an application, and been formally accepted into the program.

SOCIAL, PSYCHOLOGICAL, AND PHILOSOPHIC FOUNDATIONS OF EDUCATION

Clyde A. Parker, Chairman, 206 Burton Hall

The areas of social and philosophic foundations of education and psychological specialties do not offer an undergraduate degree program but contribute professional education courses basic to teacher preparation programs. For postbaccalaureate work in these fields see Section III of this bulletin or the *Graduate School Bulletin*.

VOCATIONAL AND TECHNICAL EDUCATION

Jerome Moss, Jr., Chairman, 125 Peik Hall

Agricultural Education

The major in agricultural education, offered jointly with the College of Agriculture, is designed for the student who plans to teach agriculture or horticulture in public schools, area vocational-technical schools, and junior colleges in Minne-

Undergraduate Programs in the College of Education

sota communities. Comprehensive training in technical agriculture, including areas such as animal science, agronomy, agriculture and applied economics, horticulture, soils, and mechanization, is useful for those preparing for other professional careers in agriculture, including farming. The special training in education which the program provides not only meets the requirements for certification as an instructor of agriculture in the public schools but is useful also in the professional careers in agriculture associated with nonformal education.

In the third quarter of the sophomore year, students should make application at the Office of Admissions and Records, Coffey Hall, St. Paul Campus, for joint registration in one of the combined curricula. They will then complete the admission requirements of the College of Education, which include health and psychological examinations and interviews. To be eligible the student must have a GPA of at least 2.00 for all courses taken at this University and at least a 2.30 GPA in technical agriculture courses as follows:

For horticultural education specialization: 2.30 in courses in entomology, forestry, horticulture, mechanized agriculture, plant pathology, agricultural economics, and soils

For agricultural education specialization: 2.30 in courses in agricultural economics, agronomy, animal science, entomology, food science, forestry, horticulture, agricultural journalism, mechanized agriculture, plant pathology, soils, and veterinary medicine.

The same grade averages are required for later admission to student teaching and for graduation.

Students applying for the agricultural education specialization must have a satisfactory background in agriculture. Those entering the horticultural education specialization must have adequate experience in horticulture or they must be employed for the equivalent of 3 months, full time, in an appropriate occupation before receiving the B.S. degree. Both curricula require a minimum of 80 credits in technical agriculture; both require a total of 192 quarter credits for completion.

A student is expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward those requirements.

COMMON REQUIREMENTS

Related Course Requirements

Rhet 1222—Public Speaking (4)

Rhet 3551—Professional Writing (3)

Math 1111—College Algebra and Analytic Geometry (5)

Chem 1004, 1005—General Principles (5 cr each)

BioC 1301—Elementary Biochemistry I (5)

Phys 1041—Introductory Physics: Physics and Mankind (5)

One course from BioC 1302, Phys 1032, MicB 3103, GCB 3022, Geo 1001, Ecol 3004

Major Courses—see specialization chosen

Professional Education Courses (minimum 29 credits)

AgEd 1001—Introduction to Agricultural Education (1)

AgEd 1010—Rural Education and Community Leadership (3)

AgEd 3010—Organization and Direction of Supervised Occupational Experience and FFA Activities (4)

AgEd 3031—Student Teaching (8)

AgEd 5028—Teaching Methods in Agricultural Education (5)

AgEd 5061—Program Planning and Evaluation (3)

SeEd 3155—Introduction to Secondary School Teaching (5)

Vocational and Technical Education

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Vocational Agriculture Specialization

In addition to the common requirements listed above, those choosing this option will complete:

Related Course Requirements

- Biol 1001—General Biology (5) (and) Biol 3011 (or) Biol 3012 (or) Bot 1012 (or) Biol 1106

Major Courses (minimum 80 credits)

- AgEc 1020—Principles of Macroeconomics (5)
- AgEc 1030—Principles of Microeconomics (4)
- AgEc 3820—Farm Management Economics (4)
- AgEc 5800—Farm Records and Business Analysis (4)
- Soil 1122—Introduction to Soil Science (4)
- Agro 1010—Principles of Agronomy (4)
- PlPa 1001—Introduction to Plant Pathology (5)
- Hort 1001—Fundamentals of Horticulture (4)
- Ent 1005—Economic Entomology (4)
- AnSci 1100—Introduction to Animal Science (5)
- AnSci 1401—Principles of Animal Nutrition (5)
- AgEn 1020—Agricultural Shop-Metalwork (4)
- AgEn 5020—Program Planning and Instructional Methods in Agricultural Mechanics (4)
- Electives—24 credits in technical agriculture

Professional Education Courses

- AgEd 5049—Agricultural Education for Adults (5)

Vocational Horticulture Specialization

In addition to the common requirements listed above, those choosing this option will complete:

Related Course Requirements

- Biol 1011—General Biology (5) (and) Biol 3012 (or) Bot 1012

Major Courses (minimum 80 credits)

- AgEc 1020—Principles of Macroeconomics (5)
- AgEc 1030—Principles of Microeconomics (4)
- Soil 1222—Introduction to Soil Science (5)
- PlPa 1001—Introduction to Plant Pathology (5)
- Ent 1005—Economic Entomology (4) (or) Ent 5050—Forest Entomology (4)
- Hort 1001—Fundamentals of Horticulture (4)
- Hort 1016—Greenhouse Management (3)
- Hort 1036—Plant Propagation (4)
- AgEn 3205—Power and Power Use (4)
- PlPa 3131—Survey of Plant Physiology (3)
- PlPh 3132—Laboratory (2)
- Electives—18 credits in horticulture and 19 credits in technical agriculture

Professional Education Courses

- AgEd 5049—Agricultural Education for Adults (5) (or) Educ 5104—Adult Education (3)

Undergraduate Programs in the College of Education

Supporting Fields

Supporting Field in Agriculture for Agricultural Education Majors—Students majoring in agricultural education may choose a concentration in an agriculture department. Such a supporting field consists of 18 credits exclusive of introductory courses. For details, consult the department or the *College of Agriculture Bulletin*.

Supporting Field in Agricultural Education for College of Agriculture Students—A supporting field in agricultural education is open to students majoring in the agricultural science and industries curriculum. This field, however, will not include requirements for a teaching certificate. It is recommended that Psy 1001 be completed before entering the supporting sequence. A minimum of 18 credits may be selected from AgEd 1010, 5028, 5032, 5034, 5049, 5051, 5061, 5071.

Business Education

A student preparing to teach business subjects will normally register for the first year in a liberal arts or junior college or in the General College. Application for admission to the program should be made early in the quarter in which the student will have completed 45 credits. These credits should include courses to meet the Liberal Education Distribution Requirements and major course requirements for the program in business education.

A student who has had high school courses or experience in bookkeeping/accounting may be exempt from Acct 1050 and admitted to Acct 1051 by passing a placement test. A student who has had previous instruction or experience in typewriting, shorthand, and/or office procedures and machines may take proficiency examinations for credit in the following courses: BsEd 1501, 1502, 1503, 1505, 1506, 1507, 1508, 1509. (See Examinations for Advanced Standing Credit.)

All students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements.

COMMON REQUIREMENTS

Related Course Requirements

Soc 3801—Sociological Methods I: Descriptive Statistics (4)
3 credits from Math 1001, 1008, 1111, 1141

Major Courses

Econ 1001—Principles of Macroeconomics (4) (and) Econ 1002—Principles of Macroeconomics (4)
GC 1535—Introduction to Data Processing (5)
GC 3531—Writing for Business and the Professions (4)
Acct 1050, 1051—Principles of Accounting (4 cr each)
BsEd 1501—Beginning Typewriting (2)
BLaw 3058—Introduction to Law and the Law of Contracts and Agency (4)
Mgmt 3001—Fundamentals of Management (4)
Mktg 3000—Principles of Marketing (4)

Professional Education Courses

BsEd 1504—Introduction to Business Education (3)
12 credits in BsEd 3601—Student Teaching in Business Subjects (3-12)
HEd 3090—The School and Society (3)
SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

PROFESSIONAL OPTIONS

In addition to the common requirements listed above, students are required to complete one of the following professional options. Students are encouraged to complete more than one option to improve placement possibilities. They should consult with an adviser to plan the electives needed to complete 186 credits. The department recommends that these be in courses numbered at the 3000 and 5000 levels in the College of Business Administration, economics, audio-visual materials, business education, guidance, psychology of adolescence, social foundations of education, advertising, occupational psychology, office occupational experience, and prefall student teaching. A C+ (2.50) average in the major is required for admission to student teaching, for graduation, and for all major and professional courses except SeEd 3150 and 3155 and HEd 3090.

Accounting and Data Processing

Major Courses (minimum 36 credits)

- Acct 3101, 3102—Accounting Theory and Practice I, II (4 cr each)
- QA 1050—Elementary Managerial Statistics (4)
- QA 3053—Quantitative Methods for Administration (4)
- MIS 5100—Computer Systems Design (4)
- BFin 3300—Finance Fundamentals (4)
- 3 credits in BsEd 5114—Office Occupational Experience (3-12)
- 9 credits at the 3000 and 5000 level from accounting, data processing, finance, management information systems, and quantitative analysis

Professional Education Courses (minimum 5 credits)

- BsEd 3303—Teaching Accounting and Data Processing (2)
- 3 credits in education courses

Basic Business and/or Economics

Major Courses (minimum 36 credits)

- Econ 3101—Microeconomic Theory (4)
- Econ 3102—Macroeconomic Theory (4)
- Econ 3751—Money and Banking (4)
- BLaw 3088—Law of Personal Property, Sales Contracts, Commercial Paper, and Wills and Estates (4)
- IR 3002—Industrial Relations Systems, Labor Marketing, and the Management of Human Resources (4)
- Ins 3100—Risk Management and Insurance (4)
- Mktg 3098—Introduction to Consumer Behavior (4)
- 8 credits at the 3000 and 5000 level from economics and business administration

Professional Education Courses (minimum 5 credits)

- BsEd 3302—Teaching Basic Business Subjects (2)
- 3 credits in education courses

Undergraduate Programs in the College of Education

Comprehensive Business

Major Courses (minimum 50 credits)

- BsEd 1502—Intermediate Typewriting (2)
- BsEd 1503—Advanced Typewriting (2)
- BsEd 1505—Beginning Shorthand (3)
- BsEd 1506—Intermediate Shorthand (3)
- BsEd 1507—Advanced Shorthand (3)
- BsEd 1508—Office Management and Procedures (3)
- BsEd 1509—Office Machines (2)
- 3 credits in BsEd 5114—Office Occupational Experience (3-12)
- Mgmt 3002—Psychology in Management (4)
- 25 credits chosen from economics, business administration or related areas including two courses at the 3000 or 5000 level in economics and four courses chosen from at least three of the following areas: accounting, business law, finance, industrial relations, insurance, marketing, management, management information systems, quantitative analysis, transportation

Professional Education Courses (minimum 11 credits)

- BsEd 3300—Teaching Typewriting (2)
- BsEd 3301—Teaching Shorthand and Transcription (2)
- BsEd 3302—Teaching Basic Business Subjects (2)
- BsEd 3303—Teaching Accounting and Data Processing (2)
- BsEd 5107—Materials and Methods in Office Education (3)

Comprehensive Business (Without Shorthand)

Students will take the same courses as specified for the comprehensive business program, substituting appropriate electives selected with the help of a major adviser to replace BsEd 1505, 1506, 1507, and 3301, which are not required.

Vocational Office Education Certification

Four thousand hours of occupational experience, or equivalent, in appropriate areas of preparation are required for certification for teaching vocational office education courses. Of these 4000 hours, 500 must have been earned within the last 5 years. Students not meeting this work experience requirement may enroll in BsEd 5114 concurrently with their office employment. This course includes supervision of the work experience and weekly seminars to relate the experience to instructional problems. The state of Minnesota recognizes such supervised work experience on a ratio of 1 to 2—each hour worked is counted double toward meeting the certification requirement.

Cooperative Office Education Coordinator Certification

For this certificate, students will complete the requirements for the accounting and data processing specialization or one of the comprehensive business programs, obtain the required amount of related work experience, and, in addition, complete the following courses: BsEd 5104, 5106, 5107, and VoEd 5300.

Model/Simulated Office Teacher Certification

Students will complete the requirements for the accounting and data processing specialization or one of the comprehensive business programs, obtain the

required amount of related work experience, and, in addition, complete the following courses to qualify for this certificate: BsEd 5106, 5111, and VoEd 5300.

Distributive Education

The following curriculum, leading to the B.S. degree, prepares teachers of distributive education (sales and marketing) in the secondary and postsecondary schools. Although not required, a minor may be completed through careful selection of electives. Students normally enter the College of Education upon completion of at least 45 credits in a liberal arts area. They may enter later if they satisfy the admission requirements. Major advisers should be consulted as early as possible.

The student who has had high school courses or experience in bookkeeping may be exempt from Acct 1050 and be admitted to Acct 1051 by passing a placement test. Those who have had previous typewriting instruction may be exempt from BsEd 1501.

A student preparing for vocational certification must have had experience in a distributive occupation prior to admission. The student who has had practical business experience or has completed a high school or post-high school cooperative distributive education program may be exempt from part of DE 3100. The extent of this exemption will depend on the quality, amount, and recency of such experience.

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. For a major in distributive education, the courses listed as related and major courses may be used toward these requirements.

Major in Distributive Education

Related Course Requirements

3 credits in mathematics from Math 1001, 1008, 1111, or GC 1533

Major Courses (minimum 54 credits)

Jour 5251 (4) (or) Psy 5751—Psychology of Advertising (4)

Econ 1001—Principles of Macroeconomics (4) (and) Econ 1002—Principles of Microeconomics (4) (and) 3 credits to be elected

GC 1454—Statistics (5) (or) Soc 3801—Sociological Methods I: Descriptive Statistics (4)

GC 1534—Practical Law (5) (or) BLaw 3058—Introduction to Law and the Law of Contracts and Agency (4)

GC 1537—Salesmanship (3)

Acct 1050, 1051—Principles of Accounting I, II (4 cr each) (or) GC 1540, 1541, 1542, 1543—Accounting Fundamentals (2 cr each)

IR 3002—Industrial Relations Systems: Labor Markets, and the Management of Human Resources (4)

Mktg 3000—Principles of Marketing (4)

Mktg 3065—Retail Management (4) (or) GC 1553—Marketing: Principles of Management (5) (and) 6 credits in marketing, merchandising, or management to be elected

BsEd 1501—Beginning Typewriting (2)

Also recommended: Dsgn 1521, Dsgn 1525, Ind 1540, TexC 1641

Professional Education Courses (minimum 58 credits)

DE 1100—Introduction to Distributive Education (3)

DE 3100—Distributive Occupational Experience (1-15)

DE 3301, 3302, 3303—Methods: Distributive Education (3 cr each)

Undergraduate Programs in the College of Education

- 9 credits in DE 3601—Student Teaching in Distributive Education (3-12)
- DE 5100—Organization and Administration of Distributive Education (3)
- DE 5105—Coordination Techniques (2)
- DE 5106—Coordination Techniques in Cooperative Distributive Education (2)
- DE 5110—Curricula in Cooperative Vocational Education (2)
- DE 5111—Curricula in Cooperative Distributive Education (2)
- DE 5305—Teaching Merchandise Display (3)
- SEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- HEd 3090—The School and Society (3)
- CSPP 5101—Foundations of Career Development (3) (or) 5331—Career Development: Principles and Practice I (3)
- VoEd 5300—Philosophy and Practice of Vocational Education (3) (or) Ind 5325—Philosophy and Practice of Industrial Education (3)
- Ind 5330—Industrial Course Construction (3)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Electives to complete 186 credits should be selected in consultation with an adviser. Recommended are advanced courses in business administration, audio-visual materials, consumer education in the schools, guidance and counseling, conference leading, psychology of adolescence, social foundations of education, education of the disadvantaged, advertising, textiles, design, occupational psychology, vocational psychology, vocational education, and prefall student teaching.

The C+ (2.50) major average for admission to student teaching and for graduation is required in the following: Econ 1002; Acct 1051 or GC 1542 and 1543; Mktg 3000, 3065, or GC 1553; Psy 5751 or Jour 5251; GC 1537; DE 3303; DE 5100; DE 5105; DE 5106; DE 5305; Ind 5330.

Minor in Distributive Education

Minor Courses (minimum 39 credits)

- Econ 1001—Principles of Microeconomics (4) (and) 1002—Principles of Macroeconomics (4) (or) AgEc 1020—Principles of Macroeconomics (5) (and) AgEc 1030—Principles of Microeconomics (4)
- GC 1537—Salesmanship (3)
- Mktg 3000—Principles of Marketing (4) (or) AgEc 1400—Agricultural Marketing and Prices (4)
- Mktg 3065—Retail Management (4) (or) GC 1553—Marketing: Principles of Management (5)
- DE 1100—Introduction to Distributive Education (3)
- DE 3100—Distributive Occupational Experience (1-15)
- DE 3302—Methods: Distributive Education (3)
- 3 credits in DE 3601—Student Teaching in Distributive Education (3-12)
- DE 5100—Organization and Administration of Distributive Education (3)
- Electives—12 credits approved by adviser

Home Economics Education

Students intending to major in home economics education will register for the first 2 years in a program in the home economics area and may apply for admission to the College of Education early in the quarter in which they will have completed 90 credits of specified courses at the designated level. For all admissions, applications must be received in the Office of Admissions and Records, Coffey Hall, St. Paul Campus, no later than the end of the first week of

the previous spring quarter; applications for winter admission, no later than the end of the first week of fall quarter. No students are admitted for spring quarter or summer terms.

The curricula in home economics education, offered jointly by the College of Home Economics and the College of Education, are designed for those who expect to become teachers in junior or senior high schools. Satisfactory completion of one of the three curricula qualifies the student for teaching home economics in federally aided schools in the specified area.

During the first 2 years, the student registers in the College of Home Economics. During the third quarter of the sophomore year or the first quarter of the junior year, after the completion of HEEd 1500, application for joint registration with the College of Education is made. The application form and information about procedures should be obtained at the Office of Admissions and Records, 130 Coffey Hall, St. Paul Campus.

Students are expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward these requirements.

Departmentally approved alternates may be substituted for specified courses. Advisers will have information about electives. The three curricular options, designed to include appropriate courses to satisfy the liberal education requirements, are as follows: (1) consumer-homemaking; (2) family life; and (3) occupational education option with child care and development, food service, or textiles and clothing clusters.

COMMON REQUIREMENTS FOR ALL HOME ECONOMICS EDUCATION CURRICULA

Related Course Requirements

- Rhet 1101, 1102—Communications I, II (4 cr each)
- Rhet 1222—Public Speaking (4)
- Rhet 3351—Professional Writing (4)
- Psy 1001—General Psychology (5)
- Soc 1001—Introduction to Sociology (4)
- AgEc 1020—Principles of Macroeconomics (5) (and) AgEc 1030—Principles of Microeconomics (4) (or) Econ 1001—Principles of Macroeconomics (4) (and) Econ 1002—Principles of Microeconomics (4)
- 12 elective credits from courses in Artistic Expression (Group D)

Professional Education Courses (minimum 31 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- HEd 3090—The School and Society (3)
- HEEd 1500—Introduction to Home Economics Education (2)
- HEEd 1510—Knowledge and Values in Teaching (4)
- HEEd 3520—Home Economics Curriculum and Instruction: Cognitive Learning (5)
- HEEd 3530—Home Economics Curriculum and Instruction: Affective Learning (4)
- HEEd 3620—Curriculum Management (3)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits

Electives to complete 186 credits

In addition to the common requirements, the student will complete one of the three options which follow:

Undergraduate Programs in the College of Education

Consumer-Homemaking Option

Related Course Requirements

- Anth 1002—Introduction to Anthropology (5)
- AgEc 5580—Economic Organization of the Household (3 or 4)
- Chem 1004, 1005—General Principles of Chemistry (5 or each) (or) NSci 1004—The Physical World: Physics (4) (and) NSci 1005—The Physical World: Chemistry (4)
- Econ 1041—Decision Making for Consumers (4)
- 8 credits in child psychology including CPsy 3301—Child Psychology (4)
- One course from the following: FScN 1020, MicB 3103, Biol 3051, PubH 3151
- Two courses in consumer decision making, to be selected in consultation with the adviser

Major Courses (minimum 52 credits)

- FScN 1212—Scientific Principles of Food Preparation I (4)
- FScN 1272—Introduction to Food Decision Making (2)
- FScN 1600—Sociocultural Aspects of Nutrition (3)
- FScN 1602—Principles of Nutrition (4)
- FScN 3472—Principles of Food Purchasing (4)
- Dsgn 1551—Housing: Selection of Dwelling and Furnishings (4)
- TexC 1601—Basic Clothing Construction (2)
- TexC 1602—Pattern Fitting and Alteration (2)
- TexC 1661—Aesthetic Principles of Clothing Selection (2)
- TexC 3621—Textiles (5)
- FSoS 1401—Household Equipment (3)
- FSoS 3260—Home Management Principles (3)
- FSoS 5200—Family Relationships (5)
- One elective from each of the following areas, selected in consultation with an adviser: consumer-oriented courses in textiles and clothing; consumer-oriented courses in equipment, housing, or furnishings; the family

Professional Education Courses (minimum 12 credits)

- HEED 3601—Clinical Experience: Teaching Consumer-Homemaking (9)
- HEED 3611—Fieldwork: Consumer-Homemaking Education (3)

Family Life Option

Related Course Requirements

- Anth 1002—Introduction to Anthropology (5)
- Biol 1011—General Biology (5)
- 12 credits of electives in physical or biological science

Major Courses (minimum of 65 credits)

- 15 credits in human growth and development
- 15 credits in home economics courses in home management, family economics, and areas in the College of Home Economics other than family relationships
- Electives from the following areas, selected with the consent of an adviser in the major: anthropology, family social science, psychology, sociology, and other areas related to family excluding home economics

Professional Education Courses (minimum 12 credits)

- HEED 3602—Clinical Experience: Teaching Family Life (9)
- HEED 3612—Fieldwork: Family Life Education (3)

Home Economics Occupational Education Option

To qualify for certification as a teacher in a high school home economics occupational education program in Minnesota, a student must select one or more

subject matter clusters: food service, child development and care, or textiles and clothing services. In addition to the subject matter preparation, certification requirements include a specified number of hours of occupational experience in the subject matter cluster.

Related Course Requirements

- FSeN 1020—Introductory Microbiology (4)
- GC 1132—Biological Science: The Human Body (5)
- Chem 1004, 1005—General Principles (5 cr each) (and) GC 1163—Principles of Physics (5) (or) NSci 1004—The Physical World: Physics (4) (and) NSci 1005—The Physical World: Chemistry (4)
- 8 credits in human growth and development including CPsy 3301—Child Psychology (4)

Major Courses (minimum 19 credits)

- FSoS 1401—Household Equipment (3)
- FSoS 3260—Home Management Principles (3)
- FSoS 5200—Family Relationships (5)
- FSeN 1212—Scientific Principles of Food Preparation (4)
- FSeN 1602—Principles of Nutrition (4)

Cluster Requirements

Food Service Cluster (minimum 18 credits)

- FSeN 1700—Introduction to Hospitality and Food Service Management (2)
- FSeN 3472—Principles of Food Purchasing (4)
- FSeN 3730—Quantity Foods Purchasing and Production (5)
- Two courses in home economics subject matter, to be selected in consultation with the adviser

Child Development and Care Cluster (minimum 18 credits)

- CPsy 5330—Directed Experiences with Children (4)
- CPsy 5331—Processes of Socialization of Children (4)
- Elem 3378—Social Learning in Early Childhood Education (3)
- Two courses in home economics subject matter, to be selected in consultation with the adviser

Textiles and Clothing Cluster (minimum 29 credits)

- TexC 1601—Basic Clothing Construction (2)
- TexC 1602—Pattern Fitting and Alteration (2)
- TexC 1661—Aesthetic Principles in Clothing Selection (2)
- TexC 3601—Tailoring (3-5)
- TexC 3604—Flat Pattern Design (3)
- TexC 3605—Draping Design and Construction (3)
- TexC 3621—Textiles (5)
- TexC 3642—Apparel Industries (4)
- TexC 5600—Advanced Apparel Design and Construction Problems (2-4)
- TexC 5601—Problems in Clothing Construction (3-5)

Professional Education Courses (minimum 18 credits)

- HEEd 3330—Home Economics Occupational Experience (1-9)
- HEEd 3540—Home Economics Curriculum and Instruction: Psychomotor Learning (2)
- HEEd 3603—Clinical Experience: Teaching Home Economics Occupations (9)
- HEEd 3613—Fieldwork: Home Economics Occupational Education (3)
- CSPP 5101—Foundations of Career Development (3)

Optional Program for Teacher Coordinator Certification

Home economics teachers who wish to prepare themselves for the new position of coordinator of home economics occupational programs in secondary schools may do so by taking the following courses:

- HEEd 5106—Coordination Techniques in Home Economics Occupational Education (2)

Undergraduate Programs in the College of Education

- HEEd 5111—Curricula in Home Economics Occupational Education (2)
- HEEd 5301—Materials and Methods in Home Economics Occupational Education (2)
- DE 5100—Organization and Administration of Distributive Education (3)
- DE 5105—Coordination Techniques (2)
- DE 5110—Curricula in Cooperative Vocational Education (2)
- DE 5300—Materials and Methods in Cooperative Vocational Education (2)

Industrial Education

There are two undergraduate majors within industrial education: the B.S. degree with a major in industrial education and the B.S. degree with a major in vocational-industrial education. Students completing the specified undergraduate program with a major in industrial education will be awarded the B.S. degree and will be recommended for the standard special certificate to teach industrial arts in Minnesota public schools. Those completing the specified undergraduate program with a major in vocational-industrial education will be awarded the B.S. degree and will be recommended for certification under the provisions of the Minnesota State Plan for Vocational Education to teach in secondary and postsecondary vocational schools in Minnesota. Preparation for later graduate study in the field is included in both programs.

A student applying for admission to either program must have completed 45 quarter credits, including courses in mathematics, physical science, and English, with at least a C (2.00) average. Application for admission to the major in vocational-industrial education also requires that the student submit verification of occupational experience. This work experience will be evaluated using the standards for certification at the postsecondary level as stated in the Minnesota State Plan for Vocational Education. Students in this program must have sufficient occupational experience in the area in which they intend to teach to be certifiable as a vocational-industrial education teacher in a Minnesota Area Vocational-Technical Institute in order to be admitted.

In addition to the classes scheduled on the campus, industrial education courses are conducted in various centers throughout the state, planned in cooperation with the State Department of Education and local school authorities. Services are available to industrial groups, such as foremen and other personnel with instructional responsibilities, and to public schools. Students may arrange to take a number of laboratory courses at the William Hood Dunwoody Industrial Institute and at metropolitan area Vocational-Technical Institutes without fees other than those paid at the University. Consent of the adviser must be secured prior to registration in any off-campus laboratory course.

A student is expected to complete the Liberal Education Distribution Requirements as detailed in this section of the bulletin. Appropriate related and major courses may be used toward those requirements.

Major in Industrial Education

Related Course Requirements

77 credits from mathematics, science, language, speech, social science, philosophy, history, sociology, psychology, and child psychology, including Math 1008—Trigonometry (3) (and) Math 1111—College Algebra and Analytic Geometry (5), selected in consultation with an adviser

Major Courses (minimum 45 credits)

Ind 3750—Industrial Practices and Processes (3) (and) 42 credits, including 6 credits in each of two blocks and 15 credits in each of two other blocks from:

Vocational and Technical Education

Block A

- Ind 1492—Craftwork (3)
- Ind 1510, 1511, 1512—Wood Processing (3 cr each)
- Ind 1530—Small Gas Engines (3)
- Ind 1532—Automotive Mechanics I (3)
- Ind 3610, 3612—Woods-Technical Specialty (3 cr each)
- Ind 3630, 3632—Power Mechanics-Technical Specialty (3 cr each)

Block B

- Ind 1500—Drafting (3)
- Ind 1502—Building Construction Drafting (3)
- Ind 1504—Advanced Drafting (3)
- Ind 1506—Design (3)
- Ind 1540, 1542—Graphic Arts (3 cr each)
- Ind 3600, 3602—Drafting-Technical Specialty (3 cr each)
- Ind 3640, 3642—Graphic Arts-Technical Specialty (3 cr each)

Block C

- Ind 1520—Electricity and Electronics (3)
- Ind 1522—Communication Electronics (3)
- Ind 1524—Industrial Electronics (3)
- Ind 1526, 1528—Applied Electronics (3 cr each)
- Ind 3620, 3622—Electronics-Technical Specialty (3 cr each)

Block D

- Ind 1560, 1562, 1564, 1566, 1568—Metal Processing (3 cr each)
- Ind 3660, 3662—Metals-Technical Specialty (3 cr each)
- AgEn 1020—Agricultural Shop-Metalwork (4)

Professional Education Courses (minimum 48 credits)

- Ind 1300—Introduction to Industrial Arts Teaching (5)
- Ind 3700, 3702, 3704—Student Teaching (3 cr each)
- Ind 3900—Independent Study (3)
- Minimum of 1 credit from Ind 3701, 3703, 3705, 3707—Student Teaching Seminar (1-3 cr each)
- Ind 5301—Tests in Industrial Subjects (3)
- Ind 5320—Vocational Guidance (3)
- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- Hed 3090—The School and Society (3)
- Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- Physical Education—3 credits
- All students will complete, in addition, electives from Ind 3344, 3706, 3901, 3902, 5100, 5101, 5102, 5103, 5303, SeEd 5105, or Blocks A, B, C, D to complete 186 credits

Prerequisites for student teaching are:

1. Advanced junior or senior status
2. Completion of at least 30 of the 42 laboratory credits in Block A, B, C, or D as required for the major
3. Completion of Ind 1300 and 5360
4. An average of C+ (2.50) for all work in industrial education, including the laboratory courses

Manual Arts Therapy

Selected students working toward the B.S. degree, with a major in industrial education, or those who already possess this degree can become qualified as manual arts therapists by attending a 3-month clinical training program at the Minneapolis Veterans Administration Hospital. Persons desiring to learn more of this cooperative clinical training program are invited to confer or to correspond with one of the major advisers.

Undergraduate Programs in the College of Education

Major in Vocational-Industrial Education

Related Course Requirements

77 credits from mathematics, science, language, speech, social science, philosophy, history, sociology, psychology, and child psychology, including Math 1008—Trigonometry (3) (and) Math 1111—College Algebra and Analytic Geometry (5). These should be selected with consent of an adviser.

Major Courses (minimum 45 credits)

Students admitted to this program will be granted the 45 credits on the basis of demonstrated occupational competency. The 45 credits will be credited to the student after completion of all other degree requirements.

Professional Education Courses (minimum 48 credits)

Ind 3700, 3702, 3704—Student Teaching (3 cr each)

Minimum of 1 credit from Ind 3701, 3703, 3705, 3707—Student Teaching Seminar (1-3 cr each)

Ind 3900—Independent Study (3)

Ind 5301—Tests in Industrial Subjects (3)

Ind 5303—Instructional Aids (3)

Ind 5320—Vocational Guidance (3)

Ind 5325—Philosophy and Practice of Industrial Education (3)

Ind 5330—Industrial Course Construction (3)

Ind 5360—Industrial Instruction (3)

Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)

HEd 3090—The School and Society (3)

12 credits to be elected from Ind 3344, 3706, 3901, 3902, 5305; SeEd 3150, 3155; Educ 5104; AgEd 5035; DE 5115; SpEd 5101; PsyF 3370, 5141; CSPP 5101

Special Requirements for All Students

PsyF 3380—Introduction to Human Relations (3)

PubH 3004—Basic Concepts in Personal and Community Health (4)

Physical Education—3 credits

Electives—9 credits to complete a total of 186 credits

Prerequisites for student teaching are:

1. Junior or senior status
2. Completion of Ind 5360
3. An average of C+ (2.50) for all work in industrial education

III. ADVANCED STUDY

Postbaccalaureate and graduate programs receive a major emphasis in the College of Education. These programs are designed to continue the development of school personnel and to prepare students for a wide range of specializations. The college offers a professional degree, the master of education, intended primarily to help teachers and other professionals improve their skills. Programs offered through the Graduate School lead to the M.A., Ph.D., Ed.D., and the Specialist Certificate in school administration, college teaching, counseling, supervision of curriculum and instruction, and other specialized fields.

This section of the bulletin contains basic information about the professional and graduate degrees and brief descriptions of the specific programs. Students interested in a particular program should contact the appropriate department in the college or secure the *Graduate School Bulletin* for further information.

THE MASTER OF EDUCATION DEGREE

Programs for the M.Ed. are of two types. Plan I is for certified teachers who wish to pursue advanced professional study; Plan II is for professional personnel in fields not requiring teacher certification. The M.Ed. is not a certifying degree, except in the 5-year combined program with the Institute of Technology.

M.Ed. programs are extremely flexible, with each student's program specially planned with an adviser. All programs include a minimum of 45 credits of study appropriately distributed among course work, independent study, seminars, internships, workshops, and school-based experiences.

Applications for admission to all fields except home economics education and agricultural education should be made to the College of Education through the Office of Admissions and Records, 6 Morrill Hall. Students interested in the M.Ed. in home economics or agricultural education should apply to the Office of Admissions and Records, 130 Coffey Hall, St. Paul Campus. Admission is based upon graduation from an accredited college or university with an appropriate undergraduate major or specialization, departmental approval of the application, and concurrence of the college.

The following master of education degree programs are offered by the College of Education:

Plan I, for certified teachers:

Agricultural Education	Home Economics Education
Art Education	Mathematics Education
Business Education	Music Education
Distributive Education	Physical Education
Early Childhood Education	School Health Education
Elementary Education	Science Education
English Education	Social Studies Education

Plan II, for noncertified professional personnel:

Agricultural Education	Recreation and Park Administration
Home Economics Education	

Following admission to an M.Ed. program, the student and his adviser design a proposed program according to the student's needs and interests. The proposed program is then submitted to a departmental committee for approval. There is a 20-percent limitation on courses taken under the S-N grading system. All work

Advanced Study

submitted for the degree must be concluded within 7 years after acceptance into the program. A total of 12 credits may be transferred from another institution, provided the work is appropriate to the program of study. Also, there is a 12-credit limitation on work taken prior to admission, and, in most instances, a maximum of 12 credits on work may be taken through Continuing Education and Extension. A minimum grade point average of B (2.80) is required for graduation. Students should apply for graduation at Window 6 in Morrill Hall early in the quarter in which they plan to complete work for the degree.

GRADUATE STUDY

Graduate programs at the University of Minnesota are administered by the Graduate School. Applications for admission to those programs are made to the Graduate School Office, 316 Johnston Hall. Graduate-level courses in education are offered during the regular academic year (a large number are scheduled at late afternoon and Saturday morning hours) and during the summer terms.

Students intending to take graduate work after finishing undergraduate studies should be aware of the policies of the graduate schools for evaluating courses taken under S-N and similar systems. Most major graduate schools, including that at the University of Minnesota, have adopted special policies for courses taken S-N which are offered in support of an application for admission. As approved by the Executive Committee of the Graduate School of the University of Minnesota the policy is as follows:

“Applicants for admission submitting an undergraduate academic record containing ‘pass-no credit’ or ‘credit only’ entries in advanced courses which have a bearing on the student’s field of specialization should submit (1) a written evaluation or letter grade by the instructor in each course, and (2) scores on the Graduate Record Examination aptitude test and on the advanced test if an appropriate advanced test is available in terms of the declared proposed major in the Graduate School.”

Master of Arts Degrees

Graduate study leading to the M.A. degree is available in most education fields. This degree is offered under two plans: Plan A, involving a thesis, and Plan B, which substitutes additional course work and 9 credits of special papers for the thesis. The majority of M.A.’s in educational fields are taken under Plan B.

A Master’s degree program ordinarily takes from 4 to 6 quarters in residence to complete. The minimum residence requirement for the degree, however, is 3 academic quarters or its equivalent in summer terms at full tuition (2 summer terms—that is, a full summer session—are equivalent to 1 quarter for this purpose). State residents may petition to complete the program in 5 summer terms, but nonresidents must pay full tuition for the 3 academic quarters or summer equivalent. It is possible for a student holding the Bachelor’s degree to complete an M.A. program through registration in the summer terms.

After completion of 15 credits, and not later than the third quarter of registration (the second year for the longer programs), students file with the Graduate School the official proposed program for the degree (Plan A or Plan B) listing all course work, completed and proposed, which will be offered in fulfillment of degree requirements. There is no Graduate School requirement for a foreign language, but departments may determine language requirements for a specific major field.

Specialist Certificate Programs

Programs which lead to the Specialist in education certificate are available in a number of fields. These programs require the completion of a minimum of 90 credits. Students will usually complete the requirements for the Master's degree with a major in the field of the specialty as the first year of the program. All first-year students meet regular admission, candidacy, and examination requirements for the master of arts degree and specify as their degree objective the Master's degree on the application form. Any decision regarding continuation beyond the Master's degree in a specialist program depends on an evaluation of performance in meeting requirements for that degree. The specialist certificate programs now available are the following:

General Educational Administration	School Psychological Services
School Business Administration	Special Education
Intermediate Unit in Educational Administration	Business Education
Secondary School Administration	Distributive Education
Elementary School Administration	Mathematics Education
Counseling	General Curriculum Supervision (Grades 7-12)

After admission to the Graduate School for the specialist program and satisfactory completion of at least 9 credits beyond the Master's degree, the student will file a program for the certificate. This program form lists all courses completed beyond the Bachelor's degree which will be presented, as well as those courses which are proposed to fulfill the requirements for the award of the certificate.

Qualifying examinations in specific areas may be required of students who present credits from other institutions. Such examinations are designed to aid students and their advisers in planning the program for the specialist in education certificate and will be taken preceding the date that the student applies for candidacy and files an approved program.

All students in the specialist program must earn in residence at the University of Minnesota a minimum of 45 credits distributed as approved by the adviser and the graduate faculty in the area of specialization. At least 30 credits of the second year of the program must be earned at the University of Minnesota. The 2-year program must be completed within a period of 12 years.

The Doctor of Education Degree

The University of Minnesota awards the doctor of education (Ed.D.), its highest professional degree in the field of education, in recognition of completion of academic preparation and demonstrated competence for professional activity in that field. Currently, the Ed.D. is offered in the following fields: educational administration, physical education, industrial education, and vocational education.

Standards and procedures for admission and expectations for performance are, in general, comparable to those held for the Ph.D. A major part of the program must be conducted in full-time residence including at least 1 continuous academic year at advanced stages of the program. Rules and procedures for the Ph.D. governing examinations, candidacy, time limits, appointment of committees, and the thesis apply in general to the Ed.D.

POSTBACCALAUREATE PROGRAMS IN EDUCATION

The following listing is provided to identify areas in which postbaccalaureate programs in education are available. Master of education (M.Ed.) programs are described in detail in this section of the bulletin. Students interested in the master of arts, doctor of education, doctor of philosophy, and specialist degree programs should contact the department indicated and should obtain the *Graduate School Bulletin* for details of admission and program requirements.

<i>Field or Emphasis</i>	<i>M.Ed.</i>	<i>M.A.</i>	<i>Ph.D.</i>	<i>Ed.D.</i>	<i>Specialist</i>
Adult Education	no	Education			
Agricultural Education	yes	Agricultural Education	Education or Vocational Education	Vocational Education	
Art Education	yes	Art Education	Education		
Business Education	yes	Business Education	Education or Vocational Education	Vocational Education	Business Education
Child Psychology	no	Child Psychology	Child Psychology		
Counseling and Student Personnel Psychology	no	Educational Psychology	Educational Psychology		Counseling
Distributive Education	yes	Distributive Education	Education or Vocational Education	Vocational Education	Distributive Education
Early Childhood Education	yes				
Education	no	Education	Education		
Educational Administration	no	Educational Administration	Educational Administration	Educational Administration	See fields in this section
Educational Psychology	no	Educational Psychology	Educational Psychology		
Elementary Education	yes	Elementary Education	Education		
English Education	yes	Education or Secondary Education	Education		
Foreign Languages	no	Education or Secondary Education	Education		

<i>Field or Emphasis</i>	<i>M.Ed.</i>	<i>M.A.</i>	<i>Ph.D.</i>	<i>Ed.D.</i>	<i>Specialist</i>
General Curriculum	no	Education or Secondary Education	Education		General Curriculum Supervision
Higher Education	no	Education	Education		
History and Philosophy of Education	See Social and Philosophic Foundations of Education				
Home Economics Education	yes	Home Economics Education	Education or Vocational Education	Vocational Education	
Industrial Education	no	Industrial Education	Education or Vocational Education	Industrial Education or Vocational Education	
Library	no	Library School			
Mathematics Education ^{oo}	yes	Mathematics Education	Education		Mathematics Education
Music Education	yes	Music Education	Education		
Physical Education	yes	Physical Education	Physical Education	Physical Education	
Psychological Foundations	no	Educational Psychology	Educational Psychology		
Recreation and Park Administration	yes	Recreation and Park Administration	Physical Education		
Secondary Education	See fields	Education or Secondary Education	Education		
School Psychology	no	Educational Psychology	Educational Psychology		School Psychology
School Health Education	yes	Physical Education or Education	Physical Education		
Special Education	no	Educational Psychology	Educational Psychology		Special Education
Social and Philosophic Foundations of Education	no	Social and Philosophic Foundations of Education	Education		
Social Studies	yes	Education or Secondary Education	Education		
Teacher Education	no	Education	Education		
Vocational Education	See fields			Vocational Education	Vocational Education

^{oo} See Fifth-Year Combined I.T.-Education program in this section.

The Doctor of Philosophy Degree

The degree of doctor of philosophy is granted in recognition of candidates' high attainments and ability in their special fields as demonstrated, first, by required examinations covering both the general and special fields of candidates' subjects and, second, by the preparation and defense of a thesis.

Candidates for the doctoral degree must register in the Graduate School for at least 9 quarters of graduate study in approved subjects and thesis research and writing. Students who transfer work from other graduate schools for the degree spend the first 2 years, or the last year, in residence at the University of Minnesota.

There is no minimum number of credits specified for the major by the Graduate School, and frequently, depending upon previous preparation, the types and duration of programs for individual students, even within the same field, may vary considerably.

It is expected that from 18 to 24 credits will be offered in the minor or supporting program. With a traditional minor, this work is in a single field related to the major. The supporting program is comprised of a coherent pattern of courses embracing several disciplines. Students electing the supporting program option are expected to take preliminary written examinations in the field included but are not expected to attain competency in each of the fields in their supporting program comparable to that of a person with a traditional minor in the field concerned.

ADULT SPECIAL

A person who wishes to take courses but who has not been formally admitted to a degree program in the College of Education or the Graduate School may be admitted as an adult special student in the College of Education. Graduates of the College of Education need not apply for admission as an adult special student; they need only secure a permit to register at the Education Window in Morrill Hall. All others should secure the adult special application form in the Office of Admissions and Records, Morrill Hall, and return the application to that office as early as possible before registration. Only those credits earned in the first quarter or summer term of adult special registration may be transferred to a Graduate School record. Those who have been admitted as adult special students and wish to proceed in a degree program should apply for admission to the specific program early in the first quarter of registration as an adult special student. Courses numbered 8000 or above are reserved for students who have been admitted to the Graduate School; adult special students are *not* permitted to register for these courses.

CURRICULA

CHILD PSYCHOLOGY

Graduate study is available in several areas of child psychology. A student interested in the M.A. or Ph.D. degree should apply for admission to the Graduate School, specifying his major as child psychology. See also the section below for details of the M.Ed. program in early childhood education. Consult the *Graduate School Bulletin* for details on admission requirements for the M.A. and Ph.D.

COMMUNICATION DISORDERS

The Department of Communication Disorders in the College of Liberal Arts offers graduate programs leading to the master of arts degree, with emphasis in either speech pathology or audiology; and the Ph.D. degree, with emphasis in speech pathology, speech science, audiology, or hearing science. Graduate students are eligible to complete academic and clinical practice requirements for Minnesota teaching certification and for the American Speech and Hearing Association's Certificate of Clinical Competence. The department offers many courses of interest to individuals pursuing continuing professional education.

CURRICULUM AND INSTRUCTION

This department offers graduate-level study in all of its program areas. See the specific area for description of advanced program offerings: adult education; art education; elementary education; general curriculum and instruction; library science; mathematics education; music education; remedial reading and reading supervisor; secondary education academic fields of English education, foreign languages, science education, and social studies education; and teacher education.

Adult Education

Graduate-level study is offered to those interested in the design, implementation, and evaluation of educational programs for adults. Students are prepared for teaching, program development, and administrative roles in a wide variety of institutions and agencies which offer training and education for adults. Students may develop programs within the general area of adult education or may concentrate on one of the following areas: adult basic education, community education, continuing education of the professional, and continuing education of older adults. Course work is listed under Education (Educ) in Section IV.

Art Education

The M.Ed. program in art education is designed to help teachers improve their teaching skills. Secondary teachers applying for the program should have an undergraduate major in art education. Elementary teachers must have 27 credits in art and art education for admission to the program. A general description of the master of education is detailed at the beginning of this section of the bulletin. All programs are specifically planned for the individual student.

Course Requirements for Certified Art Teachers in Secondary Schools (minimum 45 credits)

ArEd 5389—Application of Aesthetic Theory in Education (3)

ArEd 5900—Professional Problems (3)

ArEd 8300—Research in Art Education (3)

ArEd 8306—Seminar: Art Education (1)

14 credits from studio art, art history, and/or art education

Electives—21 credits, selected with the consent of an adviser

Course Requirements for Elementary School Teachers (minimum of 45 credits)

36 credits in art, art education, and electives selected with the consent of an adviser

9 credits in education courses outside the major

Advanced Study

Students interested in graduate study in art education should contact the Graduate School for details on current programs.

Early Childhood Education

The M.Ed. in early childhood education is designed for the preschool teacher who wants a degree of expertise in a number of different curriculum areas as well as child growth and development. A general description of the master of education degree is detailed in the beginning of this section of the bulletin.

Course Requirements (minimum of 48 credits)

30 credits from child psychology and elementary education:

Minimum of 12 credits in child psychology

Minimum of 12 credits in elementary education, including Elem 5376, 5377, and 5378

18 credits to be selected in consultation with an adviser

Elementary Education

The M.Ed. program in elementary education has three primary objectives: 1) to help elementary school teachers improve their teaching skills, 2) to help elementary school teachers develop additional decision-making skills which are needed to select instructional materials and teaching strategies appropriate to their current teaching situations, and 3) to assist elementary school teachers in functioning effectively in school decision-making and evaluation processes. A general description of the master of education degree is detailed at the beginning of this section of the bulletin.

Course Requirements (minimum 48 credits)

Elem 5100—Elementary School Curriculum (3)

Elem 5107—Diagnosis and Treatment of Learning Difficulties (3)

Elem 5300—Literature for the Elementary School (3)

Elem 5317—Materials Laboratory for Teaching English in Elementary Schools (3)

Elem 5337—Beginning Reading Instruction (3) (or) Elem 5338—Teaching Reading in the Intermediate Grades (3)

Elem 5350—Elementary School Science: Materials and Resources (3)

Elem 5602—Practicum: Improvement of Teaching (3)

3 credits in Elem 5363—Workshop: Curriculum Implementation in Elementary School Social Studies (Cr ar)

3 credits in MthE 5101—Workshop: Elementary School Mathematics (1-12)

One course from Elem 5109, 5316, 5334, 5347, 5362, 5377, MthE 5321

18 credits to be selected in consultation with an adviser

Programs leading to the M.A. and Ph.D. degrees are offered through the Graduate School emphasizing areas of study in elementary education. Applicants should have completed an undergraduate curriculum leading to certification for elementary school teaching. These graduate programs prepare the teacher at an advanced level for classroom work, or they prepare the several specialists in elementary education, such as the supervisor or consultant, principal, teacher educator, or teacher of special classes. Requirements for the M.A. and Ph.D. degrees are described in the *Graduate School Bulletin*. In applying for admission to the Graduate School, an applicant should indicate the specific area of interest within elementary education that he wishes to emphasize. Classroom teachers, supervisors, consultants, and teacher educators will state the major as elementary education for the M.A. degree or education for the Ph.D. degree. Prospective elementary school principals may major in educational administration, and their programs

will include work in elementary education with special emphasis on the improvement of instruction. Special-class teachers take substantial amounts of work in educational psychology in addition to that in elementary education.

General Curriculum and Instruction

Graduate study is offered to students interested in learning environments (both school and nonschool) and in the design, development, implementation, and evaluation of programs of learning. Students who wish to pursue graduate work in this field may apply for admission for a major in education or secondary education for the M.A.; for a major in education with an emphasis in general curriculum and instruction for the Ph.D.; or for the Specialist certificate in general curriculum supervision. Students are prepared for such roles as curriculum director and coordinator of instruction. Graduate offerings are designed for those majoring in education and for those specializing in other academic and professional disciplines. Courses are listed under Elementary Education (Elem) and Secondary Education (SeEd); related courses are listed under Education (Educ) and Psychological Foundations (PsyF).

Higher Education

Graduate study is offered with a major in education at the M.A. or Ph.D. level to those interested in teaching and administrative positions in institutions of higher education. Courses are designed for those majoring in education or for those specializing in other academic and professional disciplines and are listed under Education (Educ), Educational Administration (EdAd), Psychological Foundations (PsyF), Counseling and Student Personnel Psychology (CSPP), and Social and Philosophic Foundations of Education (HED).

Library Science

The Library School offers two fifth-year programs leading to the Master's degree for school librarians or media personnel. To qualify fully for professional librarianship, a librarian is expected to earn a 4-year Bachelor's degree and a Master's degree in library science; a) for the education graduate who holds a valid teaching certificate, a regular M.A. program; and b) for the liberal arts graduate who lacks a teaching certificate, a special M.A. program. For further information on courses and requirements, see the assistant to the director of the Library School, 419 Walter Library.

Mathematics Education

The M.Ed. degree in mathematics education is designed for the certified teacher and has as its primary goal the improvement of classroom instruction. A general description of the master of education degree is detailed in the beginning of this section of the bulletin. A student interested in the M.Ed. program should consult a program adviser for specific requirements and course work.

Five-Year Program—For students interested in a 5-year program, the Institute of Technology and the College of Education offer a combined curriculum leading to the bachelor of science and the master of education degrees with a major in mathematics. For other information, see the index for Combined Programs.

A student interested in graduate study in curriculum and instruction in mathematics education may work toward an M.A. in this field. A Specialist certificate is available for those persons with an M.A. who are interested in becoming state and local mathematics curriculum specialists and/or supervisors, departmental

chairmen, or for persons interested in mathematics curriculum development. For a statement of programs and requirements, see the *Graduate School Bulletin*. Students who plan to major or minor in mathematics education at either level should apply for admission to the Graduate School and should plan their programs in consultation with an adviser.

Music Education

The master of education degree, administered through the College of Education, is designed for teachers who wish to increase their knowledge and strengthen their skills in music and education. The program includes courses in applied music, music theory, music history, music education, and education, selected with the approval of an adviser. A general description of the master of education degree is detailed in the beginning of this section of the bulletin.

Course Requirements (minimum 45 credits)

- 15 credits in music education courses
- 6 credits in education courses outside the major
- 18 credits in music
- 6 credits of electives

Graduate study includes programs leading to the master of arts in music education and doctor of philosophy degrees in education or music with an emphasis in music or music education. See the *Graduate School Bulletin* for details on admission requirements.

Remedial Reading and Reading Supervisor Certification

Course work is available at the postbaccalaureate level leading to state certification as an elementary reading teacher; secondary remedial reading teacher; secondary developmental reading teacher; and reading consultant, supervisor, or coordinator. To be recommended for the certificate, the student must have a teaching certificate, have at least 2 years of teaching experience at an appropriate level, and have completed the requisite course work.

Secondary Education

See the specific field for M.Ed. program descriptions in English education, science education, social studies education, and mathematics education.

Graduate study is available for those interested in advanced study in the field. A secondary school teacher interested in the M.A. degree in secondary education or education should apply for admission to the Graduate School, specifying his major as secondary education with a specific area of interest indicated (e.g., secondary education—foreign languages), or as education if he desires a combination of education fields with related work in teaching subjects. The Ph.D. major in the Graduate School in this field should be specified as education with the specific area of interest indicated. See the *Graduate School Bulletin* for details on admission requirements.

English Education

The M.Ed. program in English education is open to certified teachers with a major in a language arts area. It provides language arts teachers with a wide variety of course work and with school-based experiences designed to benefit their work in the schools.

Course Requirements (minimum 45 credits)

SeEd 5194—Curriculum Development in Secondary English and Speech (3)

SeEd 5132—Techniques of Instruction in Secondary Education (3)

SeEd 8892—Introduction to Research in English and Speech Education (3)

Minimum of 6 credits in SeEd 5659—School-Related Projects in Language Arts (1-12)

One course from SeEd 5195, 5321, 5322, 5324, 5325, 5340, 5344, 5347, 5350, 5404

Electives—27 credits selected with the consent of an adviser

Science Education

The M.Ed. program in science education is especially designed for classroom teachers and has as its major goal the improvement of their classroom instruction. Areas of special emphasis are pedagogical training and the practical application of knowledge to the classroom. The program offers the teacher an opportunity to combine scholarly activity and practical classroom experiences.

Course Requirements (minimum 45 credits)

SeEd 5390—Current Developments in Secondary School Science Teaching (3)

SeEd 8887—Research Foundations of Secondary School Science Teaching (3)

Minimum of 6 credits in SeEd 5395—School-Based Projects in Science Education (1-12)

6 credits in education courses

9 credits in science

Electives—18 credits, selected with the consent of an adviser.

Social Studies Education

The M.Ed. program in social studies is designed for classroom teachers who are interested in improving instruction.

Course Requirements (minimum 45 credits)

SeEd 5150—Advanced Methods of Teaching the Social Studies (3)

SeEd 5132—Techniques of Instruction in Secondary Education (3) (or)

SeEd 5152—Techniques of Instruction in Social Studies (3)

3 credits in SeEd 5173—Preparation of Curriculum Materials (1-12) (or)

SeEd 8104—Curriculum Development in the Social Studies (3)

Minimum of 3 credits in SeEd 5151—School-Based Projects in Social Studies Education (1-12)

Minimum of 3 credits in SeEd 5153—New Perspectives in the Social Studies (1-3)

3 credits in the social sciences

Electives—27 credits selected with the consent of an adviser

Teacher Education

Graduate study is offered to those interested in managing comprehensive program and staff renewal in educational institutions. The program area offers a cluster of courses to those whose primary responsibility is in staff and program development. Courses are listed under Education (Educ). Related courses in general curriculum and instruction are listed under Elementary Education (Elem) and Secondary Education (SeEd).

EDUCATIONAL ADMINISTRATION

The Department of Educational Administration offers graduate preparation programs designed to qualify personnel for administrative and supervisory positions in the elementary and secondary schools, junior and senior colleges, and graduate schools in both public and private institutions. Other programs include preparation for leadership posts in regional, state, and federal educational agencies as well as local, state, and national professional and union groups. Information on programs offered for the M.A. degree, Specialist in education certificate, Ed.D. and Ph.D. degrees is available in the departmental publication, *Advanced Degree Programs in Educational Administration* and in the *Graduate School Bulletin*.

EDUCATIONAL FOUNDATIONS

Graduate study in educational foundations leading to the M.A. or Ph.D. degrees provides professional preparation in psychological foundations and social and philosophic foundations of education. For courses and requirements, see the *Graduate School Bulletin*.

Psychological Foundations

Graduate study is provided as preparation for research and teaching. Majors in the program are expected to achieve broad competence in psychological foundations of education together with specialization in a field such as learning, development, cognition, personality, social psychology, measurement, evaluation, statistics, research design, instructional systems, or computer applications. The program also provides basic background offerings in psychology as applied to education for majors in related fields.

Social and Philosophic Foundations of Education

Work in the following fields is available at the graduate level leading to the master of arts degree: comparative international education; history of education; intercultural education; philosophy of education; sociology of education; educational and social futures; anthropology of education. A student should arrange his program in consultation with an adviser in accordance with his special field of interest. The Ph.D. is listed as education. For courses and degree requirements, see the *Graduate School Bulletin*.

PHYSICAL EDUCATION, RECREATION, AND SCHOOL HEALTH EDUCATION

In the School of Education, Recreation, and School Health, Education, programs are available leading to the M.Ed. degree in those three fields. Two types of programs are offered: Plan I for teachers of physical education and school health education and Plan II for noncertified professional workers in recreation.

The M.Ed. programs in physical education and school health education are based on an extension of the undergraduate major in physical education and undergraduate major and minor in school health education and provide continuous education for the in-service teacher. The major objectives are to help the teacher function more effectively in his or her present role; to provide opportunities for both refresher experiences in areas previously studied and for retraining in new areas; and to offer a structure whereby a student may work toward a degree and at the same time satisfy recertification requirements.

Physical Education, Recreation, and School Health Education

Graduate study leading to the Master's degree is offered with majors in recreation and park administration or in physical education where the emphasis may be either physical education or school health education. A graduate program leading to the Master's degree in education with an emphasis in school health education is available. A graduate program leading to the Ph.D. degree with a major in physical education is also available, or with a major in education with emphasis in any one of the three fields. The Ed.D. degree with a major in physical education may offer emphasis in any of the three areas. The applicant is required to select one of two areas of emphasis within the major: administration or curriculum, methods, and supervision. For requirements and course offerings for these degrees, consult the *Graduate School Bulletin*. Application for admission should be made to the Graduate School.

Physical Education

The M.Ed. program in physical education is planned to improve instructional competencies of the certified teacher in this area. Two options are available: general preparation or a concentration in physical education for the handicapped. In addition to the general admission requirements, a student is expected to have an overall grade point average of at least C (2.00) in undergraduate work. A general description of the master of education degree is detailed in this section of the bulletin.

Course Requirements for General Preparation in Physical Education (minimum 45 credits)

- 30 credits in physical education including 3 credits in PE 5981—Problems (Car)
- Electives—15 credits

Course Requirements for Physical Education for the Handicapped (minimum 45 credits)

- 21 credits in physical education
- 15 credits in special education
- 9 credits in education including PE 5982—Integrating Paper (3)

Recreation and Park Administration

The master of education program in recreation is designed for noncertified professional workers. A student may concentrate in one of the areas of industrial recreation, outdoor recreation, public park and recreation administration, therapeutic recreation, and voluntary and youth-serving agencies. The student is expected to have an undergraduate degree in recreation or a related area, including undergraduate courses in psychology, sociology, and natural sciences, and an overall grade point average of at least C+ (2.50) in undergraduate work. A written statement should be submitted with the application indicating the reason for seeking admission, specifying an area of interest, and stating experience of the applicant in the field of recreation. Adequate skill proficiency in the student's selected area of concentration is required for admission to the program.

Course Requirements (minimum 45 credits)

- 24 credits in recreation and park administration
- 9 credits in education including 3 credits in Rec 5620 (or) 5630 (or) 5640
- Electives—12 credits selected in consultation with an adviser

School and Community Health Education

The M.Ed. program in school health education is designed for classroom teachers and has as its major goal the improvement of classroom instruction. In addition to the general admission requirements, a student is expected to have an overall grade point average of at least C (2.00) in undergraduate work.

Course Requirements (minimum 45 credits)

30 credits in school health education including 3 credits in Hlth 5685—School-Based Projects in School Health Education (1-12)

Electives—15 credits

PSYCHOEDUCATIONAL STUDIES

This department offers graduate programs in several areas leading to the M.A. and Ph.D. degrees in counseling and student personnel psychology (school counseling, counseling psychology, college personnel work); school psychology; and special education. Students who plan to major or minor in one of these areas should apply for admission to the Graduate School and should plan their programs in consultation with an adviser in one of the three areas. Although students apply and are admitted to concentrate their study primarily in one area, all students are expected to attain a level of competence in certain studies in the foundations area, including research methodology. For specific courses and requirements, see the *Graduate School Bulletin*.

Counseling and Student Personnel Psychology

Graduate study leading to the Master's degree, Specialist certificate (2-year program), or the Ph.D. degree can be taken with a concentration in this area to prepare for professional or administrative positions at either the secondary school or college level. A major in educational psychology is most frequently advised with a minor in psychology, education, or sociology. Preparation of counseling psychologists is closely related to this field with a concentration in various aspects of psychology.

Preparation leading to understanding the individual student and group behavior, through clinical practice or supervised experience in school, university, or social agency guidance programs, will include course work in psychology of learning, personality development, measurement, social psychology, and individual and group counseling. Students are advised to become familiar with curriculum and administrative problems at either the public school or higher education level, and to take selected courses in psychology and sociology. Doctoral students will include advanced courses in statistics and measurement and will become involved in research projects.

School Psychology

The University of Minnesota offers training in school psychology at two levels: a 2-year graduate program leading to the Specialist certificate in school psychological services and a 4-year graduate program leading to the Ph.D. degree. The School Psychology Training Program prepares psychologists for work in school settings. The curriculum includes courses in learning, personality, child psychol-

ogy, learning difficulties, diagnostic and remedial procedures, statistics and measurement, specialized research techniques, special education, and practicum. Faculty are drawn from the fields of psychology, educational psychology, and child development. In addition to on-campus training facilities, the larger metropolitan area offers a variety of training opportunities, including placements in the Minneapolis Public Schools and suburban school systems, in several special school settings, and in state and community agencies. Applicants for the School Psychology Training Program must fulfill all general standards and requirements of the Graduate School.

Special Education

All training programs in special education require admission to the Graduate School or to adult special status in the College of Education. In addition, the faculty in special education has its own admission procedure which includes an interview of prospective students. Inquiries about admission and advising procedures, state of Minnesota certification requirements, and training sequences should be directed to the admissions office in 101A Pattee Hall.

Students in any college or graduate program may take specific courses such as SpEd 5101, Education of Exceptional Children, to obtain an overview of the possible adaptation of school programs for children with special needs; however, special certification sequences of courses are not offered at the undergraduate level.

Special Education Resource Teaching

Special Education Resource Teacher (SERT) training is available to post-baccalaureate students who already possess a teaching certificate. Students admitted to training are those who are, or will be, responsible for the instruction of handicapped students who spend some or most of their time in regular classrooms. Students receiving SERT training will be advised to develop the competencies required for Severe Learning Behavior Problem: Learning Disabilities (SLBP:LD) and Educable Mentally Retarded (EMR) certification; therefore, such students completing training will be eligible for positions as EMR resource teachers, LD resource teachers or tutors, or some combination of those roles.

Once admitted to training, students typically take the following courses or their equivalents.

- SpEd 5100—Childhood Language Development: Classroom Implications
- SpEd 5110, 5111—Diagnosis and Remediation of Learning Disability I, II
- SpEd 5112—Education of Learning Disabled Children
- SpEd 5121—Methods and Materials for Elementary and Secondary Mentally Retarded Pupils
- SpEd 5150—Education of Emotionally Disturbed and Socially Maladjusted Children
- SpEd 5301—Contingency Management in Special Education
- SpEd 5601—Practicum: Special Education
- SpEd 5610, 5611—Practicum: Diagnosis and Remediation of Learning Disability I, II
- CPsy 5315—Introduction to Mental Retardation
- Elem 5334—Reading Difficulties
- MthE 5355—Mathematics for Slow Learning Children

Teaching Disadvantaged Children and Youth

Assistance in program planning is available to graduate students wishing to minor or specialize in the area of teaching the disadvantaged. There is no formally differentiated program for training teachers of disadvantaged children and youth; all programs are individually arranged.

Teaching Children with Severe Learning and Behavior Problems

Special education offers a program in this field at the postbaccalaureate level only; however, undergraduates are invited to discuss the selection of undergraduate elective courses with staff of the admission office in 101 Pattee Hall. Students admitted to the program can pursue course work toward Minnesota certification with specialization either in the "learning disability" or "emotionally disturbed and socially maladjusted" areas. The two programs share a common core of basic training plus appropriate special training and experience. Students wishing to qualify for either certificate are strongly urged to make early contact with an adviser for current information.

Students who wish to be certified to teach children with learning difficulties (SLBP:LD) typically take the following courses or their equivalents, but should not proceed into the program until they have been formally admitted.

- CPsy 5331—Processes of Socialization of Children
- Elem 5334—Reading Difficulties
- Elem 5335—Clinical Diagnosis of Reading Difficulties
- PsyF 5120—Educational Measurement in the Classroom
- SpEd 5100—Childhood Language Development: Classroom Implications
- SpEd 5110, 5111—Diagnosis and Remediation of Learning Disability I, II
- SpEd 5112—Education of Learning Disabled Children
- SpEd 5150—Education of Emotionally Disturbed and Socially Maladjusted Children
- SpEd 5610, 5611—Practicum: Diagnosis and Remediation of Learning Disability I, II

A typical program leading to Minnesota certification as a teacher of the "emotionally disturbed and socially maladjusted" (SLBP:ED) includes the following courses or their equivalents. Students should not proceed into the program until they have been formally admitted.

- SpEd 5150—Education of Emotionally Disturbed and Socially Maladjusted Children
- SpEd 5601—Practicum: Special Education
- Elem 5334—Reading Difficulties
- SpEd 5112—Education of Learning Disabled Children
- PsyF 5162—Personality and Social Development
- PsyF 5170—Social Psychology of Education
- PsyF 5141—Psychology of School Learning
- PsyF 5120—Educational Measurement in the Classroom
- CPsy 5319—Clinical Procedures with Children
- CPsy 5331—Processes of Socialization of Children

Teaching Children with Severe Hearing Impairments

Acceptance into this program requires submission of a formal application through the admissions office in 101A Pattee Hall. While some of the courses may be taken at the undergraduate level, most students will wish to apply course work completed in this program toward the requirements for the Master's degree.

For certification in this area, students must complete a set of course experiences in general and professional education. The following courses or their equivalents comprise the preparatory program for teachers of the severely hearing impaired. Additional and specialized courses are required for the Master's degree.

- CDis 5302—Anatomy and Physiology of the Speech and Hearing Mechanisms
- CDis 5702—Hearing Measurement
- SpEd 5101—Education of the Exceptional Child
- SpEd 5140—Psychosocial and Educational Aspects of Deafness
- SpEd 5141—Methods of Teaching School Subjects to the Hearing Impaired
- SpEd 5143, 5144—Teaching Language to the Hearing Impaired I, II
- SpEd 5145, 5146—Teaching Speech to the Hearing Impaired I, II
- SpEd 5147—Aural Rehabilitation of Hearing-Impaired Children
- SpEd 5601—Practicum: Special Education

Teaching Gifted Children

Special education offers no prescribed program to prepare for teaching children with outstanding abilities; however, course offerings, research training, and practicum arrangements are available to interested students at undergraduate and graduate levels. The Ph.D. program in educational psychology may emphasize research concerning outstanding abilities, with a program including offerings in special education and psychological foundations of education.

Teaching Physically Handicapped Children

A sequence of courses and practica leading to state certification to teach children with physical impairments or disabilities is possible at the postbaccalaureate level or Master's degree. Students intending to be recommended for the special certificate must have clearance from the program adviser. Required for recommendation for special certification is completion of a minimum of 30 credits from the following.

Required—18 credits from

- SpEd 5101—Education of Exceptional Children
- SpEd 5130—Education of Crippled Children
- SpEd 5131—Educational Problems of the Neurologically Impaired
- SpEd 5601—Practicum: Special Education

Electives—12 credits selected in consultation with an adviser from the following, or other courses

- Anat 1027—Anatomy for Physical Education Students
- Cpsy 5313—Psychology of Atypical Children
- SpEd 5112—Education of Learning Disabled Children
- SpEd 5120 (or Cpsy 5315)—Introduction to Mental Retardation
- PE 3100—Adapted Physical Education
- PE 5100—Teaching Physical Education for the Handicapped

Supervision and Administration of Special Education Programs

Special education and the Department of Educational Administration, through the Graduate School, offer a program which leads to the doctorate in educational administration with a major emphasis in administration of special education programs. This combines course work in general school administration and supervi-

Advanced Study

sion with specialized courses and internships or other practical experiences for students who plan to serve as directors, coordinators, supervisors, or consultants in special education programs. Admission to this program requires completion of the Master's degree, special certification, and experience in some area of special education.

Teaching Moderately and Severely Retarded Pupils

Admission to this program, which leads to a Minnesota certificate to teach severely retarded (trainable) pupils requires admission to the Graduate School as a degree candidate or admission as an adult special student in the College of Education, but does not require a baccalaureate degree in education. Degrees in related fields such as social work or child psychology are acceptable. In addition, persons wishing to enter this certification program must apply for admission to special education. Forms are available in 101 Pattee Hall. Upon admission, the student should see an adviser to plan a program of study.

A minimum of 30 credits, selected from the courses below or their equivalents, is required for completion of the certification program.

SpEd 5100—Childhood Language Development: Classroom Implications (preschool or elementary emphasis) (or) Ind 5320—Vocational Guidance (secondary or adult emphasis)

SpEd 5101—Education of Exceptional Children

SpEd 5120 (or CPsy 5315)—Introduction to Mental Retardation

SpEd 5123—Methods and Materials for Severely Retarded Preschool and School-Age Pupils

SpEd 5301—Contingency Management in Special Education Systems

SpEd 5601—Practicum: Special Education

Students interested in a program of preparation to teach mildly retarded (educable) pupils should inquire in 101A Pattee Hall. Students wishing to take either program as part of a graduate degree should see the *Graduate School Bulletin* for further information, or contact the staff in 101A Pattee Hall for descriptive materials.

VOCATIONAL AND TECHNICAL EDUCATION

See specific fields for master of education program descriptions for agricultural education, business education, distributive education, and home economics education.

Graduate programs in the vocational education fields include Master's degrees in agricultural education, business education, distributive education, home economics education, and industrial education; the Specialist certificate in business education; Ph.D. degrees in vocational education and education with a special field of interest; and Ed.D. degrees in vocational education and industrial education.

The Ph.D. and Ed.D. programs in vocational education are available for persons who wish to prepare for high-level leadership positions: the Ph.D. for specialists in curriculum development and research-evaluation and the Ed.D. for preparation of administrators and instructional specialists. See the *Graduate School Bulletin* for details on admission requirements.

Agricultural Education

Two types of M.Ed. programs are available: Plan I for certified teachers of agriculture and Plan II for noncertified professional workers in agricultural education. A student interested in the master of education should submit an application for admission to the program to the Office of Admissions and Records, 130 Coffey Hall, St. Paul Campus.

Course Requirements for Certified Teachers—Plan I (minimum 45 credits)

- 12 credits in agricultural education
- 6 credits in education outside of the major
- 23 credits in technical agriculture and appropriate noneducation areas
- Electives—4 credits

The master of education degree, Plan II, is designed for persons who are not certified to teach agriculture in public schools but who are engaged in professional activities such as extension workers, employees of public service agricultural agencies, educational directors of agricultural industries, and others whose primary responsibility is agricultural education. Candidates must have at least 1 year of professional experience in agriculture before the degree is awarded.

Course Requirements for Noncertified Professional Workers—Plan II (minimum 45 credits)

- 12 credits in agricultural education including an integrating paper
- 6 credits in education outside the major
- 23 credits in technical agriculture and other areas selected with the consent of an adviser
- Electives—4 credits

Graduate programs in agricultural education include the M.A. in agricultural education, the Ph.D. in education with emphasis in agricultural education, the Ph.D. in vocational education, and the Ed.D. in vocational education. Each program has a distinct purpose and serves a clientele with unique career goals. Most, but not all, advanced degree students in agricultural education have had undergraduate preparation or work experience in the field. See the *Graduate School Bulletin* for details on admission requirements.

The master of agriculture program is offered through the College of Agriculture and is available for teachers who wish to engage in professional development. A student who chooses the applied social science specialization may select an agricultural education adviser. Details on special requirements for the degree can be obtained from the College of Agriculture, St. Paul Campus.

Business Education

The master of education program in business education provides certified business teachers with a wide variety of course work and with school-based experiences designed to benefit their work in the school. A student is expected to have an overall grade point average of C (2.00) and 2.25 in the business education major in undergraduate work. All programs are specifically designed for the individual.

Course Requirements (minimum 45 credits)

- BsEd 5108—Curriculum Construction in Business Education (3)
- 6 credits in education including BsEd 5112
- Two courses from BsEd 5100, 5101, 5102, 5107
- Minimum of 6 credits in BsEd 5116—School-Based Projects in Business Education

Advanced Study

3 credits from business administration or economics
Electives—21 credits selected with the consent of an adviser

The master of arts degree and the Specialist certificate are offered through the Graduate School with a major in business education. Two Ph.D. degree programs are available: education with an emphasis in business education, and vocational education. In addition, the Ed.D. in vocational education administration or vocational instruction is offered. See the *Graduate School Bulletin* for details on admission requirements.

Distributive Education

Two options for the Plan I master of education degree are available: 1) Option I for certified distributive education teachers who have completed an undergraduate major in distributive education or a related teaching field and 2) Option II for persons who hold the Bachelor's degree in a content field such as marketing, retailing, or business administration and who have had considerable occupational experience in marketing. Students are expected to have a full or provisional teaching certificate in distributive education before admission to the program and an overall grade point average of C (2.00) with a 2.25 in the major in undergraduate work. A general description of the master of education degree is detailed in this section of the bulletin.

Course Requirements—Option I (minimum 45 credits)

DE 5125—Issues and Trends in Distributive Education (3)
6 credits in DE 5600—School-Based Projects in Distributive Education (1-12)
6 credits in education including DE 5400—Program Developments in Distributive Education
One course from DE 5115, 5300, 5301, 5310, 5315
6 credits in marketing or marketing-related courses
Electives—22 credits selected with the consent of an adviser

Course Requirements—Option II (minimum 45 credits)

DE 5100—Organization and Administration of Distributive Education (3)
DE 5105—Coordination Techniques (2)
DE 5106—Coordination Techniques in Cooperative Distributive Education (2)
DE 5110—Curricula in Cooperative Vocational Education (2)
DE 5111—Curricula in Cooperative Vocational Education (2)
DE 5120—Business and Distributive Education Programs for Adults (3)
DE 5300—Materials and Methods in Cooperative Vocational Education (2)
DE 5301—Materials and Methods in Cooperative Distributive Education (2)
9 credits in DE 5600—School-Based Projects in Distributive Education (1-12)
6 credits in education including DE 5400—Program Developments in Distributive Education
3 credits in business administration and/or liberal arts
Electives—9 credits

The Master's degree and the Specialist certificate are offered through the Graduate School with a major in distributive education. Two Ph.D. programs are available: the Ph.D. major in education emphasizing distributive education and the Ph.D. in vocational education. In addition, the Ed.D. in vocational education emphasizing vocational education administration or vocational instruction is offered. See the *Graduate School Bulletin* for details on admission requirements.

Home Economics Education

Master of education programs in home economics education include Plan I for certificated home economics teachers and Plan II for noncertificated professional workers in home economics education. A general description of the M.Ed.

degree is detailed in this section of the bulletin. A student interested in the M.Ed. program should submit an application for admission through the Office of Admission and Records, 130 Coffey Hall, St. Paul Campus.

Course Requirements for Plan I and Plan II (minimum 45 credits)

- 9 credits in home economics education including 3 credits in HEED 5910—Integrating Paper
- 6 credits in education outside the major
- 21 credits in technical home economics courses such as design, family social science, food science and nutrition, and textiles and clothing
- Electives—9 credits selected with the consent of an adviser

Graduate study in home economics education includes the master of arts degree in home economics education, the Ph.D. in education with a home economics emphasis, the Ph.D. in vocational education, and the Ed.D. in vocational education. For further information, consult home economics education graduate advisers and the *Graduate School Bulletin*.

Industrial Education

The master of arts degree is offered through the Graduate School with a major in industrial education. In addition, four doctoral programs are available: the Ph.D. degree in education with an industrial education emphasis, the Ed.D. degree in industrial education which emphasizes the needs of instructional personnel in industrial education, the Ph.D. in vocational education, and the Ed.D. degree in vocational education. For further information, consult industrial education graduate advisers and the *Graduate School Bulletin*.

IV. DESCRIPTION OF COURSES

This section contains descriptions of the courses offered in the College of Education. When no departmental prefix precedes the number of a course listed as a prerequisite, the prerequisite course is in the same department as the course being described.

Course Numbering System

1000 to 1998—Courses primarily for freshmen and sophomores

3000 to 3998—Courses primarily for juniors and seniors

5000 to 5998—Courses for juniors, seniors, adult special, and graduate students

8000 to 8998—Courses for Graduate School registrants only

The *Class Schedule*, published just before the registration period each quarter, contains the days and hours when classes meet, the place of meeting, and the name of the instructor. Students should check carefully with the *Class Schedule* for the exact course offerings each quarter.

Symbols

The following symbols are used throughout the course descriptions:

- Courses through which it is possible for graduate students to prepare Plan B papers.
- † All courses preceding the dagger must be completed before credit will be granted for any quarter of the sequence.
- § Credit will not be granted if the equivalent course listed after the section mark has been taken for credit.
- ¶ Concurrent registration is required in course listed after the paragraph mark.
- # Consent of the instructor is required before registration.
- △ Consent of the department offering course is required before registration.

CHILD PSYCHOLOGY (CPsy)

- 1310. TOPICS IN CHILD PSYCHOLOGY.** (1-4 cr; prereq #)
Readings and experiences, proposed by the student, related to cognitive, personality, perceptual, language, and social development in children.
- 1970. DIRECTED STUDY IN CHILD PSYCHOLOGY.** (Cr ar; prereq #)
Reading in area of special interest in child psychology.
- 3301. CHILD PSYCHOLOGY.** (4 cr; prereq 5 cr introductory psychology)
Introduction to the science of child behavior; critical review of theories and research.
- 3301H. HONORS COURSE: CHILD PSYCHOLOGY.** (4 cr; prereq 5 cr introductory psychology and #)
Students attend the lectures in CPsy 3301 and meet with the lecturer in a seminar each week.
- 3360. HONORS COURSE: JUNIOR SEMINAR.** (4 cr; prereq 3301, #; S-N only)
Broad coverage of child psychology research; special attention to methodology.
- 3361H. HONORS COURSE: SENIOR SEMINAR.** (4 cr; prereq 3301, #; S-N only)
Systems, theories, and methods of child psychology; design and conduct of experiments with children.
- 3980. DIRECTED INSTRUCTION.** (1-4 cr [max 4 cr]; prereq #; S-N only)
Undergraduates serve as teaching assistants in courses they have successfully completed for credit.
- 5303. ADOLESCENT PSYCHOLOGY.** (4 cr; prereq 5 cr introductory psychology)
Physical, cognitive, and social development during adolescence.
- 5311. BEHAVIOR PROBLEMS.** (4 cr; prereq 3301 or equiv)
Types, origin, development, and treatment of behavior difficulties in normal children.

Description of Courses

- 5313. PSYCHOLOGY OF ATYPICAL CHILDREN.** (4 cr; prereq 3301 or equiv)
Problems of research, assessment, and behavior associated with atypicality; evaluation of research in areas of major concern for sensory, language, intellectual, and physical deviation.
- 5315. INTRODUCTION TO MENTAL RETARDATION.** (4 cr, §SpEd 5120; prereq 3301 or equiv)
Psychological and educational problems related to the mentally retarded.
- 5319. CLINICAL PROCEDURES WITH CHILDREN.** (4 cr; prereq 12 cr in psychology, educational psychology, sociology, or child psychology)
Methods of clinical psychology; basic concepts and research problems in clinical work with children; primarily for students not majoring in clinical psychology.
- 5330. DIRECTED EXPERIENCES WITH CHILDREN.** (4 cr; prereq 3301, #; S-N only)
Intellectual and/or social development of children as individuals or members of peer groups. Experiences offered in case study, social behavior, cognitive stimulation of children.
- 5331. PROCESSES OF SOCIALIZATION OF CHILDREN.** (4 cr; prereq 3301 or grad)
Processes of social learning; identification, imitation, reward and punishment, internalization, and object choice.
- 5333. PERSONALITY DEVELOPMENT.** (4 cr; prereq 5331)
Psychoanalytic and behavior theory formulations and related research literature in content areas (e.g., attachment, dependency, aggression, and sex typing).
- 5334. CHILDREN AND YOUTH IN SOCIETY.** (4 cr; prereq #)
Rule-acquisition process in children and youth and its relation to concepts of rights, roles, and responsibilities; an interdisciplinary theoretical and research perspective employed to examine the development of moral, political, and legal ideologies in sub- and cross-cultural contents.
- 5335. PEER RELATIONS.** (4 cr; prereq 5331)
Peer influences, social interactions and social relations; developmental changes.
- 5339. PARENT-CHILD RELATIONS.** (4 cr; prereq 5331)
Parent-child relationships and evaluation of relevant research literature.
- 5341. PERCEPTUAL DEVELOPMENT.** (4 cr; prereq 3301)
Perceptual learning and the development of sensory and perceptual processes.
- 5343. COGNITIVE DEVELOPMENT.** (4 cr; prereq 3301)
Development of cognitive processes; discussion of relevant theory, research literature, and methodology.
- 5345. LANGUAGE DEVELOPMENT.** (4 cr; prereq 3301)
Development of structure and function of language; factors influencing development; methodological problems, language scales, theories.
- 5347. LEARNING IN CHILDREN.** (4 cr; prereq 3301)
Current research on learning and problem solving in children; application to practical contexts.
- 5970. DIRECTED STUDY IN CHILD PSYCHOLOGY.** (Cr ar; prereq #)
Independent reading.
- 5990. DIRECTED RESEARCH IN CHILD PSYCHOLOGY.** (Cr ar; prereq #)
Individual empirical investigation.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8301. ADVANCED CHILD PSYCHOLOGY**
- 8304. RESEARCH METHODS IN CHILD PSYCHOLOGY**
- 8310. SEMINAR: CURRENT ISSUES IN CHILD PSYCHOLOGY I**
- 8320. SEMINAR: CURRENT ISSUES IN CHILD PSYCHOLOGY II**
- 8327. ETHOLOGY OF CHILD BEHAVIOR**
- 8329. GENETICS AND DEVELOPMENT**
- 8333. ADVANCED PERSONALITY DEVELOPMENT**

- 8336. ADVANCED SOCIAL DEVELOPMENT
- 8338. DEVELOPMENTAL PSYCHOLOGY OF COMMUNICATION
- 8341. ADVANCED PERCEPTUAL DEVELOPMENT
- 8343. ADVANCED COGNITIVE DEVELOPMENT
- 8345. ADVANCED LANGUAGE DEVELOPMENT
- 8347. ADVANCED CHILDREN'S LEARNING
- 8351. THEORY AND PRACTICES IN THE PRESCHOOL
- 8355. BEHAVIOR OF PRESCHOOL CHILDREN
- 8360. SEMINAR: DEVELOPMENTAL PSYCHOLOGY
- 8605. DEVELOPMENTAL PSYCHOPATHOLOGY
- 8970. INDEPENDENT STUDY
- 8990. RESEARCH PROBLEMS

CURRICULUM AND INSTRUCTION

Art Education (ArEd)

- 1207. EXPERIENCES WITH PICTORIAL EXPRESSION. (3 cr)
Materials, techniques, and ideas important in art expression; relationship between adult expression, child expression, and art history.
- 1208. EXPERIENCES WITH DESIGN AND MATERIALS. (3 cr)
Projects in invention, arrangement, and decoration; color, lettering, posters, bulletin board displays.
- 1209. EXPERIENCES WITH FUNCTIONAL DESIGN AND CRAFTS. (3 cr)
Projects related to clothing, architecture, and interior design; community planning; commercial and industrial design; puppetry; dramatics; intercultural relations.
- 1501. INTRODUCTION TO ART EDUCATION. (2 cr)
For art education majors; a preview of career opportunities, basic problems of teaching, professional qualifications, and use of educational resources at the University.
- 3001. SURVEY OF ART ACTIVITIES. (4 cr; not open to art education majors)
Introduction to pictorial expression, design, and the function of art in the social environment.
- 3009. WEAVING WITHOUT A LOOM. (4 cr)
Developing fundamental weaving skills employing inexpensive equipment and techniques without use of the floor loom.
- 3010. INTRODUCTION TO WEAVING. (3 cr)
Equipment, design, setting up and operation of floor and table looms.
- 3011. ADVANCED WEAVING. (3 cr)
Multibarness floor looms, warp beams, draft studies, design finishes.
- 3020. CONTEMPORARY CRAFTS. (3 cr)
Materials, equipment, design criteria, and techniques for textile, wood, metal, and ceramics.
- 3030. PUPPETRY. (3 cr)
Construction, manipulation, and stage technique for basic puppet types.
- 3306-3307-3308. PRINCIPLES AND EXPERIENCES IN ART EDUCATION. (4 cr per qtr; prereq 1501)
Sequence for art education majors. Basic types of art expression as a foundation for teaching methods adjusted to age and ability groups; experiences in planning group activities in art.
- 3309. INDEPENDENT STUDY. (1-4 cr [max 4 cr]; prereq 3306, 3307)
Individual exploration and study of basic types of art expression with the opportunity for in-depth professional research and creative involvement in one area of interest.
- 3414. TEACHING ART IN ELEMENTARY SCHOOL. (2 cr; prereq 3001 or 6 cr from 1207, 1208, 1209)
Place and content of art in the curriculum.

Description of Courses

- 3424. TEACHING ART IN THE ELEMENTARY SCHOOL.** (3 cr; prereq elementary post-baccalaureate students only)
Materials, projects, and methods for students without previous background in art.
- 3450. ART FOR INTEGRATION IN SECONDARY EDUCATION.** (3 cr)
Using art to further the objectives of instruction in secondary school subjects.
- 3506-3507-3508†. TEACHING AND SUPERVISION OF ART.** (2 cr per qtr [max 6 cr]; prereq sr art education, 3306 and 3307, SeEd 3150 and 3155, ¶3606, ¶3607, ¶3608)
Planning and methods for art education in schools.
- 3606-3607-3608†. STUDENT TEACHING AND SUPERVISION OF ART.** (3 cr per qtr [max 9 cr]; prereq sr art education, 3306 and 3307, SeEd 3150 and 3155, ¶3506, ¶3507, ¶3508)
Observations, participation, student teaching, and supervisory experiences with various types and levels of art classes.
- 5001. ART MEDIA TECHNIQUES.** (1-12 cr [max 12 cr])
Lectures, demonstrations, discussions, and critique sessions exploring and learning various techniques and processes in creativity; handling specific media, with each offering focusing on a single topic.
- 5020. ADVANCED CONTEMPORARY CRAFTS.** (4 cr; prereq 3020)
In-depth experiences in techniques of metal jewelry with emphasis on design criteria, equipment, materials, and process.
- 5302. CURRICULUM BUILDING IN ART EDUCATION: INNOVATIONS.** (4 cr)
Selection, evaluation, and organization of material for teaching units and projects.
- 5303. CURRICULUM BUILDING IN ART EDUCATION: PROGRAMS FOR EXCEPTIONAL CHILDREN.** (3 cr)
Selection, evaluation, and organization of material for teaching units and projects.
- 5316. INTERCULTURAL EDUCATION THROUGH ART.** (3 cr)
Approaches to international understanding through recognition of aesthetic contributions of diverse peoples to American life.
- 5318. ART EDUCATION IN EUROPE.** (3 cr)
Current practices, problems, and achievements in art education in Western Europe compared with practices in American art education.
- 5386. IMPROVING ART PROGRAMS IN THE SCHOOLS.** (4 cr; prereq tchg exper or #)
For teachers of art: critical examination of present art programs in the schools.
- 5389. APPLICATION OF AESTHETIC THEORY IN EDUCATION.** (3 cr)
Contemporary theories of art, their psychological and philosophical foundations. Open to teachers, supervisors, and administrators concerned with art in general education at all levels.
- 5600. INTERNSHIP.** (3-9 cr; prereq #)
Professional assignment for degree candidates under joint supervision of departments and cooperative agency.
- 5605. PRACTICUM.** (3-9 cr; prereq #)
Independent project under direction; gathering data, developing proposals, experimenting with evaluating innovative practices.
- 5900. PROFESSIONAL PROBLEMS.** (3 cr; prereq MEd student)
Independent study for M.Ed. candidates integrating learning from art education, art, and education.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

8300. RESEARCH IN ART EDUCATION

8306. SEMINAR: ART EDUCATION

8900.* PROBLEMS: ART EDUCATION

Education (Educ)

- 1100. DEVELOPMENT OF PARAPROFESSIONAL SKILLS IN INSTRUCTION.** (1-9 cr [max 9 cr]; prereq in-service paraprofessional)
Basic background information for the paraprofessional; training in assisting with instruction. Each offering will focus on a different area.
- 5103. ADULT EDUCATION WORKSHOP.** (1-12 cr [max 12 cr]; prereq practicing adult educator and #)
Study of topic appropriate to the activities and interests of the participants.
- 5104. SURVEY OF ADULT EDUCATION.** (3 cr; prereq sr or #)
General concepts in the field, literature, objectives, history, philosophy, research, institutions, issues, and problems.
- 5201. ORIENTATION TO THE ADULT BASIC EDUCATION STUDENT.** (3 cr)
Characteristics and problems of the disadvantaged adult; individual differences; traditional and innovative approaches for working with adults in ABE programs.
- 5202. THEORIES AND TECHNIQUES OF DIAGNOSIS AND PRESCRIPTION FOR THE ABE TEACHER.** (3 cr; pereq 5201 and ¶5205)
Diagnostic instruments and techniques; application of diagnostic information to learning difficulties of adults in reading and mathematics ABE programs.
- 5203. METHODS AND MATERIALS IN ADULT BASIC EDUCATION.** (3 cr; prereq 5201, 5202, ¶5205)
Teaching basic education subjects to adults: basic theories and approaches to teaching; overview of methods and materials for implementation.
- 5205. FIELD EXPERIENCE IN ADULT EDUCATION.** (4-8 cr [max 8 cr]; prereq #)
Supervised fieldwork practice and weekly seminar with presentation and joint evaluation of adult education practice.
- 5301. DESIGNING THE ADULT EDUCATION PROGRAM.** (3 cr; prereq #)
Designing and implementing educational programs for adults: concepts, theories, determining needs, educational objectives, learning experiences, and evaluating outcomes.
- 5401. ADULT LEARNING AND DEVELOPMENT THROUGH THE LIFE-SPAN.** (3 cr)
Physiological, social, and cultural bases of adult behavior; motivation, socialization, personality change as applied to education of adults.
- 5110. THE STATUS AND ROLE OF WOMEN IN AMERICAN SOCIETY.** (4 cr)
The role of women in American history; perceptions of women in literature and art; attention to women in social studies curricula; human sexuality; male and female character-nature and/or nurture; choices of family and career.
- 5180. ANALYSIS OF THE TEACHING PROCESS.** (3 cr; prereq tchg exper or #)
Conceptual analysis of instructional strategies and methodologies.
- 5182. LABORATORY APPROACHES IN TEACHER EDUCATION.** (3 cr)
Training modes in teacher education; microteaching, simulation, games, and protocol materials.
- 5184. SUPERVISION OF CLINICAL EXPERIENCES.** (3 cr; prereq #)
Supervision of professional laboratory experiences.
- 5186. ALTERNATIVE SCHOOL DESIGNS: IMPLICATIONS FOR TEACHER EDUCATION.** (3 cr)
Value positions and basic assumptions underlying alternative schooling processes and their implications for the selection and training of personnel.
- 5199. WORKSHOP: TEACHER EDUCATION.** (1-12 cr [max 12 cr]; prereq tchg exper and #)
Study of topics in teacher education appropriate to the activities and interests of the participants.
- 5305. WORKSHOP IN HUMAN RELATIONS.** (1-6 cr [max 6 cr], §CSPP 5305)
An experientially based course including simulation activities, curriculum writing, and supervised practice in basic human relations skills emphasizing individual, cultural, and ethnic differences and their implications for educational practice.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8188. ALTERNATIVE PROGRAMS IN TEACHER EDUCATION**

Description of Courses

- 8228.° PROBLEMS: HIGHER EDUCATION
- 8229. SEMINAR: BASIC ISSUES IN HIGHER EDUCATION
- 8230. SEMINAR: DISSERTATION RESEARCH IN HIGHER EDUCATION
- 8250. HIGHER EDUCATION IN THE UNITED STATES
- 8251. CURRICULUM TRENDS IN AMERICAN COLLEGES
- 8252. EFFECTIVE COLLEGE TEACHING
- 8253. SEMINAR: IMPROVEMENT OF COLLEGE INSTRUCTION
- 8254. DIRECTED EXPERIENCE IN COLLEGE INSTRUCTION
- 8250. SEMINAR: MATERIALS AND METHODS IN MARRIAGE EDUCATION
- 8284.° PROBLEMS: TEACHER EDUCATION
- 8285, 8286. PROFESSIONAL EDUCATION OF TEACHERS
- 8302. PROBLEMS: ADULT EDUCATION

Elementary Education (Elem)

- 3100. PSYCHOLOGICAL FOUNDATIONS OF ELEMENTARY EDUCATION. (5 cr; prereq 5 cr introductory psychology)
Educational psychology, learning, retention, transfer, intelligence, measurement, behavioral management and modification applied to elementary education; lecture, laboratory section, school or community agency participation.
- 3101. INTRODUCTION TO ELEMENTARY SCHOOL TEACHING. (3 cr; prereq 3100, §student tchg and §)
Curriculum and organizational patterns; unit instruction; reporting, promotion and non-promotion classroom management; control and support of public instruction.
- 3102. ORIENTATION TO TEACHING IN THE ELEMENTARY SCHOOL. (1 cr, §3101; prereq 3100)
Role of the teacher, school, and community; career planning.
- 3103. THE TEACHER AND THE ELEMENTARY SCHOOL. (2 cr, §3101; prereq elementary education major)
Contemporary issues, curriculum, and organization of the elementary school.
- 3111. FOUNDATIONS OF ELEMENTARY EDUCATION. (1-5 cr [max 5 cr], §3100; prereq Δ)
Educational psychology applied to elementary education.
- 3300. CHILDREN'S LITERATURE. (3 cr)
Materials for children's reading in the elementary school program.
- 3316. TEACHING ENGLISH IN THE ELEMENTARY SCHOOL. (3 cr; prereq 3100 and Engl 3851)
Development of language power in elementary school in relation to all activities of the school day.
- 3331. TEACHING READING IN THE ELEMENTARY SCHOOL. (3 cr; prereq 3100)
Emphasis on intermediate and upper elementary grades; reading readiness, word recognition techniques, development of basic study skills, word meanings, comprehension abilities, and interests and taste in reading.
- 3346. TEACHING SCIENCE IN THE ELEMENTARY SCHOOL. (3 cr; prereq 3100, 10 cr in natural science)
Objectives, content, materials, philosophy, and methods of instruction and evaluation; practical applications.
- 3361. TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. (3 cr; prereq 3100)
Content and philosophy of the social studies program; methods of instruction and problems.
- 3376. NURSERY SCHOOL-KINDERGARTEN CURRICULUM I. (3 cr; prereq 3100)
Objectives of the kindergarten; use of literature; appropriate creative activities in the areas of art, dramatics, music; planning of learning activities.

3377. **NURSERY SCHOOL-KINDERGARTEN CURRICULUM II.** (3 cr; prereq 3376)
Additional expansion and clarification of the methods and materials in the areas of mathematics, reading, science, and social studies.
3378. **SOCIAL LEARNING IN EARLY CHILDHOOD EDUCATION.** (3 cr; prereq CPsy 3301)
Directed observations of nursery school children and procedures.
3391. **TEACHING MATHEMATICS IN THE ELEMENTARY SCHOOL.** (3 cr; prereq 3100 and Math 1005, 1006)
Principles of learning pertinent to the modern program of mathematics in primary and elementary grades; objectives, content, philosophy, instructional materials, and methods of instruction and evaluation.
3600. **STUDENT TEACHING IN THE ELEMENTARY SCHOOL: HALF DAY.** (6 cr; prereq Δ ; S-N only)
Five half days each week of supervised teaching and observing in elementary school.
3601. **STUDENT TEACHING IN THE ELEMENTARY SCHOOL: HALF DAY.** (6 cr; prereq 6 cr elementary student tchg, Δ ; S-N only)
Five half days each week of supervised teaching and observing in the elementary school with special attention to individual needs recognized in previous student teaching.
3602. **TEACHING IN INNER CITY SCHOOLS.** (3 cr)
Lectures, observation, and participation directed toward understanding the child, his family, and the community in a low socioeconomic area.
3603. **STUDENT TEACHING IN THE KINDERGARTEN.** (6 cr; prereq 6 cr elementary student tchg, Δ ; S-N only)
Five half days each week in supervised teaching and observation in public or private schools.
3604. **STUDENT TEACHING IN THE NURSERY SCHOOL.** (3-6 cr; prereq approval of major adviser and director of student tchg; S-N only)
Three to 5 half days each week in supervised teaching in the nursery school.
3605. **STUDENT TEACHING IN ELEMENTARY SCHOOL: HALF DAYS AND FULL DAYS.** (9 cr; prereq Δ ; S-N only)
Five half days and 2 full days each week in supervised teaching and observing in the elementary school.
3606. **STUDENT TEACHING IN THE INNER CITY ELEMENTARY SCHOOL.** (9 cr; prereq Δ ; S-N only)
Five half days and a full day each week in supervised teaching and observing in the elementary school in the inner city.
3607. **STUDENT TEACHING IN ELEMENTARY SCHOOL: FULL DAYS.** (10 cr; prereq Δ ; S-N only)
Five full days each week teaching and observing in the elementary school.
3610. **PREFALL STUDENT TEACHING: FULL DAYS.** (3 cr; prereq Δ ; S-N only)
Observing and teaching during the beginning of the school year; begins with fall semester opening of public schools and continues until University classes begin.
3620. **PREFALL ORIENTATION IN ELEMENTARY SCHOOL.** (1-4 cr; prereq Δ ; S-N only)
Supervised observation and participation in classroom and related school activities; a pre-student teaching exploratory experience.
3621. **JUNIOR PRACTICUM IN ELEMENTARY EDUCATION.** (1 or 2 cr [max 6 cr]; prereq Δ ; S-N only)
Supervised observation and participation in classroom and related school activities; a pre-student teaching exploratory experience.
3630. **STUDENT TEACHING IN ELEMENTARY SCHOOL LITERATURE.** (3 cr; prereq 6 cr in elementary student tchg, Δ ; S-N only)
Minimum of 3 hours weekly of supervised teaching and observation in the elementary school.
3631. **STUDENT TEACHING IN ELEMENTARY SCHOOL ENGLISH.** (3 cr; prereq 6 cr in elementary student tchg, Δ ; S-N only)
Minimum of 3 hours weekly of supervised teaching and observation in the elementary school.
3633. **STUDENT TEACHING IN ELEMENTARY SCHOOL READING.** (3 cr; prereq 6 cr in elementary student tchg, Δ ; S-N only)
Minimum of 3 hours weekly of supervised teaching and observation in the elementary school.

Description of Courses

- 3634. STUDENT TEACHING IN ELEMENTARY SCHOOL SCIENCE.** (3 cr; prereq 6 cr in elementary student tchg, Δ ; S-N only)
Minimum of 3 hours weekly of supervised teaching and observation in the elementary school.
- 3636. STUDENT TEACHING IN ELEMENTARY SCHOOL SOCIAL STUDIES.** (3 cr; prereq 6 cr in elementary student tchg, Δ ; S-N only)
Minimum of 3 hours weekly of supervised teaching and observation in the elementary school.
- 3639. STUDENT TEACHING IN ELEMENTARY SCHOOL MATHEMATICS.** (3 cr; prereq 6 cr in elementary student tchg, Δ ; S-N only)
Minimum of 3 hours weekly of supervised teaching and observation in the elementary school.
- 3900. DIRECTED STUDY.** (1-3 cr [max 6 cr]; prereq elementary education major and Δ)
Analysis of specific instructional curricular, organizational, and operational situations or problems in elementary education.
- 5100. ELEMENTARY SCHOOL CURRICULUM.** (3 cr; prereq 3101)
Selection and organization of subject matter for courses; methods, problems, and findings of research by subjects.
- 5101. WORKSHOP: PROGRAMS AND PROCEDURES OF CURRICULUM DEVELOPMENT.** (1-3 cr; prereq elementary school tchg exper, #)
Leadership in procedures; operational processes; major considerations in planning and organizing; interpersonal relationships and evaluation of improvement programs.
- 5102. PREPARATION OF CURRICULUM MATERIALS.** (3 cr; prereq 5100 or SeEd 5113)
Selecting and organizing units, courses of study, curriculum guides, and writing materials, individually and in groups.
- 5103. WORKSHOP: CURRICULUM LABORATORY PRACTICE.** (1-6 cr; prereq elementary school tchg exper, #)
Analysis and construction of units, courses of study, and curricula according to needs, interests, level, and specialization.
- 5104. PRACTICUM: LABORATORY SCHOOL TEACHING (K-6).** (Cr ar; prereq elementary student tchg or elementary school tchg exper, #)
Experience in teaching and/or research.
- 5105. FOUNDATIONS OF ELEMENTARY SCHOOL METHODS.** (3 cr; prereq 9 cr in education)
Psychology and philosophy related to improvement of elementary school instruction; utilization of research findings.
- 5106. SPEECH IN THE ELEMENTARY SCHOOL.** (3 cr; prereq sr)
Lectures, discussions, individual projects; role of the elementary teacher in promotion of good speech; prevention of speech problems, handling of speech defects; projects related to the teacher's own teaching situation.
- 5107. DIAGNOSIS AND TREATMENT OF LEARNING DIFFICULTIES.** (3 cr)
Evaluation of the results of teaching; diagnosis of pupil difficulty; development and prevention; tests as aids to teaching; following up a testing program.
- 5108. SUPERVISION AND IMPROVEMENT OF INSTRUCTION.** (3 cr; prereq 9 cr in education)
Functions and duties of a supervisor; techniques; analysis of classroom activities.
- 5109. SUPERVISORY STRATEGIES IN PLANNING, OBSERVING, CONFERENCING.** (3 cr; prereq #)
Overview of the responsibilities of the supervising teacher; material development and practice in basic supervisory skills and functions.
- 5120. PLANNING AND EVALUATION OF EDUCATIONAL ALTERNATIVES.** (3 cr)
Survey of alternative school concepts and designs; examination of curriculum programs and materials; procedures for systematic study of options within a classroom, school, or school system.
- 5300. LITERATURE FOR THE ELEMENTARY SCHOOL.** (3 cr)
Evaluative survey of books for children; research related to children's reading interests; selection of literature.
- 5316. TEACHING AND SUPERVISION OF ENGLISH IN THE ELEMENTARY SCHOOLS.** (3 cr; prereq 3316 or elementary tchg exper)
Improvement of instruction, study of trends in English education.

- 5317. MATERIALS LABORATORY FOR TEACHING ENGLISH IN ELEMENTARY SCHOOLS.** (3 cr; prereq 3316 or elementary tchg exper)
Examination and evaluation of textbooks, programmed materials, and audio-visual resources for elementary school language arts instruction.
- 5318. CREATIVE WRITING FOR AND BY CHILDREN.** (3-6 cr [max 6 cr]; prereq 3300 or 3336 or elementary tchg exper and #)
Language arts in the elementary school for experienced teachers, supervisors, graduate students, and college instructors; emphasis on creative aspects of the writing of children's literature and the children's own writing.
- 5319. TEACHING FOREIGN LANGUAGE IN ELEMENTARY SCHOOL.** (3 cr; prereq elementary education major with foreign language minor, #)
Methods and materials for teaching foreign language in the elementary school; laboratory sections for each of the languages represented in the student's minor concentrations (French, German, Spanish).
- 5331. TEACHING AND SUPERVISION OF READING IN THE ELEMENTARY SCHOOL.** (3 cr; prereq 9 cr in education)
Objectives, materials, and teaching procedures; current practices and curricula; class and individual projects; observation of reading techniques and material in the demonstration school.
- 5333. INSTRUCTIONAL LEADERSHIP IN ELEMENTARY READING.** (3 cr; prereq 5331 or #)
Survey of formal and informal procedures for evaluating reading instruction; demonstration teaching as instructional leadership; grouping procedures in improvement of reading programs; intended for supervisors and principals.
- 5334. READING DIFFICULTIES.** (3 cr; prereq 5331 or SeEd 5344)
Causes, prevention, and correction; remedial practices useful to the classroom teacher, school counselor, and reading specialist.
- 5335. CLINICAL DIAGNOSIS OF READING DIFFICULTIES.** (3 cr; prereq 5334)
Relationship to psychological factors and clinical remedial correction.
- 5336. CLINICAL PRACTICE IN REMEDIAL TEACHING.** (3 cr; prereq 5334 or 5107 and #)
Remedial tutoring of individual children who have difficulty in school learning.
- 5337. BEGINNING READING INSTRUCTION.** (3 cr; prereq 3331 and #)
For teachers and specialists interested in initial teaching procedures; compares alternative methods of beginning instruction; emphasis on readiness programs, test-grouping patterns, language factors, and intensive instruction procedures to prevent reading failure.
- 5338. TEACHING READING IN THE INTERMEDIATE GRADES.** (3 cr; prereq 3331 and #)
For teachers and specialists interested in problems of teaching reading beyond the decoding stage; emphasis on comprehension strategies, basic study skills, and reading in the content areas.
- 5339. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL READING.** (1-9 cr [max 9 cr]; prereq elementary school tchg exper or #)
Analysis of new instructional materials, techniques, recent trends, and innovations in elementary reading instruction.
- 5346. TEACHING SCIENCE IN THE ELEMENTARY SCHOOL.** (3 cr; prereq elementary school tchg exper or #)
Materials, resources, and methods of teaching science at the elementary level.
- 5347. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL SCIENCE.** (3-6 cr; prereq elementary school tchg exper)
Offered in summers with focus on a single program for each offering: treating concept foundations, goals, and teaching and evaluation procedures.
- 5348. WORKSHOP: OUTDOOR SCIENCE EDUCATION.** (3 cr; prereq elementary school tchg exper)
Classroom and fieldwork activities dealing with models, materials, and methods in the outdoor setting; consideration of broad topics such as ecological relationships, cyclic processes and changes as well as more specific topics such as rocks and minerals, plants and animals, and stargazing.
- 5349. ELEMENTARY SCHOOL SCIENCE: CURRICULUM AND SUPERVISION.** (3 cr; prereq 3346 or 5346)
Program foundations including elements from philosophy, psychology, the science disciplines; design of in-school curriculum improvement models; program evaluation; pupil reporting procedures.

Description of Courses

- 5350. ELEMENTARY SCHOOL SCIENCE: MATERIALS AND RESOURCES.** (3 cr; prereq 5349)
Experiences in the use of educational materials and media common to the teaching of modern elementary school science.
- 5361. TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.** (3 cr; prereq 3101 or equiv)
Content and organization of social studies programs; programs of understanding, improving the learning situation, and effective use of materials.
- 5362. MATERIALS LABORATORY FOR ELEMENTARY SOCIAL STUDIES TEACHERS.** (3 cr; prereq 3361 or 5361 or #)
Printed, audio-visual, and other materials; investigation and evaluation of teaching materials and devices.
- 5363. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL SOCIAL STUDIES.** (Cr ar [max 9 cr]; prereq elementary school tchg exper and #)
Analysis of new instructional materials and recent curriculum developments in the field; training in innovative instructional procedures.
- 5376. CURRENT TRENDS IN KINDERGARTEN EDUCATION.** (3 cr; prereq tchg exper in kindergarten or primary or #)
Continuing needs of children in our changing culture; current practices and recent research.
- 5377. KINDERGARTEN: MATERIALS AND RESOURCES.** (3 cr; prereq 3377 or 5376 and tchg exper)
Experience in the selection and use of commercial and teacher-made educational materials and media common to teaching in the kindergarten.
- 5602. PRACTICUM: IMPROVEMENT OF TEACHING.** (3 cr; prereq MED in elementary education and #; S-N only)
Elementary school classroom teaching project designed to improve specific teaching skills, planned by student, approved and directed by student's adviser as part of MED program.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8300. SPECIAL COLLECTIONS OF CHILDREN'S LITERATURE**
- 8316. RESEARCH IN ENGLISH COMPOSITION IN ELEMENTARY SCHOOLS**
- 8317. RESEARCH IN SKILL DEVELOPMENT IN SPELLING, HANDWRITING, AND LISTENING**
- 8331. RESEARCH FOUNDATIONS FOR READING INSTRUCTION**
- 8332. RECENT RESEARCH IN READING**
- 8333. SEMINAR: READING INSTRUCTION**
- 8346.* RESEARCH FOUNDATIONS OF ELEMENTARY SCHOOL SCIENCE TEACHING**
- 8347. THE ELEMENTARY SCHOOL SCIENCE PROGRAM: ARTICULATION AND COORDINATION**
- 8361. CURRICULUM CONSTRUCTION IN ELEMENTARY SOCIAL STUDIES**
- 8362. RESEARCH IN ELEMENTARY SOCIAL STUDIES**
- 8363. SEMINAR: ELEMENTARY SOCIAL STUDIES EDUCATION**
- 8364. SEMINAR: ELEMENTARY SCHOOL SOCIAL STUDIES AND THE SOCIAL SCIENCES**
- 8391. SEMINAR: ELEMENTARY SCHOOL PROBLEMS**
- 8392. WORKSHOP: IMPROVEMENT OF INSTRUCTION**
- 8916.* PROBLEMS: TEACHING ENGLISH**
- 8931.* PROBLEMS: TEACHING READING**
- 8961.* PROBLEMS: TEACHING SOCIAL STUDIES**
- 8976. PROBLEMS: TEACHING KINDERGARTEN**
- 8991.* PROBLEMS: IMPROVEMENT OF INSTRUCTION**
- 8992.* RESEARCH IN EDUCATIONAL DIAGNOSIS**

Mathematics Education (MthE)

- 5101. WORKSHOP: ELEMENTARY SCHOOL MATHEMATICS.** (1-12 cr [max 12 cr]; prereq #; not open to mathematics education majors)
Modern trends, methods, and materials used to convey mathematical ideas.
- 5102. WORKSHOP: MATHEMATICS EDUCATION.** (1-12 cr [max 12 cr])
Analyzes issues, materials, and instructional techniques, focusing on a single current topic of particular relevance to secondary school and college mathematics teachers.
- 5301. INSTRUCTIONAL LEADERSHIP IN ELEMENTARY SCHOOL MATHEMATICS.** (3 cr; prereq #; not open to majors in mathematics education)
Current trends in methods, materials, content and evaluation; program development and research; intended for supervisors and principals.
- 5311. TEACHING AND SUPERVISION OF MATHEMATICS IN THE ELEMENTARY SCHOOL.** (3 cr; prereq Elem 3391 or #)
Present practices and trends in methods, evaluation, and diagnosis; objectives, psychology, and philosophy related to improvement of instruction.
- 5312. TEACHING AND SUPERVISION OF MATHEMATICS IN THE SECONDARY SCHOOL.** (3 cr; prereq mathematics tchg exper or #)
Methods, materials, and curriculum development; principles of learning; review of research; preparation and evaluation of tests, units, and materials of instruction.
- 5321. MATERIALS LABORATORY FOR ELEMENTARY SCHOOL MATHEMATICS INSTRUCTION.** (3 cr; prereq 5311 or Elem 3391 or #)
Printed and programmed materials, audio-visual aids, community resources; laboratory projects and techniques of using mathematical devices and instruments.
- 5322. MATERIALS LABORATORY FOR SECONDARY SCHOOL MATHEMATICS INSTRUCTION.** (3 cr; prereq 5312 or #)
Sources and types of materials; laboratory projects and techniques of using mathematics devices and instruments, visual aids, and community resources.
- 5331. CURRENT DEVELOPMENTS IN ELEMENTARY SCHOOL MATHEMATICS INSTRUCTION.** (3 cr; prereq 5311 or #)
Contemporary literature; trends and experimentation with content; criteria for program evaluation.
- 5332. NEW CONTENT AND METHODS IN SECONDARY SCHOOL MATHEMATICS INSTRUCTION.** (3 cr; prereq 5312 or #)
Trends and experimentation with content; special programs for the gifted and slow learner; methods in mathematics; program evaluation.
- 5345. MATHEMATICS FOR GIFTED CHILDREN.** (3 cr; prereq 5311 or Elem 3391 or #)
Curriculum and methods of instruction for academically talented children; development of enrichment units; source material for teachers.
- 5355. MATHEMATICS FOR SLOW LEARNING CHILDREN.** (3 cr; prereq 5311 or Elem 3391 or #)
Units of instruction emphasizing mathematical concepts essential for vocational competence; experimental materials and methods designed to improve performance of low achievers.
- 5366. COMPUTER-ASSISTED MATHEMATICS INSTRUCTION.** (3 cr; prereq 5311 or 5312 or SeEd 3365 or #)
Role of the computer in a mathematics department; its contribution to learning concepts, problem solving, and computational skill; consideration of various types of equipment and languages, programming of problems, instructional materials.
- 5680. PRACTICUM IN MATHEMATICS EDUCATION.** (3-9 cr [max 9]; prereq #)
Supervised experience in teaching or related work in school.
- 5980. DIRECTED STUDIES IN MATHEMATICS EDUCATION.** (3-9 cr [max 9 cr]; prereq #)
Survey of recent literature; design and preparation of reports on special problems.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

8500. THEORY AND CLASSICAL RESEARCH IN MATHEMATICS EDUCATION

8570. RESEARCH IN MATHEMATICS EDUCATION

Description of Courses

- 8590. SEMINAR: MATHEMATICS EDUCATION**
- 8680. INTERNSHIP: MATHEMATICS EDUCATION**
- 8980.* PROBLEMS: MATHEMATICS EDUCATION**

Music Education (MuEd)

- 1201. INTRODUCTION TO PUBLIC SCHOOL MUSIC TEACHING. (2 cr)**
Orientation to the various areas of public school music and courses of study leading to certification.
- 1504. STRING TECHNIQUES I. (4 cr)**
Playing experience on violin and viola; basic concepts of teaching with study of methods and materials.
- 1505. STRING TECHNIQUES II. (4 cr)**
Playing experience on cello and bass; basic concepts of teaching with study of methods and materials.
- 1515. WOODWIND TECHNIQUES. (4 cr)**
Playing experience on all woodwind instruments; basic concepts of teaching with study of methods and materials.
- 1525. BRASS TECHNIQUES. (4 cr; prereq music education major or #)**
Theory and technical development of instruments, elementary instruction in performing, special attention to routine class instruction.
- 1535. PERCUSSION TECHNIQUES. (4 cr; prereq music education major or #)**
Theory and technical development of instruments, elementary instruction in performing, special attention to routine class instruction.
- 1801. INTRODUCTION TO MUSIC THERAPY. (1 cr)**
Survey exploring methods, materials, and applications of music therapy in various clinical settings, with emphasis on field observations.
- 3001. MUSIC FOR RECREATIONAL LEADERSHIP. (4 cr; prereq Mus 1001)**
Directing and working with students in musical performing groups, rhythmic activities, singing, musical instruments, and listening.
- 3011. TEACHING MUSIC IN THE ELEMENTARY SCHOOL. (4 cr; prereq Mus 1001 or exemption)**
For non-music majors; methods and materials in teaching singing, rhythm, music reading, creativity, classroom instruments, fundamentals, appreciation in K-6.
- 3301. TEACHING MUSIC IN GRADES K-3. (4 cr; prereq #)**
For music education majors; music methods and materials; the child voice, selection and presentation of songs, music reading, music history and appreciation, classroom instruments, creativity, rhythm, and basic conducting techniques.
- 3302. TEACHING MUSIC IN GRADES 4-6. (4 cr; prereq 3301, #)**
For music education majors; music methods and materials; notereading, part-singing, music history and appreciation, rhythm, classroom instruments, creativity, and advanced conducting techniques.
- 3311. TEACHING MUSIC IN THE SECONDARY SCHOOL I. (4 cr)**
Music in the general education of junior high and senior high school students; content, methods, and materials.
- 3312. TEACHING MUSIC IN THE SECONDARY SCHOOL II. (4 cr)**
Music in the general education of junior high and senior high school students; content, methods, and materials.
- 3314. PIANO IMPROVISATION METHODS AND MATERIALS. (2 cr; prereq 6 cr in piano and Mus 1503, 1513, 1523)**
Methods and materials for developing basic improvisational skills in junior high and senior high school; aural development.
- 3320. SEMINAR: GENERAL MUSIC. (4 cr [max 16 cr])**
Curriculum development for the general music program in secondary schools.

- 3322. TECHNIQUES OF CLASSROOM INSTRUMENTS.** (4 cr; prereq Mus 1001 or equiv or music or music education major)
Beginning and intermediate class and small group recorder instructions; methods and materials for teaching recorders, capped and uncapped Renaissance reed instruments, Studio 49 (Orff-Schulwerk) melodic and percussion instruments, and bowed, fretted instruments; factors in combining these instruments with voices and keyboard instruments.
- 3331. TEACHING CHORAL AND INSTRUMENTAL MUSIC IN THE PUBLIC SCHOOLS.** (4 cr; prereq 3416 or 3516, ¶SeEd 3150 and 3155)
School-centered experience applying methods and materials of teaching choral and instrumental music in the public schools.
- 3415. CHORAL LABORATORY I.** (4 cr; prereq Mus 1505 and major or minor in music education)
Development of basic conducting skills and rehearsal techniques with emphasis on development of basic conducting gestures; methods and materials for choirs, glee clubs, and ensembles.
- 3416. CHORAL LABORATORY II.** (4 cr; prereq Mus 1505 and major or minor in music education)
Development of basic conducting skills and rehearsal techniques with emphasis on interpretation of a choral composition; methods and materials for choirs, glee clubs, and ensembles.
- 3515-3516. INSTRUMENTAL LABORATORY I AND II.** (5 cr each)
Fundamentals of conducting with emphasis on orchestration, rehearsal techniques for bands and orchestras, study of literature and materials suitable for school use; practical study of all instruments, transposition, arranging, transcribing.
- 3650. STUDENT TEACHING AND SUPERVISION OF MUSIC.** (3-12 cr; prereq #)
Experience in carrying forward, under supervision, the music activities of elementary, junior, and senior high school teachers.
- 3801. PSYCHOLOGY OF MUSIC I.** (4 cr; prereq Psy 1001, 3604 or #)
Basic study of acoustics, the ear and hearing, musical systems, and the psychosociophysiological processes involved in musical behavior.
- 3802. PSYCHOLOGY OF MUSIC II.** (4 cr; prereq 3801)
Consideration of research methods applied in psychology of music problems through examination of selected research studies.
- 3803. PSYCHOLOGY OF MUSIC III.** (2 cr; prereq 3802)
Elementary laboratory and field studies of music therapy and musical behavior.
- 3804. MUSIC THERAPY TECHNIQUES I.** (4 cr; prereq sr in music therapy)
Examination of specific techniques in the quantitative study of music behavior; projects using behavioral applications.
- 3805. MUSIC THERAPY TECHNIQUES II.** (4 cr; prereq 3804)
Basic approaches and techniques of music therapy applied in mental health, mental retardation, physical disability, and corrections work; field studies.
- 3806. MUSIC THERAPY TECHNIQUES III.** (2 cr; prereq 3805)
Hospital orientation: plant, supplies, equipment, and staff; role of music therapy in community; public schools.
- 3851-3852†. CLINICAL INTERNSHIP IN MUSIC THERAPY.** (2 cr per qtr; prereq Δ)
Six-month resident internship in music therapy at an affiliated, approved hospital or clinic.
- 5111. BIBLIOGRAPHY.** (3 cr)
Sources, materials, and techniques.
- 5112. RESEARCH TECHNIQUES.** (3 cr)
Methods and techniques employed in investigating and reporting music education problems; review of significant research.
- 5115. TESTS AND MEASUREMENTS.** (3 cr; prereq #)
Principles of music aptitude and achievement testing; current status of music testing; survey of existing published tests in music.
- 5211. PHILOSOPHIES OF MUSIC EDUCATION.** (3 cr)
Analysis and interpretation of philosophies in music and education; objectives, trends, curriculum, evaluation.

Description of Courses

- 5212. COMPARATIVE MUSIC EDUCATION.** (3 cr; prereq #)
Study, performance, and analysis of music; unique methods of instruction, roles of creative and performing musicians in elementary and secondary school music teaching in selected countries.
- 5214. PSYCHOLOGICAL FOUNDATIONS.** (3 cr; prereq #)
Analysis and interpretation of psychologies of music and education as applied to the teaching of music.
- 5217. HISTORICAL FOUNDATIONS OF MUSIC EDUCATION.** (3 cr; prereq #)
Analysis and interpretation of important elements in modern music teaching derived from the past.
- 5221. MUSIC AND THE HUMANITIES IN THE SECONDARY SCHOOLS.** (3 cr; prereq Mus 1506 and 1603 or #)
Teaching music as part of the humanities emphasis in high schools; methods and music materials appropriate to the humanities.
- 5231. SUPERVISION AND ADMINISTRATION OF ELEMENTARY MUSIC.** (3 cr; prereq major or minor in music or music education)
Analysis and evaluation of instructional techniques; supervisory and administrative techniques; readings; new trends.
- 5232. SUPERVISION AND ADMINISTRATION OF SECONDARY SCHOOL MUSIC.** (3 cr; prereq major or minor in music or music education)
Evaluation of materials, scheduling and teaching of required and elective courses; individual and group lessons; ensembles; extracurricular activities.
- 5305. GENERAL MUSIC IN ELEMENTARY AND JUNIOR HIGH SCHOOLS.** (3 cr; prereq 3011 or #)
Open to music education and non-music majors. Methods, materials, and problems in teaching general music classes; emphasis on music literature.
- 5306. TEACHING MUSIC LITERATURE.** (3 cr; prereq 3011 or 3302 or #)
Principles, methods, and materials for teaching music history (appreciation) in grades K-12.
- 5308. TEACHING MUSIC READING.** (3 cr; prereq 3011, 3302 or #)
Objectives, materials, research, teaching procedures and evaluation; class and individual projects; emphasis on general music class approach.
- 5311. MUSIC FOR EXCEPTIONAL CHILDREN.** (3 cr; prereq 3011 or #)
Trends; methods and materials for a functional program of singing, playing, rhythm, listening, and creative activities for mentally and physically handicapped and gifted pupils.
- 5322. INSTRUMENTAL MUSIC IN THE GENERAL MUSIC CLASSROOM.** (3 cr; prereq Mus 1001 or equiv, music or music education major)
Beginning and intermediate class and small group recorder instruction; methods and materials for teaching recorder, capped and uncapped Renaissance reed instruments, and Studio 49 (Orff-Schulwerk) melodic and percussion instruments; factors in combining these instruments with voices and keyboard instruments.
- 5327. TECHNIQUES AND MATERIALS: ORFF-SCHULWERK APPROACH.** (4 cr)
Demonstration and class practice in teaching and performance skills of Orff-Schulwerk instrument playing; the recorder; movement, improvisation, singing, and creation of musical forms; techniques to encourage children to create and improvise song, instrumental music, and related bodily movement; class exercises in adapting indigenous and foreign ethnic musical material for school use.
- 5421. SELECTION, CONDUCTING OF CHORAL MATERIALS.** (3 cr; prereq sr)
Student conducting with class as performing ensemble; criteria for selecting choral and combined choral and instrumental materials; rehearsal techniques.
- 5431. ADVANCED TOPICS: VOCAL MUSIC.** (3 cr; prereq #)
Empirical research and literature on voice development in individual, class, and choral work: individual surveys of performance practices and examination of school vocal groups; selection of vocal music.
- 5432. THE ADOLESCENT SINGING VOICE.** (3 cr, §3431; prereq Upper Division clearance in voice for voice majors or 6 cr of applied voice for non-voice majors)
Principles of voice pedagogy in teaching adolescent singers; survey of resource materials for the teacher and opportunity to apply principles and techniques in a directed teaching setting.

- 5441. READING AND STYLISTIC INTERPRETATION OF CHORAL MUSIC.** (3 cr; prereq 5431 or #)
Defining means of teaching choristers to read and interpret music of representative periods and styles of compositions.
- 5504. ADVANCED STRING INSTRUMENT TECHNIQUES.** (3 cr; prereq BS in music education or #)
Research reports, lecture-demonstrations; performance by class members and by school-age laboratory groups.
- 5505. STRING TEACHING SEMINAR.** (3 cr; prereq 3650 or #)
Survey and evaluation, through group and individual projects, of recently developed string teaching techniques.
- 5514. ADVANCED WIND TECHNIQUES.** (3 cr; prereq BS in music education or #)
Research reports, practical performance, and lectures.
- 5534. ADVANCED PERCUSSION TECHNIQUES.** (3 cr)
Contemporary approaches to teaching percussion in the elementary, junior high, and senior high school; emphasis on performing techniques; playing of teaching materials, solo and ensemble repertoire.
- 5564. BAND ARRANGING.** (4 cr, §Mus 5564; prereq Mus 1506, 5563 or MuEd 3516 or #)
Current scoring techniques for wind and percussion instruments. Scoring for band; creative arrangements for marching or concert band.
- 5581. SELECTION OF INSTRUMENTAL MATERIAL I.** (3 cr)
Analytical survey of solo and smaller wind chamber music and its use in the teaching of instrumental music on the precollegiate level.
- 5582. SELECTION OF INSTRUMENTAL MATERIAL II.** (3 cr)
Analytical survey of larger wind, chamber, and band music and its use in the teaching of instrumental music on the precollegiate level.
- 5591. NEW DIMENSIONS IN INSTRUMENTAL MUSIC EDUCATION.** (3 cr)
Study of instrumental music through analysis, performance, listening, and composition; evaluative procedures; curriculum structure and design; scheduling.
- 5750. WORKSHOP: MUSIC EDUCATION.** (1-12 cr [max 12 cr])
Selected topics in music education. Each offering will focus on a single topic.
- 5801. INFLUENCE OF MUSIC ON BEHAVIOR.** (3 cr)
Methods and principles of the behavioral and biological sciences as they relate to the art of music.
- 5804. MUSIC IN THERAPY.** (3 cr; prereq 5801)
Application of methods and principles of music therapy through observation, research, and case studies.
- 5970. INDEPENDENT STUDY.** (1-4 cr; prereq consent of adviser and of dept)
An independent study project organized by the student in consultation with the appropriate instructor.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8281-8282-8283†. SEMINAR: HISTORICAL, PHILOSOPHICAL, AND PSYCHOLOGICAL ISSUES**
- 8990.* RESEARCH PROBLEMS**

Secondary Education (SeEd)

- 3150. INTRODUCTION TO SECONDARY SCHOOL TEACHING.** (5 cr; prereq 5 cr introductory psychology)
Secondary education; purposes, history, organization, curriculum, pupils; organization of instructional units; teaching profession; lecture, discussion section; individual youth leadership project.
- 3151. DIRECTED STUDY.** (1-9 cr; prereq Δ)
Analysis of specific instruction, curricular, organizational, and operational situations or problems in secondary education.

Description of Courses

- 3155. INTRODUCTION TO SECONDARY SCHOOL TEACHING.** (5 cr; prereq 5 cr introductory psychology)
Individual differences and educational measurement; statistics, standardized tests, teacher-made tests, marking and promotion, educational research; psychology of learning and human development; lecture, discussion section, and individual youth leadership project.
- 3160-3161†. COMMUNITY FIELD STUDY IN THE INNER CITY.** (2 cr per qtr (max 4 cr))
On-site seminar and fieldwork in the inner city; discussion of experience, social welfare, school-community resources, role relationships, the "disadvantaged."
- 3320. BASES FOR INSTRUCTION IN LANGUAGE IN SECONDARY ENGLISH CURRICULA.** (3 cr)
Implications of recent developments in linguistic theory for English language instruction; special attention to studies of oral and written language development of children and adolescents; relevance of instruction in grammar(s); nonstandard dialects; review of language materials used in schools; practice in development of materials and short instructional episodes.
- 3325. INSTRUCTIONAL PRACTICE IN ENGLISH, SPEECH, AND THEATRE ARTS.** (3 cr)
Practice on and analysis of small-scale instructional episodes with small groups of secondary school students and in conjunction with regular secondary school classes; interaction analysis and videotaping procedures.
- 3326. TEACHING ADOLESCENT LITERATURE.** (3 cr; prereq 3150, 3155)
Sources and materials for curriculum objectives and materials related to teaching of adolescent literature; attention to surveys of reading and responses to literature.
- 3327. TEACHING OF WRITING IN THE SECONDARY SCHOOL.** (3 cr; prereq 3150, 3155)
Sources and procedures for developing curriculum objectives and materials related to the teaching of written composition; attention to prewriting procedures; relational processes of composing; forms and functions of discourse; survey of research findings related to the evaluation of student writing.
- 3328. TEACHING JOURNALISM.** (3 cr; prereq Jour 1012 or Jour 3151)
Methods and techniques of presenting journalism to students of less than college level. Required of all students with a minor in journalism.
- 3329. TEACHING LANGUAGE ARTS IN SECONDARY SCHOOLS.** (3 cr; prereq minor in English, language arts or speech, with major other than speech or English)
Methods and content in development of curriculum materials and instruction in English, language arts, and speech.
- 3330. METHODS AND MATERIALS FOR STUDY OF AMERICAN CIVILIZATION.** (3 cr)
Design and implementation of courses for the interdisciplinary study of American culture.
- 3331. INTRODUCTION TO TEACHING READING IN THE CONTENT AREAS.** (3 cr)
Problems encountered, objectives sought, methods and materials useful for advancing the reading skills of secondary students in regular classes.
- 3334. TEACHING FOREIGN LANGUAGES.** (6 cr; prereq sr or foreign language minor)
- 3335. TEACHING FOREIGN LANGUAGES.** (3 cr; prereq sr and ¶3631)
- 3342. TEACHING SOCIAL STUDIES IN SECONDARY SCHOOL.** (3 cr; prereq minor only)
- 3348, 3349. TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL.** (3 cr for 3348, 2 cr for 3349; prereq sr and ¶3641 for 3348...3348 and ¶3641 for 3349)
- 3352. TEACHING SECONDARY SCHOOL SCIENCE.** (3 cr; prereq minor only)
- 3356. TEACHING SECONDARY SCHOOL SCIENCE.** (1 cr; prereq jr, 5 cr introductory psychology, ¶3155)
Procedures in selecting and organizing materials and in teaching secondary school science.
- 3357. TEACHING SECONDARY SCHOOL SCIENCE.** (3 cr; prereq sr, 3155, 3356, admission to student tchg)
- 3358. TEACHING SECONDARY SCHOOL SCIENCE.** (1 cr; prereq sr, 3357)
- 3362. TEACHING SECONDARY SCHOOL MATHEMATICS.** (3 cr; prereq minor only)
- 3365. TEACHING SECONDARY SCHOOL MATHEMATICS.** (3 cr; prereq 3150, 3155, or #)
Methods, materials, curriculum, and principles of learning pertinent to secondary school mathematics. Students may substitute MthE 5366 for SeEd 3366 or MthE 5322 for SeEd 3367.

3366. **TEACHING SECONDARY SCHOOL MATHEMATICS.** (1 cr; prereq 3365)
3367. **TEACHING SECONDARY SCHOOL MATHEMATICS.** (1 cr; prereq 3366)
3600. **STUDENT TEACHING.** (Cr ar; prereq Δ)
Supervised teaching for students wishing to elect credits in student teaching in addition to regular requirements.
3606. **STUDENT TEACHING IN LIBRARY SCIENCE.** (2-6 cr; prereq sr, Lib 5201, 5202, 5102, 5302, 5303, 5205 or #)
For both liberal arts college graduates and college of education undergraduates intending to become school librarians.
3621. **DIRECTED EXPERIENCES IN TEACHING IN ENGLISH, SPEECH, LANGUAGE ARTS.** (6-9 cr; prereq 3325 with #)
3631. **STUDENT TEACHING IN FOREIGN LANGUAGES.** (3, 6, 9, or 12 cr; prereq sr and 3335 during same year)
3640. **STUDENT TEACHING: SOCIAL STUDIES JUNIORS.** (1 cr; prereq 3150 or ¶3150)
3641. **STUDENT TEACHING IN SOCIAL STUDIES.** (3, 6, or 9 cr [max 12 cr]; prereq sr, ¶3348, ¶3349, satisfactory completion of each qtr for continuation)
3651. **STUDENT TEACHING IN SCIENCE.** (1, 3, 6, or 9 cr; prereq sr, 3357 or ¶3357)
3661. **STUDENT TEACHING IN MATHEMATICS.** (1, 3, 6, or 9 cr; prereq Math 3161 or ¶Math 3161 and SeEd 3365 or ¶SeEd 3365)
3671. **STUDENT TEACHING IN AMERICAN STUDIES.** (3-9 cr; prereq sr, 3330 or ¶3330)
Supervised teaching in high school American studies program.
5105. **AUDIO-VISUAL MATERIALS IN EDUCATION.** (3 cr; prereq sr)
Characteristics, advantages, limitations, and practical classroom use of audio-visual materials of nonprojected and projected types; practice in operation of audio-visual equipment.
5106. **COORDINATING AN AUDIO-VISUAL EDUCATION PROGRAM.** (3 cr; prereq 5105 or #)
Criteria for equipment, facilities, and materials; in-service training of teachers; problems in schools or industry.
5107. **RADIO AND TELEVISION IN EDUCATION.** (3 cr; prereq 9 cr in education)
Production, techniques of classroom use, selection of equipment, teaching appreciation, and the administration of radio and television in the schools.
5108. **NONPROJECTED AUDIO-VISUAL MATERIALS AND EQUIPMENT LABORATORY.** (3 cr; prereq 5105 or ¶5105)
Planning and making nonprojected materials for audio-visual education; use of materials and equipment.
5109. **PROJECTED AUDIO-VISUAL MATERIALS AND EQUIPMENT LABORATORY.** (3 cr; prereq 5105 or ¶5105)
Planning and making projected materials for audio-visual education; use of materials and equipment.
5110. **APPLIED INSTRUCTIONAL MEDIA EVALUATION AND SELECTION.** (3 cr; prereq 5105)
Analysis of traditional and newer types of audio-visual materials; emphasis on selection applied to content, learning situations and technical quality; opportunity for students to follow subject area and grade-level interests.
5111. **MECHANICS OF CINEMATOGRAPHY.** (3 cr)
The place of motion picture photography in today's classroom: types of educational motion pictures considered from the production viewpoint; scripting, storyboard; selection and operation of camera, lens, and lighting equipment.
5112. **FAMILY LIFE EDUCATION.** (3 cr)
Sources and types of materials available; techniques of family life education, preparation and evaluation of instructional materials.
5113. **PRINCIPLES OF SECONDARY SCHOOL CURRICULUM.** (3 cr; prereq 3155 or equiv)
Concepts and basic principles; forces influencing curricular objectives, organization and construction; evaluation and trends.
5114. **INTERDISCIPLINARY APPROACHES TO CURRICULUM.** (3 cr)
Rationale, status and trends, design and operation of curriculum of an interdisciplinary nature.

Description of Courses

- 5115. FINDING EDUCATIONAL INFORMATION.** (3 cr)
Finding and evaluating sources of information; identification of available options and development of skills needed to search them efficiently.
- 5117. MULTIMEDIA PRODUCTION.** (3 cr; prereq 5109 or #)
Theory, design, and practical production and programming of three or more screen productions involving use of electronic programming such as the Arion Command performer.
- 5121. CROSS-CULTURAL UNDERSTANDING.** (4 cr; prereq language major or minor)
Analysis and understanding of second language and American cultures; subsequent generation of learning materials and evaluation procedures to develop understanding of both foreign cultures and American subcultures.
- 5122. LANGUAGE CONVERSATION FOR TEACHERS.** (4 cr; prereq Δ)
Improving conversational skills and vocabulary; analyses and resources and their application to the American classroom.
- 5129. TRENDS AND ISSUES IN SECONDARY CURRICULUM.** (3 cr; prereq 5113 or equiv)
Research findings and analysis of current proposals at the national, state, and local levels.
- 5131. INSTRUCTIONAL SIMULATIONS AND LEARNING GAMES: DEVELOPMENT AND CLASSROOM USE.** (3 cr)
Background, development factors, subject-matter models, procedures for use of materials; analysis of the value of such material.
- 5132. TECHNIQUES OF INSTRUCTION.** (3 cr)
Cross-departmental courses designed to develop individual competencies; application of current psychological research to classroom instruction, defining objectives in terms of achievable student competencies.
- 5150. ADVANCED METHODS OF TEACHING THE SOCIAL STUDIES.** (3 cr)
Advanced methods for social studies teachers; prerequisite to other graduate-level courses in social studies education.
- 5151. SCHOOL-BASED PROJECTS IN SOCIAL STUDIES EDUCATION.** (1-12 cr [max 12 cr])
Provides opportunity to work individually or in teams on curricular, instructional, or evaluation problems within the school.
- 5152. TECHNIQUES OF INSTRUCTION IN SOCIAL STUDIES.** (3 cr; prereq 5150)
Analysis of teaching strategies and contemporary curriculum materials in the social studies; techniques of instruction useful in inquiry, strategies of analysis; classroom behavior and evaluation; required of M.A., M.Ed., and Ph.D. candidates.
- 5153. NEW PERSPECTIVES IN THE SOCIAL STUDIES.** (1-3 cr [max 12 cr])
Issues, materials, and instructional techniques related to current topics of particular relevance to social studies teachers.
- 5154. SOCIAL STUDIES WORKSHOP.** (3-9 cr)
A workshop on the Minnesota Project Social Studies curriculum.
- 5155. MATERIALS LABORATORY FOR SOCIAL STUDIES TEACHERS.** (3 cr; prereq 5150, 5152)
Locating, developing, and using audio-visual materials, learning programs, and simulations for use in social studies classes.
- 5156. PRACTICUM IN SOCIAL STUDIES INSTRUCTIONAL TECHNIQUES.** (1 cr; prereq 5150, 5152)
Includes production of videotape episodes to demonstrate competency in the use of materials and techniques of instruction; required for all M.A., M.Ed., and Ph.D. candidates.
- 5167. ECONOMIC EDUCATION PROGRAMS.** (1-3 cr; prereq Econ 1002 or equiv or #)
Conceptual framework of economic education through analyzing its research, objectives, philosophy, scope and curricular sequence.
- 5169. STUDENT ACTIVITY PROGRAMS IN SECONDARY SCHOOLS.** (3 cr; prereq 3155)
Values, purposes, and practices in organizing, sponsoring, and evaluating student activity programs.
- 5170. PROGRAMS AND PROCEDURES OF CURRICULUM DEVELOPMENT.** (3 cr; prereq 5113 or Elem 5100)
Leadership in procedures; operational processes; major considerations in planning and organizing; interpersonal relationships, and evaluation of improvement programs.

- 5171. TEACHER SELF-APPRAISAL OBSERVATION SYSTEMS.** (3 cr)
Analyzing videotapes in classrooms using a variety of interaction analysis coding instruments as a means of understanding, selecting, and broadening classroom behavior; dimensions and directions of coding.
- 5172. SUPERVISION OF SECONDARY INSTRUCTION.** (3 cr; prereq 5113)
Achievement of appropriate teaching expectations focusing on problems of personnel responsible for their improvement.
- 5173. PREPARATION OF CURRICULUM MATERIALS.** (1-12 cr)
Principles and procedures for the selection, development, and organization of curriculum materials including learning packages, teacher-made games and simulations, units, courses of study, and curriculum guides.
- 5174. SEMINAR: PRACTICAL RESEARCH IN CURRICULUM AND INSTRUCTION.** (1-4 cr; prereq #)
Topics appropriate to the current research activities and plans of the participant selected to provide perspective on all components of a practical research endeavor; consideration of measurement and research design; hands-on computer analysis of data.
- 5177. DIRECTING SECONDARY SCHOOL SPEECH ACTIVITIES.** (3 cr; prereq Spch 1101 or 1102 and 1106 or #)
Philosophy, organization, and administration of extemporaneous speaking, oratory, interpretive reading, and debate.
- 5189. MATERIALS AND CURRICULUM CONSTRUCTION IN MODERN LANGUAGES.** (3 cr; prereq 5385 and #)
Curriculum development, preparation of units, testing techniques; materials for classroom, language laboratory, televised instruction, and programmed learning.
- 5191. WORKSHOP: TEACHING OF FOREIGN LANGUAGES** (1-10 cr [max 10 cr])
Related specifically to the needs of the in-service teacher; topics, location, and duration will be highly flexible.
- 5192. FOREIGN LANGUAGE WORKSHOP: DEVELOPMENT OF MATERIALS AND SHORT COURSES FOR INDIVIDUALIZED INSTRUCTION.** (3-12 cr)
For foreign language teachers to develop and test new types of curriculum materials in French, German, Russian, or Spanish, including independent study units, learning packages, minicourses, quarter courses, small group projects, and enrichment materials to be tried out with high school students, revised, and published for the benefit of teachers of the state.
- 5194. CURRICULUM DEVELOPMENT IN SECONDARY ENGLISH AND SPEECH.** (3 cr; prereq 3326 or equiv)
Analysis and evaluation of curricula and trends; emphasis on articulation.
- 5195. WORKSHOP: CURRICULUM DEVELOPMENT IN ENGLISH AND SPEECH.** (3 cr; prereq 5194 or #5194 or #)
Establishing curricular goals; planning new programs, courses, experiences in secondary language arts curricula; developing and selecting pertinent materials and processes.
- 5321. TEACHING LITERATURE IN SECONDARY SCHOOLS.** (3 cr; prereq 3155 or jr-sr high school tchg exper)
Background for guidance in reading for secondary school students; services of information and theory in development of program of instruction in literature.
- 5322. TEACHING RHETORIC AND COMPOSITION IN SECONDARY SCHOOLS.** (3 cr)
Contemporary directions in rhetorical theory and analysis of recent curriculum developments bearing on the teaching of oral and written composition.
- 5324. CURRICULUM PROBLEMS AND ISSUES IN TEACHING THEATRE ARTS IN SECONDARY SCHOOLS.** (3 cr; prereq Upper Division or grad)
Philosophy, methods, materials of teaching drama in the curriculum and as an extra-curricular activity in secondary schools; experience with theatrical improvisation, including theatre games, sound and motion, characterization, plot structure, and experience with the informal use of scripted plays.
- 5325. IMPROVISATIONAL DRAMA TECHNIQUES IN THE CLASSROOM.** (3-6 cr [max 6 cr])
Experiences in improvisation, including training in beginning theatre games, sound and motion, characterization, and plot structure; development of improvisational activities based on themes and literature of subject interest and suited to the needs of students.

Description of Courses

- 5326. WORKSHOP: FILM STUDIES.** (3 cr)
Applications of film as extension and as alternative to study of traditional literary forms and as context or stimulus for discussion, for reading, for writing; analysis and evaluation of range of film and published materials available for use with secondary school students in film-study classes.
- 5340. TEACHING SPEECH AND FORENSICS IN SECONDARY SCHOOL.** (3 cr; prereq Spch 1101 and 1102 and 1106 or #)
Methods of teaching speech and forensics in the high school classroom; attention to social framework of spoken communication; administration and instructional procedures in the high school forensic program.
- 5344. TEACHING READING IN SECONDARY SCHOOLS.** (3 cr; prereq 9 cr in education)
Procedures, objectives, and materials for teaching reading in subject-matter fields.
- 5347. LINGUISTICS AND READING.** (3 cr)
Nature of linguistic inquiry, investigation of the contributions made to reading and programs resulting from linguistic input; potential contributions of current linguistic research to reading instruction.
- 5349. WORKSHOP: SECONDARY READING INSTRUCTION.** (1-12 cr [max 12 cr]; prereq #)
Principles, instructional techniques, and materials for teaching reading in secondary schools. Each offering will focus on a single topic.
- 5350. CURRENT DEVELOPMENTS IN ENGLISH AND SPEECH EDUCATION.** (1-6 cr [max 12 cr])
New instructional approaches, new materials, current issues and problems in English and language arts education, focusing on a single topic or issue with each offering.
- 5351. DIRECTED STUDY.** (Cr ar [max 6 cr]; prereq #; S-N option)
Individual or group work on curricular, instructional, or evaluation problems.
- 5371. CURRICULUM WORKSHOP.** (1-3 cr per qtr; prereq 5113 or Elem 5100 or #)
Workshops pertaining to curriculum and instruction with specific topic to be identified at the time workshop is listed for offering.
- 5382. TESTING AND EVALUATION IN FOREIGN LANGUAGE TEACHING AND LEARNING.** (3 cr; prereq PsyF 5120)
Standardized achievement, proficiency, aptitude, and attitude tests in foreign languages; building test items for cognitive, affective, and psychomotor domains; techniques for evaluating curricula and teaching practices.
- 5385. TOPICS IN THE TEACHING OF FOREIGN LANGUAGES.** (3 cr)
Classroom procedure for individualized instruction, new curricula, teaching of culture and literature, use of media, evaluation of teaching.
- 5390. CURRENT DEVELOPMENTS IN SECONDARY SCHOOL SCIENCE TEACHING.** (3 cr; prereq 3356, 3357, 3358 or 3352 or equiv undergrad courses or science tchg exper)
Curricula, methods, materials of instruction, evaluation.
- 5391. METHODS AND MATERIALS FOR TEACHING PHYSICAL SCIENCE.** (3 cr; prereq 3356, 3357, 3358 or 3352 or equiv)
Individualized instruction in laboratory techniques and equipment with application to classroom use.
- 5392. METHODS AND MATERIALS FOR TEACHING BIOLOGICAL SCIENCES.** (3 cr; prereq 3356, 3357, 3358 or 3352 or equiv)
Individualized instruction in laboratory techniques and equipment with application to classroom use.
- 5393. METHODS AND MATERIALS FOR TEACHING EARTH SCIENCES.** (3 cr; prereq 3356, 3357, 3358 or 3352 or equiv)
Individualized instruction in laboratory techniques and equipment with applications to classroom use.
- 5394. WORKSHOP: SCIENCE EDUCATION.** (1-12 cr [max 12 cr])
Analysis of issues, materials, and instructional techniques on current topics of relevance to secondary school and college science teachers; each offering to focus on a single topic for varying credit.
- 5395. SCHOOL-BASED PROJECTS IN SCIENCE EDUCATION.** (1-12 cr [max 12 cr]; prereq MEd student in science education)
Individual or group work on curricular, instructional, or evaluation problems and projects applicable to school situations.

- 5396. METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE.** (3 cr; prereq Ling 5001 or #)
Principles of selection, sequencing, and presentation of instructional materials at various grade levels.
- 5404. LANGUAGE, CULTURE, AND EDUCATION.** (4 cr, §Spch 5404)
Psychological and social-psychological perspectives for the study of language-communication; dimensions of language variation (dialects, codes, registers); implications for program development and instructional practices.
- 5609. INTERNSHIP.** (Cr ar; prereq #)
- 5615. PRACTICUM IN SECONDARY READING: TUTORING REMEDIAL STUDENTS.** (3 cr [max 9 cr])
Supervised experience in diagnosing, planned individual instruction, and teaching secondary students with reading difficulties.
- 5659. SCHOOL-RELATED PROJECTS IN LANGUAGE ARTS.** (1-12 cr [max 12 cr]; prereq MEd student in English education)
Individual or group work on curricular, instructional, or evaluation problems and projects applicable to school situations.
- 5670-5671†. INTERNSHIP: SUPERVISION OF SOCIAL STUDIES STUDENT TEACHERS.** (2 cr for 5670, 1 cr for 5671; prereq #)
On-the-job supervision of social studies student teachers; coordinating seminar.
- 5673. INTERNSHIP: COLLEGE TEACHING IN SOCIAL STUDIES EDUCATION.** (1-3 cr; prereq 5150, 5152, 5155, 5156, 8104, 8801 and/or #)
Individual and group experience in planning, teaching, and evaluating a college course in social studies education.
- 5674-5675-5676. CLINICAL METHODS AND PRACTICES IN SPEECH PATHOLOGY.** (Cr ar; prereq CDis 5502, 5503, 5504 and #)
Case histories and analysis; testing and diagnosis of speech defects; techniques and work programs; practical clinical work.
- 5697. PRACTICUM: TEACHING ENGLISH AS A SECOND LANGUAGE.** (3 cr; prereq 5396 or #)
Supervised observation and teaching of classes in English for students whose native language is not English.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8104. CURRICULUM DEVELOPMENT IN THE SOCIAL STUDIES**
- 8188.° SEMINAR: RESEARCH IN SECOND-LANGUAGE LEARNING AND TEACHING**
- 8322. SEMINAR: SECONDARY CURRICULUM AND INSTRUCTION**
- 8340. WORKSHOP: IMPROVEMENT OF INSTRUCTION**
- 8341. SEMINAR: ADVANCED STUDY IN SUPERVISION AND CURRICULUM DEVELOPMENT**
- 8362. RESEARCH IN SOCIAL STUDIES**
- 8364. SEMINAR: SOCIAL STUDIES EDUCATION**
- 8387. SEMINAR: FOREIGN LANGUAGE EDUCATION**
- 8642. FIELD PRACTICUM: SUPERVISION AND CURRICULUM DEVELOPMENT**
- 8801.° PROBLEMS: TEACHING SOCIAL STUDIES**
- 8805.° PROBLEMS: AUDIO-VISUAL EDUCATION**
- 8807.° PROBLEMS: RADIO-TELEVISION EDUCATION**
- 8825.° PROBLEMS: SECONDARY SCHOOL SUPERVISION**
- 8869.° INFORMATION SOURCES IN FOREIGN LANGUAGE TEACHING AND RESEARCH**
- 8870.° SEMINAR: CURRICULUM, LEARNING, AND TEACHING OF FOREIGN LANGUAGES IN ELEMENTARY AND SECONDARY SCHOOLS**
- 8871.° PROBLEMS: CURRICULUM CONSTRUCTION**

Description of Courses

- 8887.° RESEARCH FOUNDATIONS OF SECONDARY SCHOOL SCIENCE TEACHING
- 8892. INTRODUCTION TO RESEARCH IN ENGLISH AND SPEECH EDUCATION
- 8893. SEMINAR: ADVANCED TOPICS IN ENGLISH-LANGUAGE ARTS EDUCATION
- 8895. READINGS IN ENGLISH AND MODERN LANGUAGE EDUCATION
- 8896.° PROBLEMS: TEACHING ENGLISH
- 8897. RESEARCH IN ENGLISH AND SPEECH EDUCATION
- 8936. FIELD STUDY IN GENERAL CURRICULUM

EDUCATION ADMINISTRATION (EdAd)

- 5101. PUBLIC SCHOOL ADMINISTRATION. (3 cr; not open to majors in educational administration; prereq sr, 9 cr in education)
Organization, administration, and general support of public schools in state and local school districts.
- 5103. SUPERVISION AND ADMINISTRATION OF SPECIAL EDUCATION. (3 cr; prereq #)
Procedures in establishing and improving educational programs for exceptional children.
- 5105. WORKSHOP: ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION. (1-6 cr; prereq #)
Laboratory approach to common administrative and supervisory problems; for experienced administrators of special needs programs.
- 5120. PRACTICUM: POSTSECONDARY ADMINISTRATION. (3-6 cr [max 6 cr])
Intensive group and individual examination of current and pertinent administrative problems in postsecondary but nonbaccalaureate institutions.
- 5127. WORKSHOP: POLICY DEVELOPMENT FOR SCHOOL MANAGERS. (3 cr)
Elements of feedback control applied to policy development and implementation in education; policies for instructional management, personnel administration, and fiscal control; implementation plans and procedures for analysis of policy impact.
- 5128. WORKSHOP: EDUCATIONAL ADMINISTRATION. (1-6 cr; prereq practicing education administrator or #; S-N option)
Laboratory approach provides opportunities for experienced administrators to concentrate their study on common administrative and supervisory problems.
- 5130. ADMINISTRATOR DEVELOPMENT SEMINAR. (3-9 cr [max 9 cr])
Assessment and development of skills required of the administrator in the areas of planning, decision making, and human relations; introduction to contemporary issues in educational administration; initial course for students pursuing professional certification programs.
- 5139. LABORATORY IN DECISION MAKING. (1-4 cr per qtr)
Contribution of recent research and theory to effective administration; analysis of administrative behavior in realistic settings and relations of administration to human behavior.
- 5167. JUNIOR HIGH SCHOOL. (3 cr; prereq 9 cr in education)
Sources of the movement; purposes, functions, and limitations; fundamental problems, types, and curricular implications of reorganization.
- 5180, 5181. SEMINAR: ADMINISTRATION OF SPECIAL EDUCATION. (3 cr per qtr, §SpEd 8560 and 8561)
Problems of administration and organization of special education programs.
- 5231. PRACTICUM IN SCHOOL-COMMUNITY RELATIONS. (1-4 cr; S-N option)
Practical experience in design and use of basic tools in a program such as conducting community analysis; preparing copy and news releases; meeting with and working with material for the press, radio, and television; planning school publications; opinion polling and personal conferences.
- 5233. PRACTICUM: JUNIOR HIGH SCHOOL ADMINISTRATION. (1-4 cr; S-N option)
Projects such as articulation with elementary and senior high school; organizing to meet the needs of the preadolescent; activity programs; guidance functions.

5990. SEMINAR: ADMINISTRATION OF INDIAN PROGRAMS. (1-9 cr [max 9 cr], §AmIn 5990)

Examination of various educational agencies dealing with Indian education and the development of research designs for the study and improvement of the administration of Indian educational programs.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

8201. FORMAL ORGANIZATIONS IN EDUCATION

8202. POLITICS OF EDUCATION

8203. THE COMMUNITY SCHOOL

8210. ECONOMICS OF EDUCATION

8212. SCHOOL BUDGETING

8213. FINANCIAL RESOURCE MANAGEMENT

8214. SCHOOL MANAGEMENT INFORMATION SYSTEMS

8215. THE ELEMENTARY SCHOOL PRINCIPALSHIP

8216. RECENT RESEARCH IN ELEMENTARY SCHOOL ADMINISTRATION

8217. SEMINAR: ELEMENTARY SCHOOL ADMINISTRATION

8218. SEMINAR: THE SOCIAL ORGANIZATION OF SCHOOLS

8219. SEMINAR: APPLIED HUMANISM IN ADMINISTRATIVE BEHAVIOR: THE CLASSICAL PERSPECTIVE

8220. QUANTITATIVE FOUNDATIONS FOR MANAGEMENT METHODS

8221. QUANTITATIVE MODELS FOR PROGRAM ANALYSIS AND RESEARCH

8223. QUANTITATIVE TECHNIQUES FOR DECISION MAKING

8224. LEGAL IMPLICATIONS OF ACTS BY SCHOOL BOARDS, ADMINISTRATORS, AND TEACHERS

8225. EDUCATIONAL POLICY AND THE LAW

8226. EDUCATIONAL FACILITIES PLANNING

8227. PUBLIC SCHOOL PERSONNEL PROGRAMS

8230. SCHOOL COMMUNITY RELATIONS

8234. SEMINAR: EDUCATIONAL FINANCE

8235. SEMINAR: APPLIED HUMANISM IN ADMINISTRATION BEHAVIOR: THE MODERN PERSPECTIVE

8236. SEMINAR: EDUCATIONAL FACILITIES PLANNING

8237. SEMINAR: EDUCATIONAL LAW

8238. SEMINAR: THEORY AND RESEARCH

8240. SEMINAR: CLINICAL EXPERIENCES IN EDUCATIONAL ADMINISTRATION

8241. SEMINAR: INTERNSHIP IN EDUCATIONAL ADMINISTRATION

8242. ADMINISTRATIVE ORGANIZATION AND STAFFING OF SCHOOL SYSTEMS

8244-8245-8246†. SEMINAR: ADMINISTERING PUBLIC EDUCATION IN METROPOLITAN AREAS

8253. ADMINISTRATION IN HIGHER EDUCATION

8264. THE SECONDARY SCHOOL PRINCIPALSHIP

8265. ADMINISTERING THE HIGH SCHOOL PROGRAM

8270.° PROBLEMS: ELEMENTARY SCHOOL ADMINISTRATION

8271.° PROBLEMS: SECONDARY SCHOOL ADMINISTRATION

8272.° PROBLEMS: EDUCATIONAL ADMINISTRATION

Description of Courses

- 8273. FIELD STUDY
- 8274. THE TWO-YEAR COLLEGE
- 8275. TWO-YEAR COLLEGE ADMINISTRATION
- 8276. SEMINAR: ADMINISTRATION OF CURRICULUM IN THE TWO-YEAR COLLEGE
- 8278. RECENT RESEARCH IN TWO-YEAR COLLEGE ADMINISTRATION
- 8290. FINANCING HIGHER EDUCATION
- 8291. PUBLIC RELATIONS FOR COLLEGES AND UNIVERSITIES
- 8340. POLICY SYSTEMS IN EDUCATION
- 8341. ANALYSIS OF EDUCATION POLICY SYSTEMS

SCHOOL OF PHYSICAL EDUCATION AND RECREATION

Physical Education (PE)

Activity courses are offered on successive levels in each of the following areas:

Adapted activities	Dual sports and activities
Aquatics	Individual sports and activities
Conditioning	Team sports
Dance	

The beginning courses, listed first in the numerical ordering, require no prerequisites. For courses at more advanced levels, prerequisites are indicated; but a student with skills or experience in a given area may start with one of the more advanced offerings rather than registering for the prerequisite course. Advisers in Cooke Hall (men) and Norris Gymnasium (women) will aid a student who has questions about the appropriate level for his registration.

Activity Permit Cards may be secured at 101 Norris Gymnasium (women) or 202 Cooke Hall (men), and students should be sure their activity rating is acceptable for the class selected. A student who does not attend the first meeting of a class for which enrollment is limited forfeits his place. If a class is closed at the time of registration, the student may report to the first class meeting to ask about possible cancellations. The S-N option is available for all nonprofessional courses (those numbered through 1499).

Nonprofessional Courses

("A.R." stands for "Activity Rating")

- 1001. ACTIVITIES FOR THE HANDICAPPED. (1 cr; prereq women 8; A.R. 4)
- 1004. DIVING, SPRINGBOARD. (1 cr; prereq men 1007...women 1308; A.R. 1)
- 1007. SWIMMING. (1 cr; A.R. 1)
- 1014. CONDITIONING. (1 cr; A.R. 1, 2)
- 1015. WEIGHT TRAINING. (1 cr; A.R. 1, 2)
- 1016. POSTURE AND INDIVIDUAL EXERCISE. (1 cr; A.R. 1, 2, 3)
- 1017. RHYTHMIC GYMNASTICS. (1 cr; A.R. 1, 2)
Rhythmic exercises following the natural movements of the body.
- 1020. FUNDAMENTALS, MOVEMENT. (1 cr; A.R. 1, 2)
- 1022. BALLROOM DANCE. (1 cr; A.R. 1, 2, 3)
- 1023. FOLK AND SQUARE DANCE. (1 cr; A.R. 1, 2)
- 1024. MODERN DANCE. (1 cr; A.R. 1, 2)

School of Physical Education and Recreation

- 1032. BADMINTON. (1 cr; A.R. 1, 2)
- 1033. FENCING. (1 cr; A.R. 1, 2)
- 1034. JUDO. (1 cr; A.R. 1, 2)
- 1035. KARATE. (1 cr; A.R. 1, 2)
- 1036. PADDLEBALL-HANDBALL. (1 cr; A.R. 1,2)
- 1037. SQUASH RACQUETS. (1 cr; A.R. 1, 2)
- 1038. TENNIS. (1 cr; A.R. 1, 2)
- 1039. WRESTLING. (1 cr; A.R. 1, 2)
- 1045. ANGLING. (1 cr; A.R. 1, 2, 3)
- 1046. APPARATUS. (1 cr; A.R. 1, 2)
- 1047. ARCHERY. (1 cr; A.R. 1, 2, 3)
- 1048. BOWLING. (1 cr; A.R. 1, 2, 3)
- 1049. CAMPING. (1 cr; A.R. 1, 2, 3)
- 1050. GOLF. (1 cr; A.R. 1, 2, 3)
- 1051. HUNTING. (1 cr; A.R. 1, 2, 3)
- 1052. RIFLE MARKSMANSHIP. (1 cr; A.R. 1, 2, 3)
- 1053. ICE SKATING. (1 cr; A.R. 1, 2)
- 1055. FOUNDATIONS OF PHYSICAL ACTIVITY. (2 cr; A.R. 1, 2)
- 1057. SKIING. (1 cr; A.R. 1, 2)
- 1058. PHYSICAL EDUCATION FOR FAMILY LIVING. (1 cr; A.R. 1, 2, 3)
- 1059. TRACK AND FIELD. (1 cr; A.R. 1, 2)
- 1060. TUMBLING, FLOOR EXERCISE, AND TRAMPOLINE. (1 cr; A.R. 1, 2)
- 1067. BASKETBALL. (1 cr; A.R. 1, 2)
- 1068. CURLING. (1 cr; A.R. 1, 2, 3)
- 1069. FIELD HOCKEY. (1 cr; A.R. 1, 2)
- 1070. HOCKEY, ICE. (1 cr; prereq 1053 or equiv; A.R. 1, 2)
- 1071. LACROSSE. (1 cr; A.R. 1, 2)
- 1072. SOCCER. (1 cr; A.R. 1, 2)
- 1073. SOFTBALL. (1 cr; A.R. 1, 2)
- 1074. VOLLEYBALL. (1 cr; A.R. 1, 2)
- 1080. OFFICIATING FOOTBALL-BASKETBALL. (1 cr; A.R. 1, 2)
- 1081. OFFICIATING BASKETBALL-VOLLEYBALL. (1 cr; prereq 1067 and 1074; A.R. 1, 2)
- 1082. OFFICIATING HOCKEY-BASKETBALL-VOLLEYBALL. (1 cr; A.R. 1, 2)
- 1083. OFFICIATING SWIMMING-WRESTLING-SOFTBALL-TRACK. (1 cr; A.R. 1, 2)
- 1101. ACTIVITIES FOR THE HANDICAPPED. (1 cr; prereq women #; A.R. 4)
- 1104. DIVING, SPRINGBOARD. (1 cr; prereq 1007 or equiv; A.R. 1)
- 1107. SWIMMING. (1 cr; prereq 1007 or equiv; A.R. 1)
- 1121. RHYTHMIC ANALYSIS. (1 cr; prereq 1020 or #; A.R. 1, 2)
- 1122. BALLROOM DANCE. (1 cr; prereq 1022 or equiv; A.R. 1, 2, 3)
- 1123. FOLK AND SQUARE DANCE. (1 cr; prereq 1023 or equiv; A.R. 1, 2)
- 1124. MODERN DANCE. (1 cr; prereq 1024 or equiv; A.R. 1, 2)
- 1132. BADMINTON. (1 cr; prereq 1032 or equiv; A.R. 1, 2)
- 1133. FENCING. (1 cr; prereq 1033 or equiv; A.R. 1, 2)

Description of Courses

1134. JUDO. (1 cr; prereq 1034 or equiv; A.R. 1, 2)
1135. KARATE. (1 cr; prereq 1035 or equiv; A.R. 1, 2)
1138. TENNIS. (1 cr; prereq 1038 or equiv; A.R. 1, 2)
1139. WRESTLING. (1 cr; prereq 1039 or equiv; A.R. 1, 2)
1145. ANGLING. (1 cr; prereq 1045 or equiv; A.R. 1, 2, 3)
1146. APPARATUS-GYMNASTICS. (1 cr; prereq 1046 or equiv; A.R. 1, 2)
1147. ARCHERY. (1 cr; prereq 1047 or equiv; A.R. 1, 2, 3)
1148. BOWLING. (1 cr; prereq men 1048 and 125 average...women 120 average; A. R. 1, 2, 3)
1150. GOLF. (1 cr; prereq women 1050 or equiv; A.R. 1, 2, 3)
1154. FIGURE SKATING. (1 cr; prereq 1053 or equiv; A.R. 1, 2)
1157. SKIING. (1 cr; prereq 1057 or equiv; A.R. 1, 2)
1159. TRACK AND FIELD. (1 cr; prereq 1059 or equiv; A.R. 1, 2)
1160. TUMBLING, FLOOR EXERCISE, AND TRAMPOLINE. (1 cr; prereq women 1060 or equiv; A.R. 1, 2)
1167. BASKETBALL. (1 cr; prereq 1067 or equiv; A.R. 1, 2)
1172. SOCCER. (1 cr; prereq 1072 or equiv; A.R. 1, 2)
1173. SOFTBALL. (1 cr; prereq 1073 or equiv; A.R. 1, 2)
1174. VOLLEYBALL. (1 cr; prereq 1074 or equiv; A.R. 1, 2)
1201. ACTIVITIES FOR THE HANDICAPPED. (1 cr; prereq women #; A.F. 4)
1204. DIVING, SPRINGBOARD. (1 cr; prereq 1007 or equiv; A.R. 1)
1205. SCUBA AND SKIN DIVING. (1 cr; prereq 1107 or equiv; A.R. 1)
1207. SWIMMING. (1 cr; prereq 1107 or equiv; A.R. 1)
1224. MODERN DANCE. (1 cr; prereq 1124 or equiv; A.R. 1, 2)
1238. TENNIS. (1 cr; prereq 1138; A.R. 1, 2)
1246. APPARATUS-GYMNASTICS. (1 cr; prereq 1146 or equiv; A.R. 1, 2)
1248. BOWLING. (1 cr; prereq 160 average; A.R. 1, 2, 3)
1250. GOLF. (1 cr; prereq women 1150; A.R. 1, 2, 3)
1254. FIGURE SKATING. (1 cr; prereq 1154 or equiv; A.R. 1, 2)
1256. SKATING, ICE DANCING. (1 cr; prereq 1154 or equiv; A.R. 1, 2)
1260. TUMBLING, FLOOR EXERCISE, AND TRAMPOLINE. (1 cr; prereq 1060 or equiv; A.R. 1, 2)
1306. SENIOR LIFESAVING. (1 cr; prereq ability to swim 440 yards; A.R. 1)
1307. SWIMMING. (1 cr; prereq 1207 or equiv; A.R. 1)
1308. SWIMMING AND DIVING. (1 cr; prereq 1207 or equiv; A.R. 1)
1309. SYNCHRONIZED SWIMMING. (1 cr; prereq 1207 or equiv; A.R. 1)
1324. MODERN DANCE. (1 cr; prereq 1224 or equiv; A.R. 1, 2)
1325. MODERN DANCE, COMPOSITION. (2 cr; prereq 1224 or equiv; A.R. 1, 2)
1386. FRESHMAN BASEBALL. (1 cr; men only; prereq #; A.R. 1, 2)
1387. FRESHMAN BASKETBALL. (1 cr; men only; prereq #; A.R. 1, 2)
1388. FRESHMAN CROSS-COUNTRY. (1 cr; men only; prereq #; A.R. 1, 2)
1389. FRESHMAN FOOTBALL. (1 cr; men only; prereq #; A.R. 1, 2)
1390. FRESHMAN GOLF. (1 cr; men only; prereq #; A. R. 1, 2)
1391. FRESHMAN GYMNASTICS. (1 cr; men only; prereq #; A.R. 1, 2)

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- 1392. FRESHMAN HOCKEY. (1 cr; men only; prereq #; A.R. 1, 2)
- 1393. FRESHMAN SWIMMING. (1 cr; men only; prereq #; A.R. 1)
- 1394. FRESHMAN TENNIS. (1 cr; men only; prereq #; A.R. 1, 2)
- 1395. FRESHMAN TRACK AND FIELD. (1 cr; men only; prereq #; A.R. 1,2)
- 1396. FRESHMAN WRESTLING. (1 cr; men only; prereq #; A.R. 1, 2)
- 1410. WATER SAFETY INSTRUCTOR. (2 cr; prereq current American Red Cross Senior Lifesaving Certificate; A.R. 1)
- 1425. MODERN DANCE, COMPOSITION. (2 cr; prereq 1325 or equiv; A.R. 1, 2)
- 1426. MODERN DANCE, PRODUCTION. (3 cr; prereq 1224 or #; A.R. 1, 2)
- 1486. VARSITY BASEBALL. (1 cr; men only; prereq #; A.R. 1, 2)
- 1487. VARSITY BASKETBALL. (1 cr; men only; prereq #; A.R. 1, 2)
- 1488. VARSITY CROSS-COUNTRY. (1 cr; men only; prereq #; A.R. 1, 2)
- 1489. VARSITY FOOTBALL. (1 cr; men only; prereq #; A.R. 1, 2)
- 1490. VARSITY GOLF. (1 cr; men only; prereq #; A.R. 1, 2)
- 1491. VARSITY GYMNASTICS. (1 cr; men only; prereq #; A.R. 1, 2)
- 1492. VARSITY HOCKEY. (1 cr; men only; prereq #; A.R. 1, 2)
- 1493. VARSITY SWIMMING. (1 cr; men only; prereq #; A.R. 1)
- 1494. VARSITY TENNIS. (1 cr; men only; prereq #; A.R. 1, 2)
- 1495. VARSITY TRACK AND FIELD. (1 cr; men only; prereq #; A.R. 1, 2)
- 1496. VARSITY WRESTLING. (1 cr; men only; prereq #; A.R. 1, 2)
- 1497. DIRECTED STUDY. (1-6 cr; prereq 3 cr in physical education, Δ)
For the nonprofessional student who wishes to study a topic or problem under tutorial guidance.

Professional Courses

- 1500. BEGINNING AQUATICS. (1 cr)
- 1510. FUNDAMENTAL MOVEMENT. (1 cr)
Basic steps and folk dances.
- 1511. RHYTHMIC ANALYSIS. (1 cr; prereq 1510)
- 1512. FOLK DANCE. (1 cr)
Instruction in circle, line, square, mixer, and couple dances; square dance calling.
- 1513. MODERN DANCE. (1 cr)
- 1515. MODERN DANCE TECHNIQUE AND IMPROVISATION I. (2 cr; prereq physical education major or dance minor)
Basic technique of modern dance and its relationship to form, design and exploration of movement; for dance minors.
- 1517. ETHNIC DANCE HERITAGE I. (2 cr [max 8 cr])
Focus on relationship of dance to the culture from which it evolved; emphasis for each quarter on one of the following: native American, East Indian, Afro-American, Spanish.
- 1518. BALLET I. (2 cr)
Instruction in the fundamental technique of classical ballet.
- 1520. POSTURE AND FUNCTIONAL EXERCISE. (1 cr)
- 1521. GYMNASTICS. (1 cr)
- 1522. GYMNASTICS. (1 cr; prereq 1521)
- 1523. CONDITIONING AND TACTICS. (1 cr)
Participation in and understanding of various methods of physical conditioning; physiological basis and methods of evaluation; methods of moving and organizing large and small groups; public school observation included.

Description of Courses

- 1524. GYMNASTICS COMPOSITION.** (1 cr; prereq 1521, 1522)
Completion of routines on the balance beam and uneven parallel bar at intermediate and advanced levels of skill and in floor exercise at all skill levels; judging points related to composition.
- 1530. GOLF.** (1 cr)
- 1540. BADMINTON.** (1 cr)
- 1541. TENNIS.** (1 cr)
- 1550. FIELD HOCKEY-VOLLEYBALL.** (1 cr)
- 1551. BASKETBALL.** (1 cr)
- 1552. SPEEDAWAY-SOFTBALL.** (1 cr)
- 1553. BASEBALL.** (1 cr)
- 1554. FOOTBALL.** (1 cr)
Demonstrations and practice in fundamentals for all positions on a team.
- 1555. SOCCER.** (1 cr)
- 1561. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL.** (3 cr;
prereq physical education major, soph)
Analysis of basic skills, observations and laboratory experience in teaching activities.
- 1562. GAMES AND ELEMENTARY SCHOOL ACTIVITIES.** (1 cr)
Types of games, guided movement experiences, movement education content; public school observation included.
- 1563. GAMES, SPORTS, TRACK AND FIELD FOR THE ELEMENTARY SCHOOL CHILD.**
(2 cr; prereq education major or Δ)
Elementary school games and sports programs emphasizing use for leisure time.
- 1564. EDUCATIONAL GYMNASTICS FOR CHILDREN.** (2 cr; prereq education major or Δ)
Elementary school gymnastics programs emphasizing skill analysis and progression.
- 1565. DANCE FOR THE ELEMENTARY SCHOOL CHILD.** (2 cr; prereq education major
or Δ)
Overview of the broad program of dance for children; guided laboratory experience emphasizing a creative and correlated teaching approach.
- 1580. ORIENTATION AND APPRAISAL.** (1 cr)
Rationale underlying the course of study, advising procedures, Minnesota credential requirements; vocational considerations; philosophical and professional aspects; sports competency and physical fitness testing.
- 1600. AQUATICS.** (1 cr; prereq swim 50 yds in 45 sec)
Advanced swimming, diving, lifesaving.
- 1601. ADVANCED AQUATICS.** (1 cr)
- 1615. MODERN DANCE TECHNIQUE AND IMPROVISATION II.** (2 cr; coed, prereq 1515
or $\#$)
Basic technique of modern dance and its relationship to form, design and exploration of movement; for dance minors.
- 1618. BALLET II.** (2 cr; prereq 1518 or $\#$)
Intense-discipline instruction in the technique of ballet.
- 1620. GYMNASTICS.** (1 cr; prereq 1046)
Stunts on the buck, side horse, long horse, parallel bars, rings, trampoline, mats, stall bar exercises, rope climbing and pyramid building; public school observation included.
- 1630. GOLF.** (1 cr; prereq 1050 or equiv)
- 1640. WRESTLING.** (1 cr; prereq 1039 or equiv)
- 1641. RACQUET SPORTS.** (1 cr; prereq 1032 or 1038 or equiv)
- 1650. OFFICIATING FIELD HOCKEY-VOLLEYBALL.** (1 cr; prereq 1550)
- 1651. OFFICIATING BASKETBALL.** (1 cr; prereq 1551)
- 1652. BASKETBALL.** (1 cr; prereq 1067 or equiv)
Demonstrations and practice, individual and team offensive and defensive tactics.
- 1653. VOLLEYBALL.** (1 cr)

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1654. **TRACK AND FIELD.** (1 cr; prereq 1059 or equiv)
Demonstrations and practice in all events.
1655. **ICE HOCKEY.** (1 cr; prereq 1053 or equiv)
1656. **OFFICIATING SOFTBALL.** (1 cr; prereq 1073 or 1552 or #)
Teaching officiating techniques; opportunity to practice skills for the national official's examination.
1657. **OFFICIATING SOCCER.** (1 cr; prereq 1072 or #)
Rules of the game, techniques of officiating; opportunity to qualify as soccer official through the Minnesota Soccer Referee's Association.
1700. **SENIOR LIFESAVING.** (1 cr; prereq 1601)
1715. **MODERN DANCE TECHNIQUE AND IMPROVISATION III.** (2 cr; prereq 1615 or #)
Basic technique of modern dance and its relationship to form, design and exploration of movement; for dance minors.
1718. **BALLET III.** (2 cr; prereq 1618 or #)
Intense-discipline instruction in the technique of ballet.
1800. **WATER SAFETY INSTRUCTOR'S COURSE.** (2 cr; prereq current American Red Cross Senior Lifesaving Certificate)
Methods and procedures related to organization, content, and teaching of swimming and lifesaving; opportunity to qualify for the American Red Cross Water Safety Instructor Certificate.
1801. **AQUATIC ADMINISTRATION.** (2 cr; prereq current water safety instructor's certificate and #)
Provides students with skills needed to administer an aquatic program in a school or community setting.
1860. **PHYSICAL EDUCATION FOR YOUNG CHILDREN.** (3 cr; prereq Head Start trainee)
Designed for the paraprofessional working with preschool children; emphasis will be on the importance and principles of movement, principles of planning, instructional techniques, and resource materials.
1870. **ORIENTATION TO MOVEMENT.** (3 cr; prereq physical education major)
Introduction to mechanics of movement; basic locomotor and axial movements, movement patterns; exercise, conditioning, and relaxation techniques.
1875. **ORIENTATION TO TEACHING PHYSICAL EDUCATION.** (1 cr; prereq physical education major)
Develops beginning teaching skills and processes through selected classroom activities and directed observations.
1980. **PHYSICAL EDUCATION ACTIVITIES.** (1-6 cr; prereq physical education major)
Demonstration of competencies at the beginning level in a variety of activities.
1981. **PHYSICAL EDUCATION ACTIVITIES: ADVANCED.** (1-3 cr; prereq physical education major)
Demonstration of competencies at the advanced level in a variety of activities.
1990. **DIRECTED STUDY.** (1-6 cr; prereq Δ)
For students majoring or minoring in physical education who wish to study a topic or problem under tutorial guidance.
3100. **ADAPTED PHYSICAL EDUCATION.** (3 cr; prereq 3111, Anat 1027)
Philosophy, principles, and techniques of adapting the program to meet the needs of handicapped pupils.
3110. **HUMAN ANATOMY.** (3 cr)
Emphasizes bones, nerves, and muscles and their significance in physical education.
3111. **MECHANICS OF MOVEMENT.** (3 cr; prereq Anat 1027)
Structure of the body, principles and mechanics of bodily movements.
3113. **MOTOR LEARNING AND MOTOR DEVELOPMENT.** (4 cr)
Examination of the motor growth and development of children, adolescents, and adults with emphasis on sociopsychological factors.
3114. **PREVENTION AND CARE OF INJURIES.** (3 cr; prereq 3110 or Anat 1027)
Policies for conditioning athletes in interscholastic and intercollegiate sports; safety controls.

Description of Courses

- 3115. PHYSIOLOGICAL APPLICATION TO SPORTS.** (3 cr, §PubH 3385, §3386)
Consideration of muscular contraction for strength development programs; contributions of training programs to endurance, speed, and skill acquisition; influence of training on the cardiovascular system; fatigue and recovery; early season training, pregame meals and ergogenic aids in athletics. Required for the Minnesota Coaching Certificate.
- 3120. CURRICULUM AND ADMINISTRATION.** (5 cr; prereq physical education major or minor, sr)
Objectives, content, organization, evaluation, and trends in curriculum and administration for the elementary and secondary school.
- 3125. PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT.** (4 cr)
Introduction to the form and content of the subject as represented by the major short essay literature; theories of reality, knowledge, and value salient to physical education and sport.
- 3130. HISTORY OF PHYSICAL EDUCATION AND SPORT.** (3 cr)
Influence of societal factors; geography, culture, politics, religion, education, and technology in the development of physical education; principles and application of various disciplines.
- 3150. INTRODUCTION TO EVALUATION.** (4 cr; prereq SeEd 3155)
Selection, evaluation, construction, and administration of tests; administration of sports skill and motor ability tests for elementary and secondary school levels.
- 3160. PROGRAMMING INTRAMURAL-EXTRAMURAL SPORTS.** (3 cr)
Study of the basic ingredients required for administering intramural-extramural sports programs.
- 3161. COACHING WOMEN IN COMPETITIVE SPORTS.** (3 cr; prereq Upper Division)
Psychological, sociological, and physiological aspects of coaching women in competitive sports.
- 3170. BASEBALL COACHING.** (2 cr; prereq 1553 or #)
Techniques of playing each position, batting, coaching runners, and team play; study of rules; officiating methods and practice; organization of practices.
- 3171. BASKETBALL COACHING.** (2 cr; prereq 1652 or #)
Techniques, styles of offense and defense, conditioning and handling of players.
- 3172. FOOTBALL COACHING.** (2 cr; prereq 1554 or #)
Techniques and orientation, strategy, leadership, styles of offense and defense, methods of organizing practices and handling players.
- 3173. GOLF COACHING.** (2 cr; prereq 1630 or 1530 or #)
Techniques for organizing the squad, selecting the team, and conducting tournaments; principle of the golf swing, practice routines, rules and strategy of play.
- 3174. GYMNASTICS COACHING.** (2 cr; prereq 1620 or 1522 or #)
Analysis of elementary through advanced stunts in tumbling, floor exercise, and on trampoline, side horse, parallel bars, still rings, and long horse; emphasis on teaching and techniques. Aspects of legal liability, budget, scheduling, regulations, training, research; purchase and care of equipment and constructing gymnastics gymnasiums.
- 3175. ICE HOCKEY COACHING.** (2 cr; prereq 1655 or #)
Techniques and orientation of coaching high school hockey; planning and conducting practices, team offense and defense; drills to develop individual skills; conditioning.
- 3176. SWIMMING AND DIVING COACHING.** (2 cr; prereq 1600 or 1800 or #)
Instruction in and practice of the basic techniques used in competitive swimming and diving; rules and regulations governing staging of competition.
- 3177. TENNIS COACHING.** (2 cr; prereq 1641 or 1541 or #)
Techniques and orientation, methods and organization; emphasis on high school and college levels; coverage of coaching techniques, analysis of strokes, and organization of practice sessions.
- 3178. TRACK AND FIELD COACHING.** (2 cr; prereq 1654 or 1059 or #)
Techniques of performance in all standard events; methods of coaching; organization of track meets; study of rules; officiating methods and practice.
- 3179. WRESTLING COACHING.** (2 cr; prereq 1640 or #)
Analysis of the moves, combinations, and sequence; training, safety, and health features; administrative responsibilities of the coach; review of the literature.
- 3180. HISTORY AND TRENDS IN DANCE.** (3 cr; prereq #)
History and philosophy of dance; relation to allied arts.

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- 3270. SPORT OFFICIATING AND SUPERVISION.** (3 cr)
Philosophy, principles, and problems of officiating athletic contests; interpreting game rules, officiating procedures, and participant relationship in a variety of sports.
- 3310. ATHLETIC TRAINING LABORATORY.** (1 cr; prereq 3114)
Thirty hours of practical experience in the training room under supervision.
- 3320. TEACHING INDIVIDUAL AND TEAM SPORTS.** (3 cr; prereq 1540, 1550, 1551, 1530, 1541, 1552)
General methods of teaching sports; techniques for class organization; skill analysis; individual and group guidance; evaluation; application of methods to badminton, golf, tennis, fall team sports, volleyball, basketball and softball; observations and practical experience.
- 3321. TEACHING OF FOLK DANCE AND SOCIAL FORMS.** (4 cr; prereq 1022, 1023)
Methods and materials for teaching folk dance and basic ballroom dance skills through observation, teaching experience, and lectures.
- 3322. TEACHING OF POSTURE, EXERCISE, AND GYMNASTICS.** (3 cr; prereq 1520, 1521, 1522)
Experiences include observations, unit and lesson planning, and student teaching within the class; activities designed to develop competency in methods of teaching posture exercise, stunts, tumbling, apparatus and floor exercise.
- 3323. TEACHING PHYSICAL EDUCATION.** (5 cr; prereq physical education major, jr, ¶3607)
Planning, application of general teaching methods; use of multisensory teaching aids in physical education.
- 3324. TEACHING PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL.** (4 cr; prereq physical education major, jr, 4 cr in elementary activity courses)
Methods of teaching elementary physical education; emphasizing the problem-solving approach; microteaching, videotaping, observations.
- 3326. TEACHING OF MODERN DANCE.** (4 cr; prereq 1024, 1124, 1224 or 1515, 1615 or #)
Study of and experimentation with methods, principles, and techniques; emphasis on observation, microteaching, assisting with class instruction under supervision, and workshop experiences.
- 3327. TEACHING PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL.** (3 cr, §1560, §3325, §H1th 3325; prereq elementary education major)
An overview of the elementary school physical education program; primarily a laboratory course, with participation in representative physical education activities for children; opportunities for observation of children, microteaching, skill analysis, and group discussion.
- 3360. THE INTRAMURAL-EXTRAMURAL-INTERSCHOOL SPORTS PROGRAM.** (3 cr; prereq physical education major or minor, jr)
Objectives, principles, policies, procedures, and personnel involved in the planning of sports programs for girls and women.
- 3370. COACHING BASKETBALL AND VOLLEYBALL.** (2 cr; prereq 1550 and 1551 or 1652 or #)
Emphasis on strategy in coaching; theoretical and practical experience.
- 3390. DANCE COMPOSITION.** (2 cr; prereq advanced modern dance or equiv)
Principles of composition with practical application.
- 3391. DANCE COMPOSITION.** (2 cr; prereq 3390 or equiv)
Advanced theory and practice including various approaches to dance composition.
- 3392. DANCE PRODUCTION.** (3 cr; prereq #)
Culmination of dance composition with a dance production including experience in stagecraft and costuming.
- 3394. CREATIVE DANCE FOR CHILDREN.** (4 cr; prereq 1024, 1510, 1511, 1512 or #)
Emphasis on creatively teaching basic skills and techniques of dance to children; observations and teaching experiences.
- 3395. ADVANCED IMPROVISATION.** (1 cr; prereq 1515, 1615, 1715 or #)
Emphasis on exploration and spontaneous invention through greater awareness of space, movement, and the community environment.
- 3396. DANCE REPERTORY THEATRE.** (3 cr [max 9 cr]; prereq audition or #)
Technique and improvisation related to the construction and performance of a dance theatre work under the direction of a guest choreographer; professionally oriented dance experience for advanced students.

Description of Courses

- 3397. DANCE ACCOMPANIMENT.** (3 cr; prereq 1515, 1615 or #)
Relationship between dance and music as a means of accompanying warmups, technique sequences and compositional ventures.
- 3600. PREFALL STUDENT TEACHING.** (3 cr; prereq #; S-N only)
Program and problems of organization and management; begins with fall semester opening of public schools.
- 3604. ADVANCED STUDENT TEACHING.** (3 cr; prereq #; S-N option)
Optional for those who have done superior work in 3601, 3602, 3603.
- 3607. STUDENT TEACHING: COLLEGE.** (1 cr; prereq physical education major, §3323)
Observation and practical experience in teaching at the college level under guidance.
- 3621. STUDENT TEACHING: ELEMENTARY.** (6 cr; prereq SeEd 3150, 3155 or Elem 3100, physical education major; S-N option)
Student teaching in physical education in grades 1-6 in public schools.
- 3622. STUDENT TEACHING: SECONDARY.** (6 cr; prereq SeEd 3150, 3155 or Elem 3100, physical education major; S-N option)
Student teaching in physical education in grades 7-12 in public schools.
- 3624. STUDENT TEACHING: COACHING.** (3 cr; prereq #; S-N only)
May be elected by physical education majors and minors; required of candidates for coaching credential only for men and women without public school coaching experience.
- 3625. SUPERVISED PRACTICAL EXPERIENCE.** (3 cr; prereq Δ)
On-the-job experience under a specialist in the particular area of study.
- 3900. DIRECTED STUDY.** (1-9 cr; prereq Δ)
Self-directed study preceded by classroom study and possession of basic competence.
- 5100. TEACHING PHYSICAL EDUCATION FOR THE HANDICAPPED.** (3 cr; prereq #)
Introduction to the role of physical education in the education of the handicapped individual, emphasizing understanding, principles of organization, administration, curriculum, supervision, and evaluation.
- 5101. PHYSICAL EDUCATION ACTIVITIES FOR THE HANDICAPPED.** (3 cr; prereq 5100 or SpEd 5101)
Adaptation of methods, materials, and physical activities to meet the needs of the physically, mentally, or emotionally atypical student applied to specific handicaps in selected activity areas.
- 5102. PRACTICUM: PHYSICAL EDUCATION FOR THE HANDICAPPED.** (3 cr; prereq 5101 or #)
Opportunity for teaching in public school or community organization providing instruction for atypical individuals; includes seminar for review of current theory and exchange of ideas and problems.
- 5110. SUPERVISION OF SCHOOL HEALTH AND PHYSICAL EDUCATION.** (3 cr, §Hlth 5110; prereq #)
Functions; adaptations of accepted procedures for observation, guidance, and training of teachers.
- 5111. PHYSICAL EDUCATION FACILITIES.** (3 cr)
Planning of areas and facilities for physical education and athletics, with special emphasis on current trends and problems in the field.
- 5112. PHYSICAL EDUCATION EQUIPMENT.** (3 cr)
Selection, purchase, and maintenance of athletic equipment and supplies, with opportunity to investigate selected equipment in depth.
- 5113. INTERSCHOLASTIC ATHLETICS ADMINISTRATION.** (3 cr)
Principles and procedures in the management of school athletic programs for boys and girls; state high school athletic associations; regulations, finances, issues, trends, research.
- 5120. ADVANCED KINESIOLOGY.** (3 cr; prereq undergrad kinesiology or #)
Principles of mechanics applied to human movement, analysis of motor skills, application to individual projects.
- 5121. CONTRIBUTIONS OF BASIC SCIENCE TO PHYSICAL EDUCATION.** (3 cr; prereq #)
Recent research in related physical sciences; applications in selected areas.

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- 5122. APPLIED PHYSIOLOGY.** (3 cr; prereq PubH 3386 or Phsl 3051 or equiv)
Application of concepts in human physiology to exercise physiology, sports training and physical activities with particular reference to respiratory and cardiovascular systems.
- 5123. ANALYSIS OF MOVEMENT IN GYMNASTICS.** (3 cr; prereq 3111 and 3174 or 3322 or #)
Scientific principles of body mechanics and training relating to teaching, analysis and development of advanced performance techniques.
- 5125. ADVANCED PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT.** (3 cr; prereq 3125 or #)
Examination of comprehensive, systematic, and revealing accounts of the status of physical education and sport with respect to reality, knowledge, and value.
- 5130. MOTOR LEARNING AND HUMAN PERFORMANCE.** (3 cr; prereq 3113 or #)
Mechanisms of human motor skill learning; emphasis on theories of motor learning and control of movement, motor memory, and individual differences.
- 5134. PERCEPTUAL-MOTOR DEVELOPMENT IN CHILDHOOD.** (3 cr; prereq 3113 or #)
The motoric dimension of perception: emphasis on developmental tenets of perception, diagnosis and remediation of perceptual-motor deficiencies and related research.
- 5136. PSYCHOLOGY OF COACHING.** (3 cr; prereq 3113 or #)
Psychological aspects of coaching at the elementary, secondary, and college levels.
- 5150. TEACHING ELEMENTARY SCHOOL PHYSICAL EDUCATION.** (3 cr; prereq tchg certification or #)
Principles, techniques, and procedures in developing basic motor skills, physical fitness, and sports skills.
- 5151. CURRICULUM.** (3 cr; prereq sr)
For students without previous experience in curriculum; objectives, content, organization, evaluation, and trends.
- 5152. CURRICULUM DEVELOPMENT.** (3 cr; prereq 5151 or equiv)
Trends, issues, and problems at selected levels of interest: elementary, secondary, junior college; for experienced teachers.
- 5160. EVALUATION IN PHYSICAL EDUCATION.** (3 cr; prereq 3150 or equiv)
General principles and techniques of evaluation.
- 5161. PRACTICUM: CONSTRUCTION OF MOTOR PERFORMANCE TESTS.** (3-6 cr; prereq 5160 or #)
Practical experience in the development and/or revision of motor performance tests from preschool through college with emphasis on test design and evaluation of the instrument.
- 5162. PRACTICUM: CONSTRUCTION OF WRITTEN TESTS.** (3-6 cr, §Hlth 5160; prereq PsyF 5120 or #)
Practical experience in the development of written tests with emphasis on test design and evaluation of the items.
- 5170. FOUNDATIONS OF PHYSICAL EDUCATION.** (3 cr; prereq grad or MED student)
Establishment of guidelines for individual and group professional action; examination of pertinent social forces, educational philosophies, and general ethics.
- 5255. INTRAMURALS-EXTRAMURALS.** (4 cr)
Analysis and interpretation of philosophies of men's and women's programs; principles, objectives, and techniques of program development.
- 5351. SEMINAR: TEACHING PHYSICAL EDUCATION IN COLLEGES AND UNIVERSITIES.** (1 cr [max 3 cr], §Rec 5351, §Hlth 5351; prereq Δ)
Emphasis on improvement of instruction.
- 5620. PRACTICUM: PREVENTION AND CARE OF ATHLETIC INJURIES.** (3 cr; prereq Anat 1027 or equiv)
An overview of problems (recognition, principles, responsibilities) related to athletic injuries in secondary and college programs; demonstration and practice in training techniques and familiarity with use of instruments for athletic rehabilitation.
- 5695. PRACTICUM: INTRAMURALS-EXTRAMURALS.** (3-5 cr; prereq 5255)
Theory and application of principles in developing programs, including supervised experiences in program operation.
- 5700. WORKSHOP: DANCE IN EDUCATION.** (Cr ar [max 12 cr])
History, principles, instructional techniques, and materials for teaching dance in schools and recreational agencies. Topic and credit will vary with each offering.

Description of Courses

- 5710. WORKSHOP: PHYSICAL EDUCATION FOR THE ELEMENTARY SCHOOL CHILD.** (1-12 cr [max 12 cr]; S-N at option of dept)
Current trends, instructional techniques, and resource materials for teaching physical education to the elementary school child.
- 5740. WORKSHOP: COACHING OF INDIVIDUAL, DUAL, OR TEAM SPORTS.** (1-12 cr [max 12 cr])
Instruction at the advanced level in individual, dual, or team sports, including analyses of skills, game strategies, specific techniques of coaching and methods of training and conditioning.
- 5980. INTRODUCTION TO RESEARCH.** (3 cr, §Hlth 5980; prereq #)
Methods and design for research in health, physical education, and recreation.
- 5981. PROBLEMS.** (Cr ar; prereq MEd candidate, #)
Focus on teaching of physical education.
- 5982. INTEGRATING PAPER.** (3 cr, §Hlth 5982; MEd candidates only)
Independent paper integrating learnings from a course or courses in education with learnings in physical education.
- 5983. READINGS: PHYSICAL EDUCATION.** (1-3 cr; prereq sr honor or grad student, #)
Independent study under tutorial guidance.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8110. ADMINISTRATION: GENERAL PRINCIPLES AND PROCEDURES**
- 8112. INTERCOLLEGIATE ATHLETICS ADMINISTRATION**
- 8113. COLLEGE PHYSICAL EDUCATION ADMINISTRATION**
- 8120. KINESIOLOGY: PHOTOGRAPHIC AND CINEMATOGRAPHIC ANALYSES**
- 8121. KINESIOLOGY: ELECTROMYOGRAPHIC ANALYSIS**
- 8150. PROFESSIONAL PREPARATION OF PHYSICAL EDUCATION TEACHERS**
- 8310. SEMINAR: PHYSICAL EDUCATION**
- 8320. SEMINAR: KINESIOLOGY**
- 8325. SEMINAR: PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT**
- 8330. SEMINAR: MOTOR LEARNING AND HUMAN PERFORMANCE**
- 8381. LABORATORY RESEARCH TECHNIQUES**
- 8980.* RESEARCH PROBLEMS**
- 8981.* RESEARCH PROBLEMS**
- 8985. SEMINAR: CONTEMPORARY PROBLEMS**

Recreation and Park Administration (Rec)

- 1500. RECREATION FOR SPECIAL GROUPS.** (3 cr; prereq students in Recreation Special Groups program)
Problems of forced leisure; values, methods, and techniques for planning and leading recreation activities.
- 1505. OBSERVATION OF RECREATION SERVICES FOR SPECIAL GROUPS.** (3 cr)
Supervised group observation and participation in recreation services for special groups.
- 1510. RECREATION PROGRAMMING FOR SPECIAL GROUPS.** (3 cr; prereq students in Recreation Special Groups program)
Techniques and guidelines for determining organization and content; resources for program activities.
- 1520. ORIENTATION TO LEISURE AND RECREATION.** (5 cr; prereq recreation major or minor)
Examination of the history and development of the park and recreation movement; sociological, economical, psychological, and political considerations of leisure and recreation in contemporary societies; professional and service organizations and their inter-relationship; orientation to the professional field.

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- 1525. FIELD OBSERVATION.** (1-4 cr; prereq 1520 and #)
Independent observation and participation under supervision.
- 1530. CAMP AQUATICS.** (2 cr)
Administration of the waterfront program, basic skills in handling small craft.
- 1540. CAMP COUNSELING.** (4 cr)
Practical experience in all phases of camping; introduction to camping and outdoor education for prospective counselors.
- 1600. LEADERSHIP IN SOCIAL ACTIVITIES.** (3 cr)
Techniques of leadership in social games, parties, dances, outings.
- 1650. SOCIAL ASPECTS OF LEISURE.** (3 cr; prereq nonmajor only)
Sociological consideration of leisure and recreation as parts of our total socioeconomic structure.
- 1700. FIELD EXPERIENCE.** (1-15 cr; prereq students in Recreation Special Groups program only; S-N only)
Supervised experiences in selected agencies.
- 3150. LEADERSHIP IN NATURE RECREATION.** (3 cr; prereq 10 cr in physical and biological sciences)
Identity and scope of nature recreation field; classwork and field trips.
- 3700. SENIOR INTERNSHIP.** (1-12 cr; prereq 1525, sr, recreation major or minor, ¶3701 and #; S-N only)
Supervised experiences in selected agencies.
- 3701. SENIOR SEMINAR.** (3 cr; prereq 1525, sr, recreation major or minor, ¶3700 and #)
Guided individual and group conferences.
- 3900. DIRECTED STUDY.** (3 cr [max 9 cr]; prereq recreation majors only and Δ; S-N option)
Self-directed study preceded by classroom study and possession of basic competence.
- 5100. FOUNDATIONS OF RECREATION.** (3 cr, §8120; prereq MEd, adult special, or grad)
Investigation of the historical, sociological, and educational bases of the recreative use of leisure in contemporary society.
- 5130. RECREATION AND PARK AREAS AND FACILITIES.** (5 cr; prereq 1520 or #)
Introduction to the basic principles of planning community facilities; effective application of standards in facility planning, design, and construction.
- 5140. RECREATION PROGRAMMING.** (5 cr; prereq 1520 or #)
Principles of program planning and leadership in all aspects of recreation.
- 5150. PRINCIPLES AND PRACTICES OF RECREATION ADMINISTRATION.** (5 cr; prereq 5130, 5140, or #)
Introduction to the basic principles of administration and their application to successful administrative practices in the various recreation settings.
- 5160. CONSERVATION OF NATURAL RESOURCES.** (2 cr; prereq 3150)
Importance and relation to recreation and outdoor education.
- 5170. CAMP ADMINISTRATION.** (3 cr; prereq 1540 and #)
Prepares qualified personnel for responsibilities.
- 5180. INDUSTRIAL RECREATION.** (3 cr; prereq #)
History, scope, place, and relationship of management-employee recreation.
- 5190. COMMERCIAL RECREATION.** (3 cr; prereq 5130 or #)
Survey of the scope and development of profit-making recreation agencies, facilities, and services; consideration of standards, business procedures, financing, and legal status.
- 5200. SCHOOL RECREATION.** (3 cr)
Principles of organizing and conducting school-sponsored recreation programs.
- 5210. INTRODUCTION TO THERAPEUTIC RECREATION.** (3 cr; prereq #)
General field as background for the recreation leader, hospital administrator, and other personnel.
- 5220. PROGRAMMING IN THERAPEUTIC RECREATION.** (5 cr; prereq #)
Recreation service to the ill, disabled, and other special populations.
- 5230. RECREATION AND MENTAL RETARDATION.** (3 cr; prereq 5210, 5220 or #)
Issues relating to leisure services for persons with mental retardation problems; approaches to programming in the institution and in the community.

Description of Courses

- 5240. RECREATION FOR THE AGING.** (3 cr; prereq #)
Examination of leisure problems of the aging citizen; modification of program activities; investigation of community resources; trends and developments in recreation planning.
- 5250. FINANCING PUBLIC RECREATION.** (3 cr)
Overview of the methods of financing public recreation, including the legal basis, current practices and procedures, and fiscal policies.
- 5351. SEMINAR: TEACHING LEISURE EDUCATION IN COLLEGES AND UNIVERSITIES.** (1 cr [max 3 cr], §PE 5351, §Hlth 5351; prereq Δ)
Emphasis on improvement of instruction.
- 5550. COLLEGE UNIONS.** (3 cr, §8150; prereq 5150 and #)
Administration, organization, and programming in college unions.
- 5620. PRACTICUM: COLLEGE UNIONS.** (3-9 cr, §8620; prereq 12 cr in recreation)
Supervised experiences in program operation; administrative and supervisory duties.
- 5630. PRACTICUM: THERAPEUTIC RECREATION.** (3-9 cr, §8630; prereq 12 cr in recreation)
Supervised experiences in program operation; administrative and supervisory duties.
- 5640. PRACTICUM: PUBLIC RECREATION AND PARKS.** (3-9 cr, §8640; prereq 12 cr in recreation)
Supervised experiences in program operation; administrative and supervisory duties.
- 5900. WORKSHOP: CONTEMPORARY ISSUES IN LEISURE SERVICES.** (1-12 cr [max 12 cr]; prereq Δ)
Contemporary issues emphasizing administrative and supervisory functions for recreation and allied professionals; individual offerings focus on special issues and/or professional groups.
- 5980. INTRODUCTION TO RESEARCH.** (3 cr, §5980; prereq #)
Basic techniques; emphasis on social research methodology; survey of present status of recreation and park research.
- 5981. PROBLEMS.** (Cr ar; prereq MEd candidate, #)
Focus on conduct of recreation programs.
- 5983. READINGS: RECREATION.** (1-3 cr; prereq sr honor, grad, or MEd student or #)
Independent study under tutorial guidance.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8310. SEMINAR: RECREATION AND PARK ADMINISTRATION**
- 8370. SEMINAR: ADMINISTRATIVE PROBLEMS IN THERAPEUTIC RECREATION**
- 8380. SEMINAR: ADMINISTRATIVE PROBLEMS IN RECREATION AND PARKS**
- 8980.* RESEARCH PROBLEMS**
- 8981.* RESEARCH PROBLEMS**

School Health Education (Hlth)

- 1500. AMERICAN RED CROSS STANDARD FIRST AID AND PERSONAL SAFETY.** (2 cr)
Lectures, demonstrations, and practice in first aid and personal safety; ARC Standard First Aid and Personal Safety Certificate awarded upon recommendation of the instructor.
- 3100. CURRICULUM IN SCHOOL HEALTH EDUCATION.** (3 cr; prereq PubH 3004, school health education major or minor)
Survey of the content included in units for the secondary school.
- 3300. INSTRUCTOR'S COURSE IN BASIC FIRST AID, STANDARD FIRST AID, AND PERSONAL SAFETY.** (3 cr; prereq ARC First Aid and Personal Safety, or Advanced Certificate)
Preparation to teach the ARC basic first aid and standard first aid and personal safety courses.

School of Physical Education and Recreation

- 3320. METHODS AND MATERIALS IN SCHOOL HEALTH EDUCATION.** (3 cr; prereq 3100)
Methods, materials, problems, and evaluation in preparation for health teaching; allocation and gradation of subject matter.
- 3330. TEACHING HEALTH IN THE ELEMENTARY SCHOOL.** (3 cr; prereq elementary education major)
Content (including critical health issues) and methods of instruction in health education for the elementary school.
- 3600. PREFALL STUDENT TEACHING.** (3 cr; prereq #)
Program and problems of organization and management in health education; begins with fall semester opening of public schools.
- 3601. STUDENT TEACHING: ELEMENTARY SCHOOL.** (3 cr; prereq 3320, SeEd 3150, 3155, major or minor in school health education)
Observation, participation, and teaching under supervision.
- 3602. STUDENT TEACHING: JUNIOR HIGH SCHOOL.** (3-6 cr; prereq 3320, SeEd 3150, 3155, major or minor in school health education)
Observation, participation, and teaching under supervision.
- 3603. STUDENT TEACHING: SENIOR HIGH SCHOOL.** (3-6 cr; prereq 3320, SeEd 3150, 3155, major or minor in school health education)
Observation, participation, and teaching under supervision.
- 3999. DIRECTED STUDIES: SCHOOL HEALTH EDUCATION.** (1-6 cr [max 6 cr]; prereq Upper Division major or minor in school health education and #; S-N only)
Study of topic or problem under tutorial guidance.
- 5100. DRIVER EDUCATION I.** (4 cr)
Materials and methods for driver education, building a plan for driver education for a specific school; behind-the-wheel training. Valid Minnesota driver's license required.
- 5101. DRIVER EDUCATION II.** (4 cr; prereq 5100)
Second of three courses to meet Minnesota certification requirements after September 1, 1966.
- 5110. SUPERVISION OF SCHOOL HEALTH AND PHYSICAL EDUCATION.** (3 cr, §PE 5110; prereq #)
Functions; adaptations of accepted procedures for observation, guidance, and training of teachers.
- 5120. ROLE OF THE SCHOOL HEALTH EDUCATOR IN HEALTH APPRAISAL.** (3 cr)
Role of school medical and dental advisers, nurse, teachers, and other school personnel in protection and maintenance phases.
- 5130. SAFETY EDUCATION.** (4 cr; prereq sr)
Scope and nature of the accident problem in our society; study of curricular areas leading to accident prevention.
- 5140. ADMINISTRATION OF THE SCHOOL HEALTH PROGRAM.** (3 cr)
Coordination of total program; health supervision and guidance; relationships between public schools and governmental health organizations and agencies; evaluation; guidance in the solution of individual professional problems.
- 5150. FAMILY LIFE AND SEX EDUCATION IN THE SECONDARY SCHOOLS.** (3 cr; prereq FSoS 5001 or #)
Concepts, appropriate materials and methods for teaching in the junior and senior high schools.
- 5160. PRACTICUM: CONSTRUCTION OF WRITTEN TESTS.** (3-6 cr, §PE 5162; prereq PsyF 5120)
Practical experience in the development of written tests with emphasis on test design and evaluation of the items.
- 5300. CONTEMPORARY PROBLEMS IN SCHOOL HEALTH EDUCATION.** (3 cr)
Instructional and individual problems.
- 5350. FAMILY LIFE AND SEX EDUCATION IN THE ELEMENTARY SCHOOLS.** (3 cr)
Research on sexual behavior of the preadolescent child; terminology, appropriate content, and effective methods for teaching.
- 5351. SEMINAR: TEACHING SCHOOL HEALTH EDUCATION IN COLLEGES AND UNIVERSITIES.** (1 cr [max 3 cr], §PE 5351, §Rec 5351; prereq Δ)
Emphasis on improvement of instruction.

Description of Courses

- 5400. TOPICS: EDUCATIONAL ASPECTS OF DRUG USE AND ABUSE.** (3 cr, §PubH 5032; prereq education sr, certified teacher, or school nurse)
Basic background information on alcohol and other drugs and chemicals with emphasis on curriculum concepts, teaching methodology, materials, and referral procedures appropriate for elementary, junior high, and senior high school.
- 5402. DEATH EDUCATION IN CONTEMPORARY SOCIETY.** (3 cr, §PubH 5040; prereq education sr, certified teacher, school nurse, or mortuary science major and #)
Basic background information on concepts and attitudes toward death, grief, and bereavement with emphasis on instructional aspects for the elementary and secondary schools; role of the school in suicide prevention.
- 5602. THE DRIVER SIMULATOR.** (4 cr; prereq 5100)
Working with the simulator program to improve, expand, and reduce the cost of conventional driver education.
- 5685. SCHOOL-BASED PROJECTS IN SCHOOL HEALTH EDUCATION.** (1-12 cr [max 12 cr]; prereq #)
Individual or group projects, applicable to local school situations such as curricular, instructional, or evaluative problems.
- 5700. WORKSHOP: CONTEMPORARY SOCIAL HEALTH PROBLEMS.** (1-12 cr [max 12 cr]; prereq Δ)
Basic background information on social health problems with emphasis on educational aspects for educators and health professionals. Each offering will focus on a current problem.
- 5980. INTRODUCTION TO RESEARCH.** (3 cr, §PE 5980; prereq #)
Methods and design for research in health, physical education, and recreation.
- 5981. PROBLEMS.** (Cr ar; prereq #)
Focus on teaching of school health education.
- 5982. INTEGRATING PAPER.** (3 cr, §PE 5982; MEd candidate only)
Independent paper integrating learnings from a course or courses in education with learnings in school health education.
- 5983. READINGS: HEALTH EDUCATION.** (1-3 cr; prereq sr honor or grad student, #)
Independent study under tutorial guidance.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8310. SEMINAR: SCHOOL HEALTH EDUCATION**
- 8980.* RESEARCH PROBLEMS**
- 8981.* RESEARCH PROBLEMS**

PSYCHOEDUCATIONAL STUDIES

Counseling and Student Personnel Psychology (CSPP)

- 5101. FOUNDATIONS OF CAREER DEVELOPMENT.** (3 cr)
Vocational theory and career development research; occupational analysis and industrial structure; methods of classifying the world of work; labor force and employment trends; basic concepts and principles for effective work in educational and vocational planning and development.
- 5110. COUNSELING PROCEDURES.** (3 cr)
For persons whose professional work includes counseling and interviewing; not for certification as school counselor. Emphasis on counseling relationship and principles of interviewing; case studies, role playing and demonstration.
- 5120. CLINICAL USE OF TESTS IN PSYCHOLOGICAL SERVICES.** (3 cr; prereq PsyF 5110 or Psy 3801 and PsyF 5121 or Psy 5862 or #)
Psychological theories related to test interpretation and the counseling process; critical review and selection of standardized tests.

- 5130. INTRODUCTION TO GUIDANCE.** (3 cr; prereq 9 cr in education)
Philosophy, principles, and practices in development and operation of pupil personnel services; role of counselor, teacher, principal, and specialized personnel; guidance techniques and case studies.
- 5131. GROUP PROCEDURES IN GUIDANCE.** (3 cr; prereq 9 cr in education, 5130 or #)
Content and materials for homeroom groups, occupation units, and other guidance courses in junior and senior high school.
- 5300. WORKSHOP: COUNSELING PSYCHOLOGY.** (1-6 cr [max 12 cr]; prereq #)
For all counselors, teachers, and administrators; aspects of intervention theory in relation to psychological principles; counseling, career development, assessment, psychological education, and consultation.
- 5320. GROUP COUNSELING: PRINCIPLES AND PROCEDURES.** (3 cr; prereq counseling certification or #)
Basic principles of group dynamics related to the group counseling process; emphasis on developing concepts, attitudes, and skills necessary; includes theory and laboratory experiences.
- 5331, 5332. CAREER DEVELOPMENT: PRINCIPLES AND PRACTICE I, II.** (3 cr each)
Principles of career development with focus on the world of work, theories, vocational information and appraisal techniques, vocational guidance and programs and practices to meet needs.
- 5505. CROSS-CULTURAL COUNSELING.** (3 cr; prereq #)
The effect of cross-cultural and cross-national differences in the counseling process.
- 5540. SEMINAR: THE COLLEGE STUDENT.** (3 cr; prereq 6 cr in psychology or educational psychology)
Psychology and sociology of college students; research concerning diversity of populations, vocational development of students, student society, culture, mental health, under-achievement, dropouts, values, and attitudes; relevant research methods.
- 5550. SEMINAR: PSYCHOLOGICAL EDUCATION.** (3 cr [max 9 cr]; prereq ¶5650 and #)
Review of curriculum programs in psychological/affective education, including achievement training, sensitivity groups, psychological and moral education.
- 5620. PRACTICUM IN GROUP COUNSELING.** (1-6 cr [max 6 cr]; prereq counseling certification and #)
Supervised practice in counseling several groups, preferably in the setting in which the student intends to work; emphasis on systematic evaluation of progress through direct observations and tapes and on developing skills in interpersonal perception, communication, and research.
- 5650. PRACTICUM: PSYCHOLOGICAL EDUCATION.** (1-3 cr [max 9 cr]; prereq 5550 or ¶5550 and #)
Practice in designing and implementing programs in psychological/affective education.
- 5900. INDEPENDENT STUDY: GUIDANCE AND COUNSELING.** (Cr ar; prereq #)
Independent study of areas of special interest to students.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8140. COLLEGE STUDENT PERSONNEL WORK—FOUNDATIONS AND SCOPE**
- 8150.* PSYCHOLOGICAL ASPECTS OF COUNSELING SUPERVISION**
- 8302-8303-8304†. COUNSELING THEORY AND PROCEDURES I, II, III**
- 8305-8306-8307‡. FIELD PLACEMENT IN COUNSELING AND STUDENT PERSONNEL PSYCHOLOGY**
- 8341. DIAGNOSIS AND TREATMENT OF COLLEGE LEARNING DIFFICULTIES**
- 8500. MASTER'S SEMINAR: COUNSELING AND STUDENT PERSONNEL PSYCHOLOGY**
- 8501. PROFESSIONAL SEMINAR**
- 8502. DOCTORAL SEMINAR: COUNSELING AND STUDENT DEVELOPMENT PSYCHOLOGY**
- 8510.* SEMINAR: ADVANCED COUNSELING THEORY**
- 8511.* SEMINAR: ADVANCED COUNSELING RESEARCH**

Description of Courses

- 8520.* SEMINAR: RESEARCH IN GROUP COUNSELING
- 8530. RESEARCH SEMINAR
- 8541. COLLEGE STUDENT PERSONNEL WORK—HOUSING
- 8542. COLLEGE STUDENT PERSONNEL WORK—STUDENT ACTIVITIES
- 8543. COLLEGE STUDENT PERSONNEL WORK—DISCIPLINE AND ADMINISTRATION
- 8602-8603-8604†. COUNSELING PRACTICUM I, II, III
- 8612. COUNSELING PRACTICUM: ADVANCED
- 8613-8614-8615†. COUNSELING PRACTICUM: STUDENT COUNSELING BUREAU
- 8640. PRACTICE IN STUDENT PERSONNEL WORK
- 8641. CLINICAL PRACTICE IN DIAGNOSIS AND TREATMENT OF COLLEGE LEARNING DIFFICULTIES
- 8701. INTERNSHIP: COUNSELING AND STUDENT PERSONNEL PSYCHOLOGY
- 8900.* RESEARCH METHODS IN COUNSELING AND STUDENT PERSONNEL PSYCHOLOGY
- 8905.* PROBLEMS: COUNSELING AND STUDENT PERSONNEL PSYCHOLOGY

School Psychology Training Program (SchP)

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8100. INTRODUCTION TO SCHOOL PSYCHOLOGICAL SERVICES
- 8310. TECHNIQUES OF PSYCHOEDUCATIONAL ASSESSMENT
- 8311. TECHNIQUES OF PSYCHOEDUCATIONAL ASSESSMENT: SPECIAL POPULATIONS
- 8312. PERSONALITY APPRAISAL IN CHILDREN AND ADOLESCENTS
- 8510. SEMINAR: SCHOOL PSYCHOLOGY
- 8513. THEORIES AND METHODS OF INTERVENTION: INDIVIDUALS
- 8514. THEORIES AND METHODS OF INTERVENTION: GROUPS
- 8515. THEORIES AND METHODS OF INSTRUCTIONAL INTERVENTION
- 8520. SEMINAR: RESEARCH IN SCHOOL PSYCHOLOGY
- 8600. CLINICAL PRACTICE IN SCHOOL PSYCHOLOGY
- 8610. PRACTICUM: SCHOOL PSYCHOLOGICAL SERVICES
- 8700. INTERNSHIP: SCHOOL PSYCHOLOGICAL SERVICES
- 8710. INTERNSHIP: INSTRUCTION AND SUPERVISION IN SCHOOL PSYCHOLOGY
- 8900.* RESEARCH PROBLEMS
- 8910. DIRECTED STUDY IN SCHOOL PSYCHOLOGY

Special Education (SpEd)

- 3600. JUNIOR PRACTICUM IN SPECIAL EDUCATION. (3 cr; prereq #)
Supervised observation and participation in classroom and related school activities for exceptional children; a pre-student teaching exploratory experience.
- 3601, 3602. TEACHING HANDICAPPED CHILDREN. (6 cr per qtr [3 cr in summer]; prereq #)
Observing work with special classes; teaching under direction. Conducted in cooperation with the public schools of the Twin Cities.

- 5100. CHILDHOOD LANGUAGE DEVELOPMENT: CLASSROOM IMPLICATIONS.** (3 cr)
Recent trends and findings in the study of language acquisition; classroom implications for the education of exceptional children.
- 5101. EDUCATION OF EXCEPTIONAL CHILDREN.** (3 cr)
Introduction to field of special education for classroom teachers and other school personnel.
- 5104. SOCIAL AND VOCATIONAL DEVELOPMENT OF HANDICAPPED STUDENTS.**
(Cr ar [max 4 cr]; prereq #)
Organization and designing of training programs to promote independent living, vocational and community adjustment of handicapped persons; curriculum materials and methods at adolescent and adult levels.
- 5110. DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITY I.** (3 cr; prereq #)
Survey, demonstration, and evaluation of special techniques for diagnosis and remediation of severe learning deficits appearing in reading and written language (including dyslexia) and basic quantitative concepts.
- 5111. DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITY II.** (3 cr; prereq 5110, ¶5611 and #)
Survey, demonstration, and evaluation of special techniques for amelioration of deficits in perceptive, integrative, and expressive processes.
- 5112. EDUCATION OF LEARNING-DISABLED CHILDREN.** (3 cr)
Analysis of considerations in design and conduct of services for learning-disabled children; approaches to education of such children.
- 5120. INTRODUCTION TO MENTAL RETARDATION.** (4 cr, §CPsy 5315; prereq 5101)
Issues which relate to educational practices; community planning; educational philosophy, administration and organization, and programming.
- 5121. METHODS AND MATERIALS FOR ELEMENTARY AND SECONDARY MENTALLY RETARDED PUPILS.** (4 cr; prereq 5101 or equiv)
Curriculum content, materials and methods of instruction for educable mentally retarded children; preparation of units and development of teaching aids.
- 5123. METHODS AND MATERIALS FOR SEVERELY RETARDED PRESCHOOL AND SCHOOL-AGE PUPILS.** (4 cr; prereq 5101 or equiv)
Issues and problems in curriculum development; pupil assessment and evaluation techniques; materials and teaching strategies.
- 5124. BIOMEDICAL ASPECTS OF DEVELOPMENTAL DISABILITIES.** (Cr ar [max 4 cr]; prereq #)
Selected information in genetics, anatomy, and physiology, the central nervous system, biochemistry of the body, and prenatal development; causative factors and clinical features, particularly mental retardation and its clinical manifestations.
- 5130. EDUCATION OF CRIPPLED CHILDREN.** (3 cr; prereq 5101 or #)
Characteristics and abilities; methods and materials for training; observation of teaching situations involving these groups; personal consultation scheduled in addition to class hours.
- 5131. EDUCATIONAL PROBLEMS OF THE NEUROLOGICALLY IMPAIRED.** (3 cr; prereq 5101 or #)
Problems in development, learning, and adjustment produced by neurological impairment; study and development of materials to meet educational needs; observations of teaching and personal conferences.
- 5140. PSYCHOSOCIAL AND FUNCTIONAL ASPECTS OF DEAFNESS.** (3 cr)
Historical and current societal perceptions of the deaf; analysis of effects and patterns of auditory impairment on children and adults; intelligence, personal and social adjustment, effect of the psychological processes on acquisition of language, speech, and speechreading.
- 5141. METHODS OF TEACHING SCHOOL SUBJECTS TO THE HEARING IMPAIRED.**
(3 cr; prereq #)
Adaptation of materials and teaching methods for hearing-impaired children in reading, mathematics, social studies, and science.
- 5143. TEACHING LANGUAGE TO THE HEARING IMPAIRED I.** (3 cr; prereq 5140)
Survey of the language curricula and teaching techniques in infant, nursery, preschool, and beginning primary programs for the deaf; overview of language development in the deaf and hearing child in the primary years.

Description of Courses

- 5144. TEACHING LANGUAGE TO THE HEARING IMPAIRED II.** (3 cr; prereq #)
Devising language curricula and teaching techniques in primary, intermediate and advanced programs for the deaf; comparative study of the language development of the deaf and hearing in these years.
- 5145, 5146. TEACHING SPEECH TO THE HEARING IMPAIRED I, II.** (3 cr each; prereq #)
Survey of speech methodologies employed in teaching hearing-impaired children; major emphasis on techniques in teaching specific sounds, articulation, voice and sentence rhythm stressing intelligibility of speech. Demonstration and practice are provided with individual and groups of hearing-impaired children.
- 5147. AURAL REHABILITATION OF HEARING-IMPAIRED CHILDREN.** (3 cr; prereq #)
Recent trends in training hearing-impaired (deaf and hard-of-hearing) children in utilization of residual hearing; consideration of present alternative approaches to auditory training and aural rehabilitation.
- 5150. EDUCATION OF EMOTIONALLY DISTURBED AND SOCIALLY MALADJUSTED CHILDREN.** (3 cr; prereq grad or #)
Discussion and evaluation of curricula, materials, and methods for instruction of disturbed and delinquent children in hospital, training school, and public school settings.
- 5155. PSYCHOEDUCATIONAL INTERVENTIONS: PSYCHOTIC CHILDREN.** (3 cr; prereq 12 cr in psychology, child psychology, or special education)
Introduction to psychopathology of children with psychotic characteristics; emphasis on psychoeducational intervention programs and teaching strategies.
- 5170. INTRODUCTION TO EDUCATION OF VISUALLY HANDICAPPED CHILDREN.** (3 cr; prereq #)
Educational programs, services, and resources for blind and partially seeing children; historical background; philosophy; sociological and psychological problems.
- 5171. BRAILLE I.** (3 cr; prereq 5170 or #)
Mastery of literary Braille code and introduction to use of mathematics and music codes; analysis of specialized equipment with emphasis on use of Braille writers and slates.
- 5172. BRAILLE II.** (3 cr; prereq 5171)
Development of classroom materials involving literary Braille code; mastery of Nemeth Code of Mathematics; opportunity for mastery of music code; consideration of newer approaches in setting up text and reference materials.
- 5173. METHODS OF TEACHING VISUALLY HANDICAPPED CHILDREN.** (3 cr; prereq 5170 or #)
Principles of preparation, selection, and effective use of instructional materials; adaptation of school environment; utilization of family, school, and community resources.
- 5174. ORIENTATION AND MOBILITY FOR BLIND CHILDREN.** (3 cr; prereq #)
Provides basic techniques to help blind children gain skill in orientation and mobility; lectures and demonstrations; practice in basic techniques; conferences on psychological and physical factors in mobility; discussions of cane, dog guide, and related methods of travel.
- 5175. STRUCTURE AND FUNCTION OF THE EYE—EDUCATIONAL IMPLICATIONS.** (3 cr; prereq #)
An ophthalmologist discusses the anatomy and physiology of the eye; an educator presents the educational implications; consideration of visual screening, visual efficiency, aids; field trips, films, observations.
- 5180. EDUCATION OF THE DISADVANTAGED.** (3 cr; prereq 12 cr in psychology, educational psychology, or sociology)
Educational needs of children handicapped by behavior related to deficiencies of physical and/or cultural environment; adaptations of educational programs.
- 5181. EDUCATION OF DISADVANTAGED INFANTS AND PRESCHOOL CHILDREN.** (3 cr; prereq 12 cr in education or #)
Research implications, teaching strategies, and curricula for the prevention and/or amelioration of sociocognitive deficits in infants and preschool children, particularly those whose mothers are mentally retarded.
- 5190. OUTSTANDING ABILITIES AND THE EDUCATIONAL PROCESS.** (3 cr)
Critical analysis of the origin and development of terms such as giftedness, creativity, genius, talent, and intelligence; implications for educational practice; current issues and trends.

- 5301. CONTINGENCY MANAGEMENT IN SPECIAL EDUCATION SYSTEMS.** (3 cr)
Behavior modification, precision teaching, and contingency contracting applied to problems in teaching exceptional children and adults.
- 5302. WORKSHOP: SPECIAL EDUCATION.** (Cr ar; prereq #)
Laboratory approach provides opportunities for school personnel to study specific problems related to special education.
- 5320. WORKSHOP: EDUCATION OF TRAINABLE RETARDED CHILDREN.** (6 cr; prereq #)
Curriculum and materials for teaching trainable mentally retarded children.
- 5321. WORKSHOP: EDUCATION OF EDUCABLE RETARDED STUDENTS.** (6 cr; prereq #)
Curriculum and materials for teaching educable mentally retarded students.
- 5340. CLINICAL AND EDUCATIONAL PROCEDURES FOR PRESCHOOL AND PRIMARY HEARING-IMPAIRED CHILDREN.** (6 cr; prereq teacher of hearing impaired or #)
Overview of education of the deaf; practical application to guided clinical experience with hearing-impaired children from ages 1 to 6; for professionals working with the hearing impaired.
- 5601. PRACTICUM: SPECIAL EDUCATION.** (Cr ar; prereq #)
Supervised experience in teaching or related work in schools or other agencies serving exceptional children.
- 5610. PRACTICUM: DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITY I.**
(3 cr; prereq §5110 and #)
Clinical practice in prescriptive teaching using a selected range of techniques presented in SpEd 5110.
- 5611. PRACTICUM: DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITY II.**
(3 cr; prereq 5610, §5111 and #)
Clinical practice in prescriptive teaching using a selected range of techniques presented in SpEd 5111.
- 5900. INDEPENDENT STUDY: SPECIAL EDUCATION.** (Cr ar [max 12 cr]; prereq #)
Development and implementation of individual study projects and/or field experiences, as arranged on a contractual basis with advising faculty persons.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8120. PSYCHOLOGICAL THEORY AND RESEARCH IN MENTAL RETARDATION**
- 8121. FUNCTIONAL ANALYSIS OF BEHAVIOR IN MENTAL RETARDATES**
- 8122. DESIGN AND INTERPRETATION OF BEHAVIORAL RESEARCH WITH MENTALLY RETARDED**
- 8150. ADVANCED COURSE: EDUCATION OF EMOTIONALLY DISTURBED AND SOCIALLY MALADJUSTED CHILDREN**
- 8151. THEORIES OF EDUCATING DISTURBED CHILDREN**
- 8152. RESEARCH IN EDUCATION OF DISTURBED CHILDREN**
- 8153. RESEARCH DESIGNS IN EDUCATION OF DISTURBED CHILDREN**
- 8500. SURVEY OF SPECIAL EDUCATION PROBLEMS**
- 8501. RESEARCH IN SPECIAL EDUCATION**
- 8502. SEMINAR: SPECIAL EDUCATION**
- 8520. EDUCATIONAL AND SOCIOCULTURAL THEORY AND RESEARCH IN MENTAL RETARDATION**
- 8540. LANGUAGE ACQUISITION AND LEARNING THEORY**
- 8560, 8561. SEMINAR: ADMINISTRATION OF SPECIAL EDUCATION**
- 8580. SEMINAR: THE DISADVANTAGED**
- 8601. ADVANCED PRACTICUM**
- 8602. RESEARCH PRACTICUM**
- 8900.° PROBLEMS**

**SOCIAL, PSYCHOLOGICAL, AND PHILOSOPHIC
FOUNDATIONS OF EDUCATION**

Psychological Foundations (PsyF)

- 3102. INTRODUCTION TO MEASUREMENT AND STATISTICS.** (2-3 cr; prereq 5 cr introductory psychology)
Measures of central tendency, variability, and correlation; principles of test construction.
- 3370. HUMAN RELATIONS AND GROUP DYNAMICS.** (4 cr)
Based on small-group training theory and methods; designed to help the student develop an understanding of his own behavior, the behavior of other individuals, and group and organizational behavior.
- 3380. INTRODUCTION TO HUMAN RELATIONS.** (3 cr; prereq education jr or sr)
Based on small-group training theory and methods, designed to help the student develop an understanding of his own behavior, the behavior of other individuals, and group and organizational behavior.
- 5110. INTRODUCTORY STATISTICAL METHODS.** (3 cr)
Basic statistical techniques; comprehension of literature using elementary concepts and methods.
- 5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM.** (3 cr)
Principles and methods for construction, evaluation, and improvement of classroom measures; techniques for describing results statistically; use of measurement in evaluating instruction and student performance; assignment of grades.
- 5121. BASIC PRINCIPLES OF MEASUREMENT.** (3 cr; prereq 5110 or 8110 or Psy 3801 or equiv)
Fundamental concepts, principles, and methods in educational and psychological measurement; educationally useful properties of tests; types and uses of derived scores; factors influencing reliability and validity.
- 5125. PRINCIPLES AND METHODS OF EVALUATION.** (3 cr)
Nature of inquiry in education (evaluation vs. elucidation); internal and external validity of designs; analytical operations on data; overview of models.
- 5141. PSYCHOLOGY OF SCHOOL LEARNING.** (3 cr)
Survey of psychological conceptions of the learner, the schooling process and the implications of these conceptions for education.
- 5144. LEARNING: THEORY AND PRACTICE.** (4 cr; prereq 5342 or #)
Methodologies of applied psychology; critical examination of psychological variables which support learning through instruction; procedures for interpretation of data.
- 5147. PSYCHOLOGY OF THE INTELLECT.** (4 cr; prereq 5342 or 5141 or equiv)
Examination of theories of intelligence and patterns of concept development with implications for educational practices (e.g., measurement practices and curriculum techniques).
- 5148. PSYCHOLOGY AND PEDAGOGY OF READING.** (3 cr)
Physiological, psychological, and linguistic factors influencing beginning and fluent reading and their implications for instruction.
- 5149. BEHAVIOR ANALYSIS IN EDUCATION.** (4 cr; prereq 5342)
Focus on practical applications of reinforcement theory, behavior analysis, precision teaching, programmed instruction.
- 5162. PERSONALITY AND SOCIAL DEVELOPMENT.** (3 cr; prereq 5 cr introductory psychology)
Major concepts and research findings in adjustment and development, with special emphasis on educational implications.
- 5170. SOCIAL PSYCHOLOGY OF EDUCATION.** (4 cr)
Concepts and theories in the field applied to educational problems and settings; laboratory sessions to make applications and develop skills in group behavior.
- 5176. PSYCHOLOGY OF DRUG ABUSE.** (3 cr)
Psychological and sociological problems of drug abuse, with special reference to schools, teachers, and students.

Social, Psychological, and Philosophic Foundations of Education

- 5330. COMPUTER PROGRAMMING.** (3 cr; prereq sr)
Computer as a tool for research in the behavioral sciences; computer systems, computer language, and the development of specific programs that demonstrate computer characteristics; laboratory experience.
- 5342. EXPERIMENTAL PSYCHOLOGY OF SCHOOL LEARNING.** (5 cr)
History, models and theories, research methods of educational psychology; conditioning, learning, and cognition; collection and analysis of data in the laboratory setting.
- 5581. INDIVIDUAL DIFFERENCES AND EDUCATIONAL PRACTICE.** (4 cr; prereq 5121 or #)
Student characteristics (age, sex, personality, ethnicity, cognitive styles) as they relate to differences in performance. Methods and models for utilizing student characteristics to improve learning and development.
- 5621. PRACTICUM: INSTRUMENTS AND PROCEDURES FOR EVALUATION.** (3 cr; prereq 5125, 5121 or equiv)
Developing curriculum evaluation instruments and procedures; introduction to methods and theories; focus on identifying evaluation problems; developing and implementing techniques for their solution.
- 5641. PRACTICUM: BEHAVIOR ANALYSIS AND PRECISE PERSONAL MANAGEMENT.** (1-3 cr [max 12 cr]; prereq #)
Self-applied behavior analysis; practice in self-recording and self-control of inner and outer behaviors; exploration of systematic ways to help others guide themselves more precisely and to learn more effectively.
- 5681. INSTRUCTIONAL USES OF COMPUTERS.** (3 cr; prereq 5141 or 5342 or equiv)
Analysis and evaluation of computer uses in teaching and learning; drill and practice, tutorial, learner controlled sequences, simulation and games, evaluation, instructional management and learning research; laboratory experience.
- 5899. WORKSHOP: IMPROVEMENT OF SCHOOL SUPPORT SERVICES.** (1-12 cr [max 12 cr]; prereq #)
Topics appropriate to activities and interest of the participants; each offering will focus on current problems.
- 5900. DIRECTED STUDY.** (Cr ar; prereq #)

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8110, 8111, 8112. STATISTICAL METHODS**
- 8113. DESIGN AND ANALYSIS OF EXPERIMENTS**
- 8114. MULTIPLE REGRESSION AND FACTOR ANALYSIS**
- 8120.* METHODS IN EDUCATIONAL RESEARCH**
- 8130. COMPUTER APPLICATION TO STATISTICAL ANALYSES**
- 8520. SEMINAR: RESEARCH PLANNING**
- 8522. ADVANCED THEORY OF MEASUREMENT**
- 8523. THEORY OF PSYCHOLOGICAL SCALING**
- 8524. MEASUREMENT AND EVALUATION OF COGNITIVE DEVELOPMENT**
- 8525.* SEMINAR: SPECIAL TOPICS IN EDUCATIONAL EVALUATION**
- 8530. SEMINAR: DEVELOPING COMPUTER APPLICATIONS**
- 8544. SEMINAR: PSYCHOLOGY OF KNOWLEDGE ACQUISITION**
- 8547. SEMINAR: COGNITIVE PROCESSES OF THE ADOLESCENT AND EDUCATIONAL IMPLICATIONS**
- 8548. PSYCHOLOGICAL ANALYSIS OF VERBAL LEARNING AND READING**
- 8562. PERSONALITY DEVELOPMENT AND SOCIALIZATION**
- 8565. DEVELOPMENT OF MORAL-POLITICAL JUDGMENT AND PROGRAMS IN VALUE EDUCATION**
- 8571. PSYCHOLOGY OF CONFLICT RESOLUTION**
- 8572. ORGANIZATIONAL DEVELOPMENT AND CHANGE**

Description of Courses

- 8573. SMALL GROUP PROCEDURES USED FOR PERSONAL AND ORGANIZATIONAL CHANGE
- 8581. PEDAGOGICAL PRINCIPLES IN INSTRUCTIONAL DESIGN AND DEVELOPMENT
- 8670. PRACTICUM IN GROUP LEADERSHIP
- 8681. SYSTEMS PRINCIPLES IN INSTRUCTIONAL DESIGN AND DEVELOPMENT
- 8721. INTERNSHIP: EVALUATION
- 8900.° RESEARCH PROBLEMS
- 8910.° PROBLEMS: STATISTICS FOR STUDENTS IN EDUCATION AND PSYCHOLOGY
- 8920.° PROBLEMS: MEASUREMENT
- 8921.° PROBLEMS: EVALUATION
- 8930.° RESEARCH PROBLEMS: COMPUTER APPLICATIONS
- 8940.° RESEARCH PROBLEMS: LEARNING AND COGNITION
- 8960.° RESEARCH PROBLEMS: PERSONALITY
- 8970.° RESEARCH PROBLEMS: SOCIAL PSYCHOLOGY
- 8980.° RESEARCH PROBLEMS: INSTRUCTIONAL SYSTEMS

Social and Philosophic Foundations of Education

History and Philosophy of Education (HEd)

- 3090. **THE SCHOOL AND SOCIETY.** (3 cr; prereq sr)
Readings in social science and philosophy give the student opportunity to integrate points of view in thinking about the role of the school in present-day society.
- 3099. **DIRECTED STUDY.** (1-6 cr; prereq #)
Independent readings with guidance of the faculty.
- 5101. **HISTORICAL FOUNDATIONS OF MODERN EDUCATION.** (3 cr)
Analysis and interpretation of important elements in modern education derived from the Greeks, Romans, the Middle Ages, and the Renaissance. Background course for all other courses in the history and philosophy of education.
- 5110. **INTERCULTURAL EDUCATION: SOCIAL SCIENCE AND SYSTEMS PERSPECTIVE.** (3 cr)
Application of social science and systems analyses to educational theories, ideologies, and operating contexts; preparation of students for later ethnically-focused courses on educational problems of particular minority populations in the United States.
- 5125. **ADOLESCENCE IN CHANGING SOCIAL INSTITUTIONS.** (3 cr)
Special status and conditions of adolescents in industrial societies; participation of youth in the socializing institutions: family, education, economic, religious, and political; problems related to adolescent development; emphasis on school peer relations.
- 5131. **COMPARATIVE EDUCATION.** (3 cr)
European, Asiatic, and American systems and philosophies of education; possibilities of international education.
- 5141. **CRITICAL ISSUES IN CONTEMPORARY EDUCATION.** (3 cr)
Introduces graduate students to ideas involved in current theory and practice.
- 5151. **SOCIAL HISTORY OF AMERICAN EDUCATION.** (3 cr)
Impact of education on social and institutional developments from colonial period to the present. Although schools, both private and public, will receive attention, education will be defined to include the work of the family, the religious congregation, the popular press, clubs, and other private associations.
- 5155. **HISTORY OF WESTERN EDUCATIONAL THOUGHT.** (3 cr)
Examination of the major educational classics of Western civilization; Plato, Aristotle, Cicero, Quintilian, Montaigne, Milton, Locke, Rousseau, and others.
- 5156. **HISTORY OF IDEAS IN AMERICAN EDUCATION.** (3 cr)
Readings in American political, economic, and social developments related to education; reference to the emerging system of public education. Recommended as background for 5170 but not a prerequisite.

Social, Psychological, and Philosophic Foundations of Education

- 5170. AMERICAN PRAGMATISM AND EDUCATION.** (3 cr)
Analysis and interpretation of the educational philosophy of pragmatism (experimentalism); readings from Dewey, Kilpatrick, Bode, Counts, Childs, and others.
- 5171. ANTHROPOLOGY AND EDUCATION.** (3 cr, §Anth 5371)
Cross-cultural perspectives in examining educational patterns, the implicit and explicit cultural assumptions underlying them; methods and approaches to cross-cultural studies in education.
- 5173. ANTHROPOLOGICAL CLASSROOM METHODS FOR CROSS-CULTURAL EDUCATION.** (3 cr; prereq introductory anthropology course or #)
Analysis of the social structure of classrooms and cultural backgrounds of pupils; study of ethnopedagogical techniques; development of culturally appropriate modifications of standard teaching techniques.
- 5182. COMPARATIVE PHILOSOPHIES OF EDUCATION.** (3 cr)
Examination of competing philosophies of education.
- 5190. SOCIOLOGY OF EDUCATION.** (3 cr, §Soc 5953)
Advanced studies in the social aspects of education, including the school as a socialization process, the social structure of education, the role of the school in social change.
- 5191. PROFESSIONALIZATION AND TEACHING.** (3 cr)
Process, social history, and ideology; role of teacher organizations; forms of militancy; comparison with professionalism in other occupations.
- 5192. SOCIOLOGY OF HIGHER EDUCATION.** (3 cr, §Soc 5958; prereq introductory statistics or #)
Advanced studies in social aspects of higher education; socialization of students, comparative institutional organization, role structure; emphasis on theory and empirical research.
- 5205. INTERCULTURAL EDUCATION: WORKSHOP IN COMMUNITY SOCIAL SIMULATIONS.** (3 cr)
Analyses of operation of the city as a social system; use of simulation gaming techniques to study urban institutions and processes, with emphasis on formal education.
- 5209. EDUCATION IN FUTURE SOCIAL SYSTEMS.** (3 cr, §5212)
Interdisciplinary inquiry into problems of social specialization and generalization; projections and analysis of long-range (30 years or more) social and technological trends related to education.
- 5210. SOCIAL FORECASTING AND EDUCATIONAL FUTURES.** (3 cr)
Application of social sciences in their academic and applied dimensions to formal education, including a social-scientific and systems orientation toward communities; emphasis on short-range social and educational planning—near present to a few years hence.
- 5211. SOCIAL DESIGN AND EDUCATIONAL FUTURES.** (3 cr)
Medium-range interdisciplinary approach to community design and analysis emphasizing formal education systems in community context; focus upon new neighborhoods, towns, experimental cities, and subcultural enclaves in rural and urban settings emphasizing time period from several years to three decades hence.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8241.* PROBLEMS: HISTORY AND PHILOSOPHY OF EDUCATION**
- 8242. SEMINAR: EDUCATIONAL PHILOSOPHY**
- 8255. SEMINAR: EUROPEAN AND AMERICAN EDUCATIONAL THOUGHT: 16TH AND 17TH CENTURIES**
- 8256. SEMINAR: EUROPEAN AND AMERICAN EDUCATIONAL THOUGHT: 17TH CENTURY**
- 8257. SEMINAR: EUROPEAN AND AMERICAN EDUCATIONAL THOUGHT, LATE 17TH AND 18TH CENTURIES**
- 8290. ADVANCED SOCIOLOGY OF EDUCATION**

VOCATIONAL AND TECHNICAL EDUCATION

Agricultural Education (AgEd)

- 1001. INTRODUCTION TO AGRICULTURAL EDUCATION.** (1 cr; prereq #)
Orientation to employment and service; qualifications of teachers, survey of preparatory offerings; the program in Minnesota.
- 1010. RURAL EDUCATION AND COMMUNITY LEADERSHIP.** (3 cr)
Appraisal of community educational agencies; process of and responsibilities for community leadership; role of the school in the rural community; coordination of the school with nonschool educational agencies.
- 3010. ORGANIZATION AND DIRECTION OF SUPERVISED OCCUPATIONAL EXPERIENCE AND FFA ACTIVITIES.** (4 cr)
Organization and direction of vocational agribusiness and natural resources education, supervised occupational experience and FFA (youth leadership organization) activities at the secondary level; occupational analyses; course building; integration of classroom supervised occupational experience and FFA activities; emphasis on development of abilities to organize, develop, and direct such experiences.
- 3021. EDUCATION THROUGH EXTENSION METHODS.** (3 cr; prereq soph)
Role of nonschool agencies in rural and agricultural education; methods and techniques of formal and informal instruction in school and nonschool educational programs.
- 3029. RESTRICTED EXPERIENCE IN AGRICULTURAL EDUCATION.** (1-3 cr)
Observation of the activities of teachers of agriculture; familiarization with the staff, the curriculum and the physical facilities and equipment in a department of vocational agriculture with opportunity to participate in the functions of a teacher.
- 3031. STUDENT TEACHING IN AGRICULTURE.** (8 cr; prereq jr, 5028, SeEd 3155 and #)
Instruction in developing individual farming programs, contacting parents, program analysis of community needs, conducting classes, community activities, Future Farmers, and case studies.
- 3041. PRACTICUM: AGRICULTURAL EDUCATION TECHNOLOGY.** (1-3 cr [max 5 cr])
Individualized study packages of 1 credit each of technology in agriculture, horticulture, off-farm agriculture, agricultural mechanics, adult and beginning farmer programs, youth organizations, program evaluation, and visual aids.
- 5010.* RURAL EDUCATION AND COMMUNITY LEADERSHIP.** (3 cr, §1010; prereq #)
Role of school in rural community, coordination of school with nonschool educational agencies; responsibility for community leadership.
- 5021. EDUCATION THROUGH EXTENSION METHODS.** (3 cr; prereq grad or #)
Role of nonschool agencies in rural and agricultural education; methods and techniques of formal and informal instruction in school and nonschool educational programs.
- 5023. EXTENSION METHODS FOR AGRICULTURAL PRODUCTION IN DEVELOPING COUNTRIES.** (2 cr)
Extension methods to promote the rapid adoption of improved agricultural practices.
- 5024. HISTORY AND PHILOSOPHY OF EXTENSION SERVICES.** (3 cr; prereq #)
Origin, philosophy, historical development, objectives, and organizational structure of the Cooperative Extension Service including agriculture, home economics, 4-H programs and community development work.
- 5025. EXTENSION PROGRAM DEVELOPMENT.** (3 cr)
Planning, implementing, and evaluating the program development process.
- 5026. ADMINISTRATION OF EXTENSION SERVICES.** (3 cr; prereq #)
Administration of the Cooperative Extension Service organization at the county, area, and state levels.
- 5027. PRACTICUM: EXTENSION EXPERIENCES.** (2-6 cr [max 6 cr])
Observation of the activities of county extension staff; familiarization with staff, program planning and development, county committee, youth activities and office activities, with opportunity to participate in the functions of an Extension Service educator.
- 5028. TEACHING METHODS IN AGRICULTURAL EDUCATION.** (5 cr; prereq SeEd 3155 or §SeEd 3155)
Methods utilized in teaching agriculture in public schools; use of media, principles of learning, problem solving, test construction, classroom management and specific practice in problem-solving teaching techniques; use of competency-based individualized instruction as a media for course presentation and a model for teaching methods.

Vocational and Technical Education

- 5032. HIGH SCHOOL CURRICULUM IN AGRICULTURE.** (3 cr; prereq 10 cr in education)
Philosophy, organization, and administration of instruction in agriculture departments in secondary schools.
- 5034. PROCEDURES IN TEACHING AGRICULTURE.** (3 cr; prereq #)
New developments in methodology; assessment of innovations and procedures; consideration of various levels of instruction.
- 5035. METHODS AND PRACTICES IN TEACHING POST-HIGH SCHOOL AGRICULTURE.**
(3 cr)
Problems unique to area school and junior college teaching; improving the ability to organize and present subject matter.
- 5041. WORKSHOP: AGRICULTURAL EDUCATION TECHNOLOGY.** (1-6 cr [max 6 cr])
New understandings, techniques, and materials in animal science, plant science, horticulture, soil science, agricultural mechanics, forestry, natural resources, youth organization, visual aids, and occupational exploration.
- 5049. AGRICULTURAL EDUCATION FOR ADULTS.** (5 cr)
Methods, organization, and implementation of systematic education programs for beginning and established farmers; organization of local programs to meet needs of production agriculture in areas of enterprises, agricultural mechanics and management; developing a continuing program, observations.
- 5051. ENTERPRISE ANALYSIS.** (3 cr; prereq #)
Analyzing the farm business as a basis for identifying problems; planning learning experiences to improve farm management at the high school, young farmer, and adult levels.
- 5052. FARM BUSINESS MANAGEMENT EDUCATION.** (3 cr; prereq 5049 or #)
Administration, organization, and operation of farm business management education programs for adults; development and utilization of curriculum materials based on farm business record data.
- 5061. PROGRAM PLANNING AND EVALUATION.** (3 cr; prereq sr)
Developing a program of agricultural education in a community school, integration with total school program, administrative relationships, techniques and use of program evaluation in planning.
- 5065. EVALUATION OF LOCAL VOCATIONAL EDUCATION PROGRAMS.** (3 cr)
Procedures and instruments for assessing the effectiveness of programs for employment-bound youth and adults.
- 5066. POLICY AND PROGRAM DEVELOPMENT IN AGRICULTURAL EDUCATION.** (3 cr)
Appraisal of the situation in local schools and development of plans for improving the program development process.
- 5071. SUPERVISED OCCUPATIONAL EXPERIENCES IN AGRICULTURE.** (3 cr)
Organization and administration of an occupational experience program in agriculture for high schools and area schools.
- 5072. PRACTICUM: AGRICULTURAL BUSINESS AND INDUSTRY.** (1-3 cr [max 9 cr])
Observation, study, and experience in agricultural business and industry; application to educational problems in agriculture.
- 5080. ORGANIZATION AND MANAGEMENT.** (3 cr; prereq #)
Administrative structure and function of subcollegiate programs.
- 5081. CURRENT ISSUES FOR THE BEGINNING AGRICULTURE TEACHER.** (1-3 cr [max 3 cr]; prereq #)
Teaching methods, organizing learning resource materials, managing classroom and laboratory learning activities, curriculum planning and organization, managing discipline situations, school and community relationships for the beginning teacher.
- 5084. CURRICULA FOR CAREER EXPLORATION IN AGRICULTURAL OCCUPATIONS.**
(3 cr)
Analysis and evaluation of material; criteria for selection of material; content, organization, resource activities and teaching techniques.
- 5085. CAREER DEVELOPMENT IN AGRICULTURAL EMPLOYMENT.** (3 cr)
Methods and materials in teaching career development for agricultural industries.
- 5090. INDEPENDENT STUDY.** (1-3 cr; prereq sr)
Topics may be chosen to permit study of areas within education or to supplement areas of inquiry not provided in the regular course structure.

Description of Courses

- 5095. INDEPENDENT STUDY.** (3 cr; prereq MEd student in agricultural education)
Preparation of a paper dealing with learnings in agricultural education applied to professional responsibilities.
- 5128. METHODS OF TEACHING.** (3 cr; prereq non-agricultural education major and/or #)
Methods of teaching agriculture or related subjects; developing competencies in planning, organizing, implementing, and evaluating instruction with practice in instructional techniques.
- 5129. CURRICULUM PLANNING.** (3 cr; prereq 5128 or ¶5128, non-agricultural education major and/or #)
Methods and procedures in planning a curriculum to teach within a specific subject matter area; curriculum construction for use in native country setting.
- 5130. EFFECTIVE TEACHING IN A COLLEGE OF AGRICULTURE.** (3 cr; prereq 1 yr grad study in agriculture or #)
Approaches to effective teaching, development of a personal philosophy, practice in employing types of instructional improvement activities. Primarily for the student who plans to teach in a college of agriculture.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8001.^o RESEARCH IN AGRICULTURAL EDUCATION**
- 8010. CURRENT ISSUES IN AGRICULTURAL EDUCATION**
- 8020. SEMINAR: AGRICULTURAL EDUCATION**
- 8081. SUPERVISION OF VOCATIONAL AGRICULTURE**
- 8091. FIELD PROBLEMS**
- 8303. SEMINAR: GRADUATE STUDIES REVIEW**

Business Education (BsEd)

- 1501. BEGINNING TYPEWRITING.** (2 cr, §SeEd 1501)
Emphasis on correct typewriting techniques; letter styles; manuscripts; simple tabulation; proofreading.
- 1502. INTERMEDIATE TYPEWRITING.** (2 cr, §SeEd 1502; prereq 1501 or proficiency exam)
Speed and accuracy building; carbons, tabulations, simple manuscripts, rough drafts, additional letter styles, interoffice memoranda, office forms, outlines and enumerations.
- 1503. ADVANCED TYPEWRITING.** (2 cr, §SeEd 1503; prereq 1502 or proficiency exam)
Proficiency in typing; complex manuscripts, footnotes, bibliographies, additional letter styles, complex tabulations.
- 1504. INTRODUCTION TO BUSINESS EDUCATION.** (3 cr, §SeEd 1504)
Introduction to curriculum and methodologies at all educational levels.
- 1505. BEGINNING SHORTHAND.** (3 cr, §SeEd 1505; prereq 1501 or equiv)
Gregg shorthand theory, speed building on familiar material, typewritten transcription; introduction of new matter dictation.
- 1506. INTERMEDIATE SHORTHAND.** (3 cr, §SeEd 1506; prereq 1502, 1505 or proficiency exam)
Emphasis on building speed on new matter dictation and typewritten transcription.
- 1507. ADVANCED SHORTHAND.** (3 cr, §SeEd 1507; prereq 1502, 1506 or proficiency exam)
Continued emphasis on speed building, using new matter dictation; emphasis on transcription of mailable letters.
- 1508. OFFICE MANAGEMENT AND PROCEDURES.** (3 cr, §SeEd 1508)
Office organization, communications, systems and work flow, records management.
- 1509. OFFICE MACHINES.** (2 cr, §SeEd 1509; prereq 1502 or equiv)
Calculating, duplicating, and transcribing machines.
- 3300. TEACHING TYPEWRITING.** (2 cr, §SeEd 3300; prereq 1502 or ¶1502 or equiv and SeEd 3155 or ¶SeEd 3155)
Objectives, content, methods, materials, and evaluation in the teaching of typewriting.

- 3301. TEACHING SHORTHAND AND TRANSCRIPTION.** (2 cr, §SeEd 3301; prereq 1506 or ¶1506 or equiv and SeEd 3155 or ¶SeEd 3155)
Classroom methods in developing shorthand and transcription skills.
- 3302. TEACHING BASIC BUSINESS SUBJECTS.** (2 cr, §SeEd 3302; prereq SeEd 3155 or ¶SeEd 3155)
Developments in content and method of teaching nonvocational business subjects.
- 3303. TEACHING ACCOUNTING AND DATA PROCESSING.** (2 cr, §SeEd 3303; prereq jr, SeEd 3155 or ¶3155)
Methods, materials, curriculum, and principles of learning pertinent to accounting and data processing.
- 3390. DIRECTED STUDIES IN BUSINESS EDUCATION.** (1-6 cr [max 6 cr]; prereq #; S-N option)
To permit undergraduate students maximum flexibility in pursuing projects or topics of study on an independent basis.
- 3601. STUDENT TEACHING IN BUSINESS SUBJECTS.** (3-12 cr [12 cr for majors, 3 cr for minors], §SeEd 3601; prereq SeEd 3155 and #; S-N option)
Required of all students majoring or minoring in business education.
- 3602. PREFALL STUDENT TEACHING.** (3 cr; prereq #; S-N option)
Introduction to student teaching for those completing the regular fall quarter student teaching experience in business education.
- 5100. RESEARCH AND METHODS IN TEACHING ACCOUNTING AND BUSINESS DATA PROCESSING.** (3 cr)
Recent trends and developments.
- 5101. RESEARCH AND METHODS IN TEACHING TYPEWRITING AND SHORTHAND.** (3 cr)
Application of research findings to classroom methodology.
- 5102. TEACHING THE BASIC BUSINESS SUBJECTS.** (3 cr)
Recent trends and developments in teaching general business, economic geography, marketing, business law, and consumer education.
- 5103. CONSUMER EDUCATION IN SCHOOLS.** (3 cr)
Objectives, content, and curriculum organization at elementary and secondary levels.
- 5104. OFFICE COORDINATION TECHNIQUES.** (3 cr, §DE 5105)
Problems in the cooperative program; guidance and selection; placing students in offices; job adjustments; development and evaluation of the training program.
- 5106. ORGANIZATION AND SUPERVISION OF BUSINESS EDUCATION.** (3 cr; prereq #)
Examination of evaluative criteria for business education departments, teacher selection and supervision, and organization of business education in the United States.
- 5107. MATERIALS AND METHODS IN OFFICE EDUCATION.** (3 cr)
Recent research and developments in teaching office procedures and the preparatory and related classes for office education.
- 5108. CURRICULUM CONSTRUCTION IN BUSINESS EDUCATION.** (3 cr)
Curriculum problems; organization and preparation of teaching units.
- 5109. BUSINESS EDUCATION FOR THE CULTURALLY DIFFERENT.** (3 cr)
Characteristics and problems of culturally different and economically deprived students; evaluation and recommendation for improvement in business education programs, curricula, methodologies, and instructional materials.
- 5110. BUSINESS EDUCATION PROGRAMS BEYOND HIGH SCHOOL.** (3 cr)
Determining objectives and curricula for junior/community college, vocational-technical school, adult education, and collegiate business programs.
- 5111. MATERIALS AND METHODS FOR A SIMULATED OFFICE COURSE.** (3 cr; prereq sr)
Course organization; methods; development and evaluation of objectives and materials.
- 5112. PROGRAM DEVELOPMENTS IN BUSINESS EDUCATION.** (1-12 cr [max 12 cr])
Developments emerging from research and local, state, and national programs and projects.
- 5114. OFFICE OCCUPATIONAL EXPERIENCE.** (3-12 cr, §SeEd 3100; prereq #; S-N option)
Observation and practice in business offices; weekly seminars on application to teaching and guidance of high school and post-high school students. Each 3 credit offering requires 250 hours of work; may not apply for credit toward an advanced degree.

Description of Courses

- 5115. RESEARCH PROCEDURES IN BUSINESS EDUCATION.** (3 cr, \$8100; prereq #)
Research design, techniques; preparation of reports; criteria for appraising methods; critical analysis of research completed in business education.
- 5116. SCHOOL-BASED PROJECTS IN BUSINESS EDUCATION.** (1-12 cr [max 12 cr]; prereq #)
Individual or group work on curricular, instructional, or evaluation problems and projects applicable to local school situations.
- 5390. DIRECTED STUDIES IN BUSINESS EDUCATION.** (1-6 cr [max 6 cr]; prereq #)
Opportunity for individual learning experiences not covered by regular courses.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8300. SEMINAR: RESEARCH IN BUSINESS AND ECONOMIC EDUCATION**
- 8600. INTERNSHIP: BUSINESS EDUCATION**
- 8900.* PROBLEMS: BUSINESS EDUCATION**

Distributive Education (DE)

- 1100. INTRODUCTION TO DISTRIBUTIVE EDUCATION.** (3 cr)
Orientation and exploration of distributive education including 20-25 hours of directed observation in public schools.
- 3100. DISTRIBUTIVE OCCUPATIONAL EXPERIENCE.** (1-15 cr; prereq jr, sr, distributive education majors only, #)
Observation and practice combined with weekly seminars on application to the teaching and guidance of high school and post-high school students.
- 3301-3302-3303. METHODS: DISTRIBUTIVE EDUCATION.** (3 cr per qtr; prereq #)
- 3601. STUDENT TEACHING IN DISTRIBUTIVE EDUCATION.** (3-12 cr [max 12 cr]; prereq SeEd 3155 or #)
Required of all students majoring in distributive education.
- 3602. PREFALL STUDENT TEACHING.** (3 cr; prereq #; S-N only)
Introductory student teaching experience in distributive education subjects.
- 5100. ORGANIZATION AND ADMINISTRATION OF DISTRIBUTIVE EDUCATION.** (3 cr)
Principles, practices, and legislation followed in developing cooperative vocational and adult programs under federal vocational acts; basic course for teacher-coordinators and vocational administrators.
- 5105. COORDINATION TECHNIQUES.** (2 cr)
Problems of coordinators in cooperative vocational education; guidance and selection; placing students in work stations, assisting job adjustments, developing the training program.
- 5106. COORDINATION TECHNIQUES IN COOPERATIVE DISTRIBUTIVE EDUCATION.** (2 cr; prereq 5105 or #5105)
Application in secondary and postsecondary cooperative and project plan programs; certification course for distributive education teacher-coordinators.
- 5110. CURRICULUM IN COOPERATIVE VOCATIONAL EDUCATION.** (2 cr)
Planning, organizing, implementing, and evaluating a cooperative vocational education curriculum.
- 5111. CURRICULA IN COOPERATIVE DISTRIBUTIVE EDUCATION.** (2 cr; prereq 5110 or #5110)
Application in secondary and postsecondary distributive education; certification course for distributive education teacher-coordinators.
- 5115. POSTSECONDARY BUSINESS AND DISTRIBUTIVE EDUCATION.** (3 cr)
Determining needs, curriculum, facilities, admission practices, placement and follow up of students, teacher qualifications, and interorganizational relations in junior college and area technical school programs.
- 5116. MATERIALS LABORATORY: POSTSECONDARY DISTRIBUTIVE EDUCATION.** (3 cr; prereq #)
New methods of instruction; development of materials for distributive education programs in junior colleges and area vocational-technical schools.

Vocational and Technical Education

- 5120. BUSINESS AND DISTRIBUTIVE PROGRAMS FOR ADULTS.** (3 cr)
Selection and training of evening school instructors; planning and promoting evening school distributive education classes.
- 5125. ISSUES AND TRENDS IN DISTRIBUTIVE EDUCATION.** (3 cr; prereq sr or grad and #)
Identification, analysis, and discussion of recent issues and trends; review and synthesis of research.
- 5300. MATERIALS AND METHODS IN COOPERATIVE VOCATIONAL EDUCATION.** (2 cr)
Basic course for teacher-coordinators of cooperative vocational education programs.
- 5301. MATERIALS AND METHODS IN COOPERATIVE DISTRIBUTIVE EDUCATION.** (2 cr; prereq 5300 or ¶5300)
For teacher-coordinators of cooperative and project plan distributive education; certification course for distributive education teacher-coordinators.
- 5305. TEACHING MERCHANDISE DISPLAY.** (3 cr; prereq #)
Materials and methods; practice in using equipment.
- 5310. MATERIALS LABORATORY: DISTRIBUTIVE EDUCATION.** (3 cr; prereq 3303 or 5300 or #)
Development of specific related vocational materials for distributive occupations, cooperative vocational education classes.
- 5315. MATERIALS LABORATORY: OCCUPATIONAL ADJUSTMENT.** (3 cr; prereq 3303, 5300 or #)
Development of general related vocational materials for all types of cooperative vocational education classes.
- 5320. TEACHING DATA PROCESSING IN DISTRIBUTIVE EDUCATION.** (3 cr; prereq 3303 or 5300 or #)
Implementation and application of electronic data processing principles, concepts, techniques, and materials for high school and post-high school distributive education programs.
- 5330. TEACHING SUPERVISORY TRAINING.** (3 cr)
Conducting short unit courses for store and office supervisors and improving on-the-job training in cooperative vocational education programs.
- 5340. DISTRIBUTIVE EDUCATION YOUTH ORGANIZATIONS.** (3-4 cr; prereq distributive education major)
Organization, administration, and operation of local, state, and national distributive education youth groups; laboratory assignment included for students registering for 4 credits.
- 5400. PROGRAM DEVELOPMENTS IN DISTRIBUTIVE EDUCATION.** (1-12 cr [max 12 cr]; prereq #)
Problems, practices, methodology, and relationships on topics of concern to distributive education personnel.
- 5600. SCHOOL-BASED PROJECTS IN DISTRIBUTIVE EDUCATION.** (1-12 cr [max 12 cr]; prereq Δ)
School-related experiences on an individual or group basis involving curricular, instructional, developmental, or evaluative problems and projects applicable to local school situations.
- 5900. DIRECTED STUDY: DISTRIBUTIVE EDUCATION.** (1-6 cr [max 6 cr]; prereq Δ; S-N option)
Individually arranged learning experiences in instruction, curricula, organization, operation, and evaluation.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

8300. SEMINAR: RESEARCH IN DISTRIBUTIVE EDUCATION

8600. INTERNSHIP: DISTRIBUTIVE EDUCATION

8900.* PROBLEMS: DISTRIBUTIVE EDUCATION

Description of Courses

Home Economics Education (HEEd)

- 1500. INTRODUCTION TO HOME ECONOMICS EDUCATION.** (2 cr; prereq soph)
Structure and function of teaching; nature of home economics teachers' work, emphasis on specific teaching options; impact of schooling on growth and development of pupils.
- 1510. KNOWLEDGE AND VALUES IN TEACHING.** (4 cr; prereq 1500 or #)
Roles of the home economics teacher in creating and using knowledge and in weighing and fostering values.
- 3315. ADULT EDUCATION IN HOME ECONOMICS.** (3 cr; prereq 3520 or #)
Objectives; problems affecting community and family life; methods of helping adults and out-of-school youth in solving problems in home living.
- 3325. PRACTICUM IN CHILD DEVELOPMENT.** (1 cr; prereq 3320 or ¶3320 and Δ)
Observation and experience with children as a method of teaching child development in the home economics program.
- 3330. HOME ECONOMICS OCCUPATIONAL EXPERIENCE.** (1-9 cr; prereq jr, sr home economics education major only and #)
Observation and experience in the chosen occupational cluster; weekly seminars with application to guidance and teaching of students.
- 3520. HOME ECONOMICS CURRICULUM AND INSTRUCTION: COGNITIVE LEARNING.** (5 cr; prereq 1510)
Broad overview of elements of curriculum; objectives, assessment, and strategies related to cognitive learning.
- 3530. HOME ECONOMICS CURRICULUM AND INSTRUCTION: AFFECTIVE LEARNING.** (4 cr; prereq 3520 or #, SeEd 3150, 3155 or ¶)
Objectives, assessment, and strategies related to affective learning.
- 3540. HOME ECONOMICS CURRICULUM AND INSTRUCTION: PSYCHOMOTOR LEARNING.** (2 cr; prereq 3520)
Objectives, assessment, and strategies related to psychomotor learning.
- 3601. CLINICAL EXPERIENCE: TEACHING CONSUMER-HOMEMAKING.** (9 cr; prereq ¶3611, ¶3620, Δ; S-N only)
Classroom teaching in selected Minnesota school.
- 3602. CLINICAL EXPERIENCE: TEACHING FAMILY LIFE.** (9 cr; prereq ¶3612, ¶3620, Δ; S-N only)
Classroom teaching in selected Minnesota school.
- 3603. CLINICAL EXPERIENCE: TEACHING HOME ECONOMICS OCCUPATIONS.** (9 cr; prereq ¶3613, ¶3620, Δ; S-N only)
Classroom teaching in selected Minnesota school.
- 3605. FIELD EXPERIENCE FOR EXTENSION HOME ECONOMISTS.** (6 cr; prereq #)
Observation, participation, and experience under supervision in the Agricultural Extension program on the St. Paul Campus and in a selected county program.
- 3611. FIELDWORK: CONSUMER-HOMEMAKING EDUCATION.** (3 cr; prereq ¶3601, ¶3620, Δ; S-N only)
Individualized instruction conducted in selected programs in the field and on campus.
- 3612. FIELDWORK: FAMILY LIFE EDUCATION.** (3 cr; prereq ¶3602, ¶3620, Δ; S-N only)
Individualized instruction conducted in selected programs in the field and on campus.
- 3613. FIELDWORK: HOME ECONOMICS OCCUPATIONAL EDUCATION.** (3 cr; prereq ¶3603, ¶3620, Δ; S-N only)
Individualized instruction conducted in selected programs in the field and on campus.
- 3620. CURRICULUM MANAGEMENT.** (3 cr; prereq ¶3601 or ¶3602 and ¶3611 or ¶3612, #)
Classroom activities including laboratory.
- 3900. INDEPENDENT STUDY.** (1-9 cr per qtr [max 9 cr]; prereq jr and #)
Study of selected topics in home economics chosen in collaboration with staff.
- 5106. COORDINATION TECHNIQUES IN HOME ECONOMICS OCCUPATIONAL EDUCATION.** (2 cr; prereq DE 5105 or ¶DE 5105)
Application in secondary and postsecondary cooperative and project plan programs; certification course for home economics teacher coordinators.

Vocational and Technical Education

- 5111. CURRICULUM IN HOME ECONOMICS OCCUPATIONAL EDUCATION.** (2 cr; pre-req DE 5110 or §DE 5110)
Application in secondary and postsecondary home economics education; certification course for home economics teacher-coordinators.
- 5300. HOME ECONOMICS CURRICULUM.** (3 cr; pre-req 3530 and §)
Examination of research and literature; development of units of study and programs at elementary and secondary levels; production and evaluation of materials.
- 5301. MATERIALS AND METHODS IN HOME ECONOMICS OCCUPATIONAL EDUCATION.** (2 cr; pre-req DE 5300 or §DE 5300)
For teacher-coordinators of cooperative and project plan home economics education; certification course for home economics teacher-coordinators.
- 5305. HOME ECONOMICS CURRICULUM: COLLEGE LEVEL.** (3 cr; pre-req §)
Examination of research and literature; course and program development in higher education; analysis of current college programs; production and evaluation of curriculum materials.
- 5310. METHOD IN TEACHING HOME ECONOMICS: THEORY AND TECHNOLOGY.** (3 cr; pre-req 3530 and §)
Derivation of theory for educational method from relevant research; application to the educational objectives; analysis of technology related to teaching method.
- 5315. EVALUATION: THEORETICAL AND TECHNICAL ASPECTS.** (3 cr; pre-req 3530 and §)
Collecting and interpreting evidence related to achievement of objectives, emphasizing higher levels of cognition and affective behaviors.
- 5320. ADULT EDUCATION IN HOME ECONOMICS.** (3 cr; pre-req 3315 or §)
Planning a community program; teaching procedures; special problems.
- 5325. TRENDS IN HOME ECONOMICS EDUCATION.** (3 cr; pre-req 5300 or 5305)
Current status; purposes, programs, content emphasis, research, problems, and issues in the field.
- 5331. HOME ECONOMICS OCCUPATIONAL EDUCATION.** (3 cr [max 12 cr]; pre-req sr or tchg exper or §)
Exploration of career opportunities; identification of needed competencies; development of instructional units; objectives, teaching-learning experiences, appraisal procedures; preparation of teaching materials.
- 5400. WORKSHOP: HOME PLANNING AND FURNISHING.** (3 or 4 cr [max 12 cr]; pre-req Δ)
Problems at high school and adult levels; use of new materials and techniques; group and individual projects to meet the needs and interests of experienced teachers.
- 5405. WORKSHOP: CHILD DEVELOPMENT AND HUMAN RELATIONS.** (3 or 4 cr; pre-req grad)
Recent emphasis on growth and guidance of individuals; materials and techniques for high school and adult levels to attain better understanding.
- 5410. WORKSHOP: FOODS AND NUTRITION.** (3 or 4 cr [max 12 cr]; pre-req Δ)
Problems in teaching at high school and adult levels; use of new materials and techniques; group and individual projects for experienced teachers.
- 5415. WORKSHOP: MATERIALS FOR INSTRUCTION.** (1-4 cr; pre-req grad or teacher in service)
Problems in selection and use of new materials for instruction in home economics.
- 5420. WORKSHOP: ADULT EDUCATION.** (3 or 4 cr [max 12 cr]; pre-req Δ)
Procedures in teaching adults; planning the program; use of new materials and techniques; group and individual problems.
- 5425. WORKSHOP: HOME EXPERIENCE AND EXTENDED EMPLOYMENT.** (3 or 4 cr [max 12 cr]; pre-req Δ)
Methods of using the extended period of employment effectively; techniques for selection, execution, and evaluation of home experiences; group or individual problems for experienced teachers.
- 5430. WORKSHOP: CONTEMPORARY PROBLEMS IN HOME ECONOMICS EDUCATION.** (3 or 4 cr [max 12 cr]; pre-req Δ)
Consideration of topic of current concern in home economics education.
- 5500. PROSEMINAR: HOME ECONOMICS EDUCATION.** (2 cr; required of all new grad students)
Relation of the processes and standards of rational thought to professional competence and the goals of a graduate program of study.

Description of Courses

5600. PRACTICUM: ADULT EDUCATION. (3 cr; prereq #)
Individual field assignments under supervision.
5900. READINGS IN HOME ECONOMICS EDUCATION. (1-3 cr; prereq #)
Independent study under tutorial guidance.
5910. INTEGRATING PAPER. (3 cr; prereq MEd student)
Independent paper integrating learnings from a course or courses in education with learnings in home economics education.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

8300. RESEARCH METHODS
8305. RESEARCH METHODS
8500. SEMINAR: CURRICULUM DEVELOPMENT
8505. SEMINAR: SUPERVISION OF STUDENT TEACHING
8510. SEMINAR: IMPROVEMENT OF INSTRUCTION IN ADULT EDUCATION
8515. SEMINAR: TEACHER EDUCATION
8520. SEMINAR: HISTORY AND PHILOSOPHY OF HOME ECONOMICS EDUCATION
8525. SEMINAR: ADMINISTRATION AND SUPERVISION OF HOME ECONOMICS PROGRAMS
- 8530.* SEMINAR: HOME ECONOMICS EDUCATION
- 8900.* PROBLEMS: HOME ECONOMICS EDUCATION

Industrial Education (Ind)

1300. INTRODUCTION TO INDUSTRIAL ARTS EDUCATION. (5 cr; for freshmen and those contemplating the major)
Objectives, programs, and experiences involving tools, materials, design, and processes of industrial arts teaching.
1301. INTRODUCTION TO VOCATIONAL-INDUSTRIAL TEACHING. (3-6 cr [max 6 cr])
Techniques for the occupationally certifiable individual who plans to enter the field of vocational teaching; required for initial state vocational certification.
1490. ELEMENTARY HANDCRAFTS. (3 cr)
For majors in elementary, art, special, and recreational education.
1492. CRAFTWORK. (A) (3 cr)
Projects in mediums suitable for industrial arts, plastics, art metal, lapidary, and leatherwork.
1500. DRAFTING. (B) (3 cr)
Sketching, lettering, use of instruments, orthographic projection, pictorial representation, and blueprint reading.
1502. BUILDING CONSTRUCTION DRAFTING. (B) (3 cr; prereq 1500)
Principles of orthographic and pictorial representation applied to building construction.
1504. ADVANCED DRAFTING. (B) (3 cr; prereq Δ)
1506. DESIGN I. (B) (3 cr; prereq 1500 or #)
Laboratory: creative design as a process of solving problems with tools and materials.
1510. WOOD PROCESSING I. (A) (3 cr)
Use of common hand and machine tools, materials and finishing principles.
1511. WOOD PROCESSING II. (A) (3 cr; prereq 1510 or #)
Use and maintenance of power equipment; laboratory production experiences.
1512. WOOD PROCESSING III. (A) (3 cr; prereq Δ)
Building construction practices; requirement may be satisfied by taking Dunwoody Institute carpentry or MeAg 1600.
1520. ELECTRICITY AND ELECTRONICS. (C) (3 cr)
Introduction to electricity as an area of industrial arts; basic principles, fundamental skills, projects, processes, and teaching ideas particularized for junior high school.

Vocational and Technical Education

1522. **COMMUNICATION ELECTRONICS. (C)** (3 cr; prereq 1520)
Continuation of 1520 into basic principles of radio and audio equipment for industrial arts teaching; construction practices and principles of vacuum tubes and transistor circuitry.
1524. **INDUSTRIAL ELECTRONICS. (C)** (3 cr; prereq 1522)
Principles of television, oscillator circuits, computer circuits, telemetering and control and test equipment circuits; laboratory work.
1526. **APPLIED ELECTRONICS I. (C)** (3 cr; prereq Δ)
1528. **APPLIED ELECTRONICS II. (C)** (3 cr; prereq Δ)
1530. **SMALL GAS ENGINES. (A)** (3 cr; prereq Δ)
Operating principles, maintenance, and adjustment of two- and four-cycle gas engines; may be satisfied by Dunwoody Institute course of same title.
1532. **AUTOMOTIVE MECHANICS I. (A)** (3 cr; prereq Δ)
1534. **AUTOMOTIVE MECHANICS II. (A)** (3 cr; prereq Δ)
1540. **GRAPHIC ARTS I. (A)** (3 cr)
Typesetting and presswork, photography, silk-screen printing, and general duplicating.
1542. **GRAPHIC ARTS II. (A)** (3 cr)
Letterpress, drypoint etching, bookbinding, photography, and offset printing.
1560. **METAL PROCESSING I. (D)** (3 cr; prereq Δ)
General metalwork.
1562. **METAL PROCESSING II. (D)** (3 cr; prereq Δ)
Machine shop practices.
1564. **METAL PROCESSING III. (D)** (3 cr; prereq Δ)
General metalwork, welding.
1566. **METAL PROCESSING IV. (D)** (3 cr; prereq Δ)
General metalwork, sheet metal fabrication.
1568. **METAL PROCESSING V. (D)** (3 cr; prereq Δ)
Advanced metalwork.
3330. **FUNDAMENTALS OF VOCATIONAL EDUCATION. (3 cr)**
Development and characteristics of vocational training; conservation of human and material resources; social and economic significance; current theories and practices; organization and control; types of programs, support; selection, training, and certification of teachers.
3340. **ANALYSIS AND COURSE ORGANIZATION. (3 cr)**
Need for and types of instructional analysis; objectives; course organization in selected fields.
3344. **EQUIPMENT AND MANAGEMENT. (3 cr; prereq 1300 or 3340 or #)**
Planning, evaluation, and management of industrial education shop and laboratory facilities.
3360. **TEACHING INDUSTRIAL ARTS. (3 cr; prereq SeEd 3150 or ¶SeEd 3150)**
Laboratory in study and practice.
3600. **DRAFTING-TECHNICAL SPECIALTY I (B).** (3 cr; prereq Δ)
3602. **DRAFTING-TECHNICAL SPECIALTY II (B).** (3 cr; prereq Δ)
3610. **WOODS-TECHNICAL SPECIALTY I (A).** (3 cr; prereq Δ)
3612. **WOODS-TECHNICAL SPECIALTY II (A).** (3 cr; prereq Δ)
3620. **ELECTRONICS-TECHNICAL SPECIALTY I (C).** (3 cr; prereq Δ)
3622. **ELECTRONICS-TECHNICAL SPECIALTY II (C).** (3 cr; prereq Δ)
3630. **POWER MECHANICS-TECHNICAL SPECIALTY I (A).** (3 cr; prereq Δ)
3632. **POWER MECHANICS-TECHNICAL SPECIALTY II (A).** (3 cr; prereq Δ)
3640. **GRAPHIC ARTS-TECHNICAL SPECIALTY I (B).** (3 cr; prereq Δ)
3642. **GRAPHIC ARTS-TECHNICAL SPECIALTY II (B).** (3 cr; prereq Δ)
3660. **METALS-TECHNICAL SPECIALTY I (D).** (3 cr; prereq Δ)
3662. **METALS-TECHNICAL SPECIALTY II (D).** (3 cr; prereq Δ)

Description of Courses

- 3700-3702-3704-3706. STUDENT TEACHING.** (For 3700, 3702, 3704: 3 cr each, 9 cr required; prereq 1300 and 3360 or 1300 and 5360 and Δ ; S-N only...for 3706: elective course; 3 cr; prereq Δ ; S-N only)
- 3701-3703-3705-3707. STUDENT TEACHING SEMINAR.** (1-3 cr; prereq ¶3700, ¶3702, ¶3704, ¶3706; S-N only)
- 3750. INDUSTRIAL PRACTICES AND PROCESSES.** (3 cr; prereq 3330)
An industrial series of field trips to representative industrial plants preceded by classroom study and investigation.
- 3900-3901-3902. INDEPENDENT STUDY.** (3 cr per qtr; prereq jr or #)
Self-directed study, preceded by classroom instruction in basic research procedures.
- 5100. COMMUNICATIONS OCCUPATIONAL EXPERIENCE.** (1-5 cr [max 15 cr]; prereq #)
Structured/supervised employment in the communications industry. Credits allowed will be derived from the ratio of 100 clock hours of supervised work experience to each credit awarded the student. Total credit earned in 5100, 5101, 5102, and 5103 may not exceed 15.
- 5101. PRODUCTION/MANUFACTURING OCCUPATIONAL EXPERIENCE.** (1-5 cr [max 15 cr]; prereq #)
Structured/supervised employment in the production/manufacturing industry. Credits allowed will be derived from the ratio of 100 clock hours of supervised work experience to each credit awarded the student. Total credit earned in 5100, 5101, 5102, and 5103 may not exceed 15.
- 5102. POWER/ENERGY OCCUPATIONAL EXPERIENCE.** (1-5 cr [max 15 cr]; prereq #)
Structured/supervised employment in the power/energy industry. Credits allowed will be derived from the ratio of 100 clock hours of supervised work experience to each credit awarded the student. Total credit earned in 5100, 5101, 5102, 5103 may not exceed 15.
- 5103. CONSTRUCTION OCCUPATIONAL EXPERIENCE.** (1-5 cr [max 15 cr]; prereq #)
Structured/supervised employment in the construction industry. Credits allowed will be derived from the ratio of 100 clock hours of supervised work experience to each credit awarded the student. Total credit earned in 5100, 5101, 5102, and 5103 may not exceed 15.
- 5300. VOCATIONAL EDUCATION SURVEYS.** (3 cr; prereq 5314 or 5325 or equiv)
Practices and techniques in the study of communities or areas for the establishment or improvement of vocational courses and facilities.
- 5301. TESTS IN INDUSTRIAL SUBJECTS.** (3 cr; prereq SeEd 3155)
Application of principles of evaluation to shop and drawing subjects.
- 5302. THE GENERAL SHOP.** (3 cr)
Lectures only; purpose of general shop organization; types of shops, equipment, instructional materials and procedures, pupil personnel plans.
- 5303. INSTRUCTIONAL AIDS.** (3 cr; prereq 3360 or 5360 or equiv)
Planning, construction, use.
- 5305. CRITICAL ISSUES IN INDUSTRIAL EDUCATION.** (3 cr)
Identification, analysis, and discussion of major current problems in the field.
- 5306. INDUSTRIAL EDUCATION WORKSHOP.** (1-6 cr; prereq tchg exper and #)
Areas of concentration vary with each offering.
- 5309. CONFERENCE LEADING FOR INDUSTRY.** (3 cr; prereq #)
Purposes, advantages, and limitations of method; techniques of procedure; experience in planning, leading, and evaluating conferences and in writing summaries.
- 5310. COORDINATION.** (3 cr; prereq 3330 or 5325 or #)
Duties and responsibilities of coordinators in trade schools, part-time programs, and comprehensive high schools.
- 5312. SUPERVISION OF INDUSTRIAL EDUCATION.** (3 cr; prereq 3330 or 5314)
Principles of creative supervision; duties, organization for supervision.
- 5314. ADMINISTRATION OF INDUSTRIAL EDUCATION.** (3 cr; prereq 3330 or #)
General and vocational phases; objectives, programs, and practices; laws, rulings, and standards for aid; significant literature.
- 5320. VOCATIONAL GUIDANCE.** (3 cr; prereq SeEd 3155)
History of educational and vocational guidance movement; typical public school means and methods; types and uses of occupational information; duties of the counselor; organization and relationships.

Vocational and Technical Education

- 5325. PHILOSOPHY AND PRACTICE OF INDUSTRIAL EDUCATION.** (3 cr, §3330)
History, objectives, development, and current practices of the field.
- 5330. INDUSTRIAL COURSE CONSTRUCTION.** (3 cr, §3340)
Principles and techniques; experience in planning, organizing, and building a teaching guide.
- 5360. INDUSTRIAL INSTRUCTION.** (3 cr; prereq 3340, SeEd 3155 and #)
Concepts and techniques of instruction in the industrial arts, trade and industrial schools and classes, and training-within-industry programs.
- 5400. INSTRUCTIONAL MATERIALS LABORATORY FOR NONMAJORS.** (3 cr; prereq tchg exper or #)
For students needing manipulative skills and craftwork activities in their teaching: individual and group projects.
- 5401. WORKSHOP: OCCUPATIONAL EDUCATION PROGRAMS FOR HANDICAPPED.** (1-6 cr; prereq #)
An examination of exemplary programs in occupational education; workshop sessions involving directors of model programs and other personnel.
- 5600. INSTRUCTIONAL MATERIALS LABORATORY.** (3-6-9 cr; prereq major, tchg exper or #)
Laboratory and shop experiences with new materials, processes and equipment; development of complementary instructional materials.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8300. LITERATURE OF INDUSTRIAL EDUCATION**
- 8310. RESEARCH**
- 8700. SEMINAR: INDUSTRIAL EDUCATION**
- 8900-8901-8902. RESEARCH PROBLEMS**

Vocational Education (VoEd)

- 5200. EVALUATION OF LOCAL VOCATIONAL EDUCATION PROGRAMS.** (3 cr)
Procedures and experiences in the use of instruments for conducting program evaluations for teachers, administrators, and state department personnel.
- 5300. PHILOSOPHY AND PRACTICE OF VOCATIONAL EDUCATION.** (3 cr)
Interpretation of the purposes of vocational education in varying socioeconomic contexts; analysis of vocational fields in regard to recipients, practices, legislation, and funding.
- 5400. EDUCATION FOR WORK.** (3 cr; prereq 5300 or #)
Examination of contextual bases underlying education for work; implications for practice.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8100. VOCATIONAL EDUCATION TUTORIAL**

V. FACULTY LISTING

CHILD PSYCHOLOGY

190 Child Development Building

William R. Charlesworth
W. Andrew Collins
John H. Flavell
Willard W. Hartup
Daniel P. Keating
Sally J. Kilmer
Michael P. Maratsos
John C. Masters
Shirley G. Moore
Anne D. Pick
Herbert L. Pick, Jr.
Philip H. Salapatek
Sandra Scarr-Salapatek
L. Alan Sroufe
June L. Tapp
Mildred C. Templin
Robert H. Wozniak
Albert Yonas

CURRICULUM AND INSTRUCTION

130 Peik Hall

Adult Education

206 Burton Hall

Harlan G. Copeland

Art Education

135 Wulling Hall

Mary M. Baker
Mary K. Hiniker
Mary A. Honetschlager
George K. Olson
Thomas C. Slettehaugh
Anna Smits

Elementary Education

250 Burton Hall

Mark W. Aulls
Naomi C. Chase
John J. Cogan
Robert Dykstra
Arthur K. Ellis
Ronald F. Green
Harlan S. Hansen
Kenneth R. Howey
Alan H. Humphreys
Robert L. Jackson
Roger T. Johnson
Ronald T. Lambert
John C. Manning
Marlene Mitchell
R. Norine Odland
P. David Pearson
Thomas R. Post
Robert E. Schreiner
James E. Stochl

Higher Education

211 Burton Hall

Mary E. Corcoran
Robert J. Keller

Theodore C. Kellogg

Norman C. Moen

Howard Y. Williams

Music Education

104 Scott Hall

Robert L. Borg
Reginald T. Buckner
Arnold F. Caswell
Mary T. Coleman
Judith A. Jellison
Stephen W. Schultz
Edgar M. Turrentine

Secondary Academic Fields

130 Peik Hall

Audio-Visual Education

Richard W. Davis
Michael L. Koffman
Neville P. Pearson
Robert D. Tennyson

Economic Education

William E. Becker
Darrell R. Lewis

English/Speech Education

Richard W. Beach
Gerald J. Brunetti
Michael F. Graves
Gene L. Piché
Betty Robinett

Foreign Languages

Helen L. Jorstad
Dale L. Lange

General Curriculum

Andrew Ahlgren
Colleen C. Amundson
Eugene M. Anderson
Richard D. Kimpston
Allen R. Sullivan
Howard Y. Williams

Mathematics Education

Peggy N. House
Robert L. Jackson
David C. Johnson
Thomas R. Post
James E. Stochl

Science Education

Clarence H. Boeck
Eugene D. Gennaro

Social Studies Education

William E. Gardner
Allen D. Glenn
James A. Mackey
Edith West

Teacher Education

206 Burton Hall

Charles R. Bruning
Gordon M. A. Mork
Reynold A. Willie
Arnold S. Woestehoff

EDUCATIONAL ADMINISTRATION

218 Health Services Building
St. Paul Campus

Gary F. Alkire
William M. Ammentorp
Vernon L. Hendrix
Clifford P. Hooker
Thomas L. Jackson
Robert J. Keller
James K. Kent
Ronald T. Lambert
Cerald G. Mansergh
Tim L. Mazzoni, Jr.
Don A. Morgan
Jon R. Morris
Van D. Mueller
Neal C. Nickerson, Jr.
Samuel H. Popper
Charles H. Sederberg
Wilbur L. Wakefield
Richard F. Weatherman
W. Keith Wharton

PHYSICAL EDUCATION, RECREATION, AND SCHOOL HEALTH EDUCATION

111 Cooke Hall

Physical Education

224 Cooke Hall

John F. Alexander
Mary Ann Bayless
Ronald E. Bole
Lester H. Bolstad
Nancy E. Cato
Marjorie K. Cowmeadow
Eva Lou Dillin
Belmar S. Gunderson
Helen P. Hauptfuehrer
Eloise M. Jaeger
Nadine M. Jette
Lynne Y. Johnson
John A. Kundla
Mary B. Lampe
James D. LaPoint
G. Robert Mowerson
Robert G. Osterhoudt
Jeralyn J. Plack
Robert C. Serfass
Jacqueline M. Shick
Lela June Stoner
Mary L. Young

Recreation and Park Administration

Cooke Hall

Charles A. Boudreau
Frederick M. Chapman
Glenn W. Cheatham
Leo H. McAvoy
John H. Schultz
Caroline R. Weiss

School Health Education

101 Norris Gymnasium

Richard A. Borstad
Norman A. Craig
Gary R. Sande
Helen M. Slocum

PSYCHOEDUCATIONAL STUDIES

249 Burton Hall

Counseling and Student Personnel Psychology

139 Burton Hall

Alan R. Anderson
Donald A. Biggs
Donald H. Blocher
Henry Borow
Alan S. Briskin
William H. Edson
V. Lois Erickson
Lois J. Fiedler
Charles J. Glotzbach
Theda Hagenah
Lorraine S. Hansen
Thomas J. Hummel
G. Gordon Kingsley
Dorothy R. Loeffler
Clyde A. Parker
Paul B. Pedersen
Alton L. Raygor
Warren F. Shaffer
Martin L. Snoke
Norman A. Sprinthall
W. Wesley Tennyson
Donald R. Zander

School Psychology

N548 Elliott Hall

Byron R. Egeland
Marian D. Hall
Morris I. Shrago
Richard A. Weinberg

Special Education

101 Pattee Hall

Bruce E. Balow
Robert H. Bruininks
Stanley L. Deno
Dewey G. Force, Jr.
Robert W. McCauley
Donald F. Moores
Virginia L. Reinehr
Maynard C. Reynolds
Rosalyn A. Rubin
John E. Rynders
Allen R. Sullivan
Mildred C. Templin
James E. Turnure
Richard F. Weatherman
Frank B. Wilderson
Frank H. Wood

SOCIAL, PSYCHOLOGICAL, AND PHILOSOPHIC FOUNDATIONS OF EDUCATION

206 Burton Hall

Psychological Foundations

330 Burton Hall

Douglas H. Anderson
William M. Bart
Russell W. Burris
Raymond O. Collier, Jr.
Mary E. Corcoran
Mark L. Davison
David L. Giese
David W. Johnson
Paul E. Johnson
E. Gary Joselyn
Theodore E. Kellogg
Donald G. MacEachern
Jack C. Merwin
Chester W. Oden
Clyde A. Parker
James R. Rest
John E. Rhetts
S. Jay Samuels
John E. Stecklein
Richard J. Stiggins
James S. Terwilliger
Wayne W. Welch
Victor L. Willson
Martin R. Wong

Social and Philosophic Foundations of Education

203 Burton Hall

Ayers L. Bagley
Robert H. Beck
Shirley M. Clark
Marion L. Dobbert
Arthur M. Harkins
John C. Weidman

VOCATIONAL-TECHNICAL EDUCATION

125 Peik Hall

Agricultural Education

130 Classroom Office Building

St. Paul Campus

W. Forrest Bear

George H. Copa
Gary W. Leske
R. Paul Marvin
Curtis D. Norenberg
Edgar A. Persons
Milo J. Peterson
Roland L. Peterson
Gordon I. Swanson

Business Education

254 Peik Hall

Charles R. Hopkins
Judith J. Lambrecht
Gary N. McLean

Distributive Education

249 Peik Hall

Richard D. Ashmun
Mary K. Klaurens
Warren G. Meyer

Home Economics Education

109 McNeal Hall

St. Paul Campus

Marjorie M. Brown
Betty A. Burklund
Roxana R. Ford
Helen T. Henrie
Sue C. Reitan
Ardell Wantoch
Emma B. Whiteford

Industrial Education

125 Peik Hall

David C. Bjorkquist
William A. Kavanaugh
Steven J. Miletich
Jerome Moss, Jr.
Howard F. Nelson
David J. Pucei
Robert R. Randleman
Brandon B. Smith

WHERE TO OBTAIN INFORMATION

The following is a list of departments, program areas, and offices where information can be obtained about courses, programs, requirements for degrees and teaching certification, and special resources.

General Information and Admission	Education Career Development Office 1425 University Avenue S. E.	373-2234
Adult Education	Harlan G. Copeland 206 Burton Hall	376-3501
Agricultural Education	Roland L. Peterson 130 Classroom Office Building St. Paul Campus	373-1021
Art Education	George K. Olson 135 Wulling Hall	373-4050
Bureau of Field Studies and Surveys	Charles H. Sederberg 300 Health Service Building St. Paul Campus	373-2251
Business Education	Charles R. Hopkins 254 Peik Hall	373-3306
Center for Early Education and Development	Shirley G. Moore 180 Child Development	373-9854
Child Psychology	John C. Masters 104 Child Development	373-9867
Coaching Certification Men	James LaPoint 221A Cooke Hall	373-4221
Women	Marjorie Cowmeadow 165 Norris Gymnasium	376-3212
Communication Disorders	Clark D. Starr 110 Shevlin Hall	373-4116
Counseling and Student Personnel Psychology	Norman A. Sprinthall	373-5217
Curriculum and Instruction	Robert Dykstra 130 Peik Hall	
Dean's Office	104 Burton Hall	373-9880
Distributive Education	Richard D. Ashmun 270 Peik Hall	373-9724
Drug Education	Helen M. Slocum 101 Norris Gymnasium	373-3403
Economic Education	William E. Becker 1169 Business Administration Building West Bank	373-4469
Educational Administration	Van D. Mueller 218 Health Service Building St. Paul Campus	373-5836
Educational Research and Development Council	225 Health Service Building St. Paul Campus	373-4860
Education Student Board	1425 University Avenue S.E.	373-5155
Elementary Education	250 Burton Hall	373-3974
English Education (Speech- Communication, Theatre Arts)	Gene L. Piché 350 Peik Hall	373-5198
Field Experiences (Student Teaching)	Eugene M. Anderson 1425 University Avenue S.E.	373-2246
Financial Assistance	Student Financial Aid 107 Armory	373-4021

Foreign Languages	Dale L. Lange 224 Peik Hall	373-7992
General Curriculum	Richard D. Kimpston 226 Burton Hall	373-5157
Graduation Requirements (Balance Sheet Clerk)	Window 2 Morrill Hall	373-7758
Higher Education	Robert J. Keller 211 Burton Hall	376-7558
Home Economics Education	Roxana R. Ford 107 McNeal Hall St. Paul Campus	373-1530
Human Relations	Chester W. Oden 206 Burton Hall	376-5027
Industrial Education	Erwin Geigle 125 Peik Hall	373-7220
Instructional Systems Resource Center	Robert D. Tennyson 117 Burton Hall	373-5158
Library Science	Lowell Olson 3 Walter Library	373-5256
Mathematics Education	James E. Stochl 1407 University Avenue S.E.	373-4140
Methodological Foundations of Education	John Stecklein	376-3207
Minnesota Research Coordination Unit for Vocational Education	Brandon B. Smith 145 Peik Hall	373-3843
Music Education	Adrian Lauritzen 104 Scott Hall	373-3452
Nursery-Kindergarten Program	Shirley G. Moore 180 Child Development Building	373-9854
Physical Education	Mary L. Young 223 Cooke Hall	373-3215
Placement	Arnold S. Woestehoff 1425 University Avenue S.E.	373-2266
Planning and Development Office	Theodore E. Kellogg 103 Burton Hall	
Psycho-Educational Center	Maynard Reynolds 249 Burton Hall	373-3483
Psychoeducational Studies	Maynard Reynolds 249 Burton Hall	373-3483
Psychological Foundations of Education	David W. Johnson	373-5829
Readmission Procedures	Education Career Development Office 1425 University Avenue S.E.	373-2257
Recreation and Park Administration	Glenn Cheatham 209 Cooke Hall	373-4232
Registration Information	Education Career Development Office 1425 University Avenue S.E.	373-2234
Remedial Reading and Reading Supervisor Certification	Robert L. Schreiner 214 Burton Hall	373-5834
Research, Development, and Demonstration Center, Special Education Programs		373-4955

School and Community Health Education	Helen M. Slocum 101 Norris Gymnasium	373-3403
School Psychology	Marian D. Hall N550 Elliott Hall	373-3286
Science Education	Clarence H. Boeck 370 Peik Hall	373-9764
Secondary Education (see academic fields)		
Social and Philosophic Foundations of Education	Arthur M. Harkins 203 Burton Hall	373-3178
Social, Psychological, and Philosophic Foundations of Education	Clyde A. Parker 206 Burton Hall	373-0210
Social Studies Education	James Mackey 152 Peik Hall	373-9721
Southeast Alternatives Experimental School Project (SEA) (see Teacher Center)		
Special Education	Dewey C. Force 101 Pattee Hall	373-5020
Student Progress Committee	Education Center Development Office 1425 University Avenue S.E.	373-2257
Teacher Center (MPS/UM)	Frederick V. Hayen 155 Peik Hall	376-4580
Teacher Education	Gordon M. A. Mork	376-7553
Vocational Education	Gordon I. Swanson 130 Classroom Office Building St. Paul Campus	373-5183

All students and prospective students should refer also to the *General Information Bulletin*. Some may wish to refer to bulletins of other divisions of the University: Liberal Arts, Biological Sciences, Business Administration, General College, Institute of Technology, Agriculture, Home Economics. Bulletins for any of these areas may be obtained at the Morrill Hall information booth or by writing to the Office of Admissions and Records, University of Minnesota, Minneapolis, Minnesota 55455.

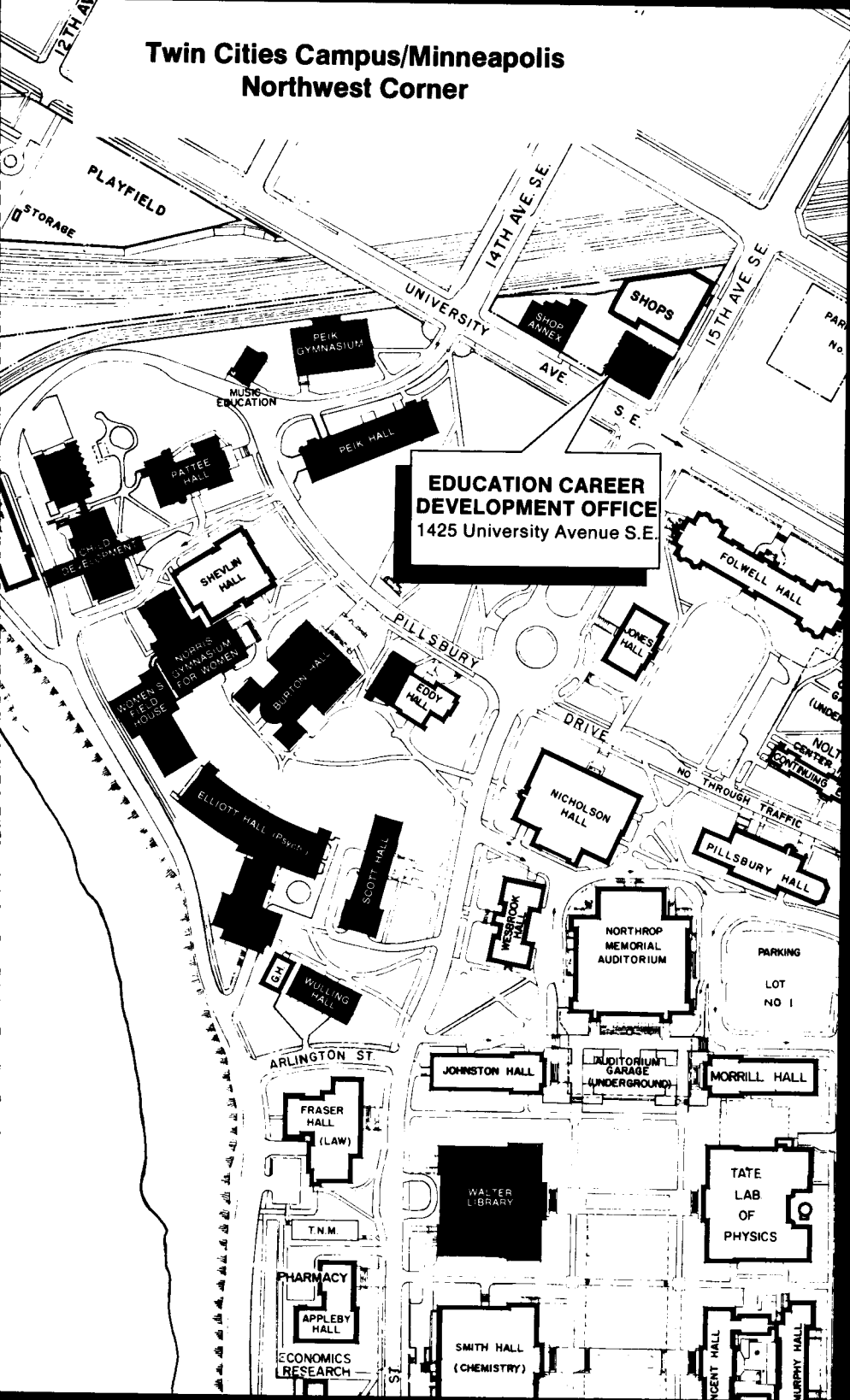
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Twin Cities Campus/Minneapolis Northwest Corner



**EDUCATION CAREER
DEVELOPMENT OFFICE**
1425 University Avenue S.E.

PLAYFIELD

STORAGE

UNIVERSITY

14TH AVE. S.E.

15TH AVE. S.E.

SHOP ANNEA

SHOPS

MUSIC EDUCATION

PEIK GYMNASIUM

PEIK HALL

PATTEE HALL

CHILD DEVELOPMENT

SHEVLIN HALL

WOMEN'S FIELD HOUSE

WOMEN'S GYMNASIUM FOR WOMEN

BURTON HALL

EDDY HALL

PILLSBURY

DRIVE

JOES HALL

FOLWELL HALL

ELLIOTT HALL (PSYCH)

SCOTT HALL

NICHOLSON HALL

PILLSBURY HALL

PARKING LOT NO. 1

WILLING HALL

ARLINGTON ST.

JOHNSTON HALL

AUDITORIUM GARAGE (UNDERGROUND)

MORRILL HALL

FRASER HALL (LAW)

WALTER LIBRARY

TATE LAB OF PHYSICS

T.N.M.

PHARMACY

APPLEBY HALL

ECONOMICS RESEARCH

SMITH HALL (CHEMISTRY)

INGENT HALL

MURPHY HALL



**UNIVERSITY
OF MINNESOTA
BULLETIN 1974-75**

**College of Education
Continuing Education Classes**
Late Afternoon, Saturday Morning, and Extension



Board of Regents

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College of Education Administration

Jack C. Merwin, Dean.....	104 Burton	373-9880
William E. Gardner, Associate Dean.....	104 Burton	373-9880
Darrell R. Lewis, Associate Dean.....	104 Burton	373-9880
Frank B. Wilderson, Assistant Dean.....	104 Burton	373-9880
William H. Edson, Director of Education	1425 University	
Career Development Office.....	Avenue S. E.	373-2257
Theodore E. Kellogg, Director of		
Education Planning Office.....	103 Burton	373-5841

College of Education
Continuing Education Classes

Late Afternoon, Saturday Morning, and Extension

UNIVERSITY OF MINNESOTA

College of Education

Continuing Education Classes

GENERAL INFORMATION

The College of Education offers a wide variety of classes to teachers at times convenient to them. Some courses are part of the day school schedule and are offered in late afternoon or on Saturday morning; others are offered through Continuing Education and Extension. Because registration procedures differ, teachers are cautioned to read the bulletin carefully.

Late Afternoon and Saturday Morning Classes

Admission—Teachers who plan to register for late afternoon and Saturday morning classes must be admitted to the College of Education or to the Graduate School. A teacher planning a program of study leading to a degree should file an application for admission and include with the application transcripts of all previous academic work.

Those wishing to pursue work leading to the master of education degree apply for admission to the College of Education through the Office of Admissions and Records. Graduates of the College of Education apply at the Education Window, Morrill Hall; all others apply at 6 Morrill Hall.

Teachers who wish to pursue work leading to the master of arts, specialist in education, doctor of education, or doctor of philosophy degree apply for admission to the Graduate School in the Graduate School Office, 310 Johnston Hall. See the *Graduate School Bulletin* for a description of these programs.

A teacher who wishes to take courses but who has not been formally admitted to a degree program in the College of Education or the Graduate School may be admitted as an adult special student in the College of Education. Graduates of the College of Education need not apply for admission as an adult special student; they need only secure a permit to register at the Education Window in Morrill Hall. All others should secure the adult special application form in the Office of Admissions and Records, Morrill Hall, and return the application to that office as early as possible before registration. Only those credits earned in the first quarter of adult special registration may be transferred to a Graduate School record. Those who have been admitted as adult special students and wish to proceed in a degree program should apply for admission to the specific program early in the first quarter of registration as an adult special student. Courses numbered 8000 or above are reserved for students who have been admitted to the Graduate School; adult special students are *not* permitted to register for these courses.

Tuition and Fees—Applicants for admission are required to pay the following fees for examination of credentials: \$10 for undergraduate, M.Ed., adult special students; \$15 for Graduate School students.

The fee for part-time registration in the College of Education is \$17.25 per credit for residents of the state and \$47 per credit for nonresidents. If 6 or more credits are taken, a student services fee of \$49 is required.

The fee for registration in the Graduate School for 6 credits (or two courses) or less is \$124 for residents and \$315 for nonresidents. The fee for thesis-only registration is \$135 for residents and \$347 for nonresidents. Graduate students taking more than 6 credits (or more than two courses) pay \$247 in resident fees and \$630 in nonresident fees. The student services fee of \$49 is required of all students taking 6 credits or more in the Graduate School but is not required of full-time elementary and secondary teachers-in-service taking fewer than 6 credits. Other fees include a \$3 record service fee required of all new students. Auditors pay the same fee as students registered for credit.

Telephone requests for information about the College of Education should be made to the Education Career Development Office (612) 373-2234; telephone requests for information about the Graduate School should be made to (612) 373-2973.

Registration—Teachers-in-service are expected to register during the advance registration period (under alphabetical control) or during the week before classes begin. Early registration is advised for classes which are limited in size.

Teachers who find it impossible to come in during the regular registration period may register from Monday through Friday of the first week of the quarter, but unless the procedure is started by early afternoon, it is unlikely that it can be completed in time to attend a late afternoon class on the same day. Closing hour for the final step of registration at the Office of Admissions and Records is 4 p.m., Monday through Friday afternoon of that week.

For students admitted to the Graduate School, the location of registration materials depends on the major. For information, these students should check in 316 Johnston Hall or call 373-4584. College of Education students, including those registering as adult special students, should secure registration materials as follows: (a) those registered in the preceding regular quarter (excluding summer terms) should report to the Education Career Development Office, 1425 University Avenue S.E.; (b) those not so registered (but previously admitted to the college) should report to the Office of Admissions and Records, Window 2, Morrill Hall.

Continuing Education and Extension

Admission—Many courses are offered to teachers by the College of Education through Continuing Education and Extension. A teacher need not apply for admission to the College of Education or Graduate School to register for courses through Continuing Education and Extension unless the courses are to be used in a program of study leading to a degree. Entry to classes is limited only by the prerequisites listed. Courses numbered 5000 or above may be taken for graduate credit; courses numbered 8000 or above are open only to persons who have been admitted to a program in the Graduate School.

Upon the recommendation of the adviser, the Graduate School will accept on a degree program a maximum of 12 credits earned through Continuing Education and Extension. The student may select the 12 credits he wishes to transfer.

Students in master of education programs in the College of Education should consult their advisers to determine the number of credits earned in Continuing Education and Extension which may be transferred to their programs.

Tuition and Fees—The following tuition schedule is in effect for courses offered through Continuing Education and Extension:

1xxx- and 3xxx-level courses	\$14 per credit
5xxx-level courses	\$15 per credit
8xxx-level courses	\$16 per credit

Special fees may be charged for use of a laboratory, extra materials, or audio-visual equipment.

A student who concurrently registers for a late afternoon or Saturday morning class and a Continuing Education and Extension class must register on separate forms and pay both day and extension tuition and fees.

For complete information on registration and fees, see the *Extension Classes Bulletin* or contact Extension Classes (612) 373-3195.

Registration—Teachers may register for courses offered through Continuing Education and Extension in 101 Wesbrook Hall, at the MacPhail Center in downtown Minneapolis, or by mail. In-person fall registration will begin September 5 and conclude on September 13. Registration hours are from 12 noon to 8 p.m. For complete information about registration procedures, including mail registration, consult the 1974-75 *Extension Classes Bulletin*. A copy of the bulletin may be obtained by calling (612) 373-3195.

TEACHER PLACEMENT SERVICE

The College of Education provides placement service for its qualified students and graduates for a nominal fee, helping them to secure the kinds of positions they desire. The fee entitles the student to placement service for a 1-year period ending October 1. All graduating seniors and candidates for the master of education degree are required to register with the Education Career Development Office, or to secure an official exemption from that office.

EQUAL OPPORTUNITY

The Board of Regents has committed itself and the University of Minnesota to the policy that there shall be no discrimination in the treatment of persons because of race, creed, color, sex, or national origin. This is a guiding policy in the admission of students in all colleges and in their academic pursuits. It is also to be a governing principle in University-owned and University-approved housing, in food services, student unions, extracurricular activities, and all other student and staff services. This policy must also be adhered to in the employment of students either by the University or by outsiders through the University and in the employment of faculty and civil service staff.

SUMMARY OF CLASS SCHEDULES

At the back of this bulletin is a summary of class schedules by quarters, days, and hours of offerings.

SYMBOLS

The following symbols are used throughout the course descriptions in lieu of page footnotes:

§ Credit will not be granted if the equivalent course listed after the section mark has been taken for credit.

¶ Means "concurrent registration."

Means "consent of instructor is required."

△ Means "consent of division, department, or school offering course is required."

Please check the quarterly *Class Schedule* for building abbreviations. A *Class Schedule* will be given to each student with his registration material.

HOURS AND DAYS

Class hours identified by roman numerals begin at the times shown below:

I	II	III	IV	V	VI	VII	VIII	IX	X
8:15	9:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:15

A class listed IX-X TTh meets the ninth through the tenth hours Tuesday and Thursday, the hyphen always indicating "through." The days of the week are abbreviated M, T, W, Th, F, S.

PROGRAM OF COURSES

See page 6 for explanation of symbols.

ADULT SPECIALS: Only those credits earned *in the first quarter* of adult special registration may be transferred to a Graduate School record. Courses numbered 8000 or above are not open to adult special students.

CHILD PSYCHOLOGY (CPsy)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5315. INTRODUCTION TO MENTAL RETARDATION. (4 cr, §SpEd 5120; prereq 3301 or equiv) IX-X MW, Arch 5, Bruininks
8336. ADVANCED SOCIAL DEVELOPMENT. (3 cr; prereq #) 3:45-5:00 TTh, CD 218, Hartup
8347. ADVANCED CHILDREN'S LEARNING. (3 cr; prereq Psy 5013 or #) 3:45-5:00 MW, ERH N119, Wozniak

WINTER QUARTER, 1975

5315. INTRODUCTION TO MENTAL RETARDATION. (4 cr, §SpEd 5120; prereq 3301 or equiv) IX-X MW, Bruininks
5319. CLINICAL PROCEDURES WITH CHILDREN. (4 cr; prereq 12 cr in educational psychology, psychology, sociology, or child psychology) 9:00-11:30 S, Gross
8333. ADVANCED PERSONALITY DEVELOPMENT. (3 cr; prereq #) 3:45-5:00 MW
8343. ADVANCED COGNITIVE DEVELOPMENT. (3 cr; prereq 12 cr in child psychology or psychology) 3:45-5:00 TTh

SPRING QUARTER, 1975

8341. ADVANCED PERCEPTUAL DEVELOPMENT. (3 cr; prereq Psy 5031, #) 3:45-5:00 MW
8345. ADVANCED LANGUAGE DEVELOPMENT. (3 cr; prereq 12 cr in child psychology or psychology, #) 3:45-5:00 TTh

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

3301. CHILD PSYCHOLOGY. (4 cr; prereq 5 cr introductory psychology; §56) Section 1—7:00-9:30 M, Sandburg JHS 204, Hess (limited to 35 students); Section 2—6:20-8:50 T, WuH 213, Roberts

5311. BEHAVIOR PROBLEMS. (4 cr; prereq 3301 or equiv; \$60) 6:20-8:50 M, WuH 230, Reed
5319. CLINICAL PROCEDURES WITH CHILDREN. (4 cr; prereq 12 cr in psychology, child psychology, educational psychology, or sociology; \$60; limited to 55 students) 6:20-8:50 T, CD 218, Gross
5331. PROCESSES OF SOCIALIZATION OF CHILDREN. (4 cr; prereq 3301 or grad; \$60) 6:20-8:50 Th, Bu 120, Collins

WINTER QUARTER, 1975

3301. CHILD PSYCHOLOGY. (4 cr; prereq 5 cr introductory psychology; \$56) Section 3—4:00-6:30 T, CD 216, Lempers; Section 4—7:00-9:30 W, Richfield HS 341, Wellman (limited to 45 students)
5303. ADOLESCENT PSYCHOLOGY. (4 cr; prereq 5 cr introductory psychology; \$60) 6:20-8:50 T, Bu 123, Morris
5311. BEHAVIOR PROBLEMS. (4 cr; prereq 3301 or equiv; \$60) 6:20-8:50 W, Bu 123, Ireton
5313. PSYCHOLOGY OF ATYPICAL CHILDREN. (4 cr; prereq 3301 or equiv; \$60) 6:20-8:50 M, CD 105, Brown
5315. INTRODUCTION TO MENTAL RETARDATION. (4 cr, §SpEd 5120; prereq 3301 or equiv; \$60) 6:20-8:50 Th, CD 105, Bruiminks

SPRING QUARTER, 1975

3301. CHILD PSYCHOLOGY. (4 cr; prereq 5 cr introductory psychology; limited to 35 students; \$56) 7:00-9:30 T, Kellogg HS 235, Waters
5303. ADOLESCENT PSYCHOLOGY. (4 cr; prereq 5 cr introductory psychology; limited to 35 students; \$60) 6:30-9:00 T, Sandburg JHS 204, Tomlinson
5311. BEHAVIOR PROBLEMS. (4 cr; prereq 3301 or equiv; \$60) 7:30-10:00 M, CD 105, Van Sieten
5331. PROCESSES OF SOCIALIZATION OF CHILDREN. (4 cr; prereq 3301 or grad; \$60; limited to 30 students) 7:00-9:30 W, Richfield HS 220, Berndt

CURRICULUM AND INSTRUCTION

Adult, Higher, and Teacher Education (Educ)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5103. ADULT EDUCATION WORKSHOP: CONTINUING EDUCATION OF THE PROFESSIONAL. (1-12 cr [max 12]; prereq practicing adult educator and #) IX-X M, NH 209, Willie
5104. SURVEY OF ADULT EDUCATION. (3 cr; prereq sr or #) IX-X T, NH 107, Copeland
5180. ANALYSIS OF THE TEACHING PROCESS. (3 cr; prereq tchg exper or #) IX-X W, NH 209A, E Anderson
5184. SUPERVISION OF CLINICAL EXPERIENCES. (3 cr; prereq #) IX-X T, FolH 108, Mork
5186. ALTERNATIVE SCHOOL DESIGNS: IMPLICATIONS FOR TEACHER EDUCATION. (3 cr) IX-X M, NH 209A, Howey
5201. ORIENTATION TO THE ADULT BASIC EDUCATION STUDENT. (3 cr; limited to 25 students) IX-X W, NH 209

5401. ADULT LEARNING AND DEVELOPMENT THROUGH THE LIFE-SPAN. (3 cr)
IX-X Th, NH 209
8250. HIGHER EDUCATION IN THE UNITED STATES. (3 cr; prereq 18 cr in education
or yr grad study in any field) I-II S, Bu 123, Keller, Kellogg
8251. CURRICULUM TRENDS IN AMERICAN COLLEGES. (3 cr; prereq 8250, 18 cr in
education or yr grad study in any field) IX-X Th, MRRC 211, Moen
8252. EFFECTIVE COLLEGE TEACHING. (3 cr; prereq 8250, yr of grad study in any
field or 18 cr in education) 7:15-9:00 T, CD 105, Williams

WINTER QUARTER, 1975

5182. LABORATORY APPROACHES IN TEACHER EDUCATION. (3 cr) IX-X W
8188. ALTERNATIVE PROGRAMS FOR TEACHER EDUCATION. (3 cr) IX-X M
8229. SEMINAR: BASIC ISSUES IN HIGHER EDUCATION. (1-4 cr; prereq #) IX-X W
8250. HIGHER EDUCATION IN THE UNITED STATES. (3 cr; prereq 18 cr in education
or yr grad study in any field) IX-X Th
8285. PROFESSIONAL EDUCATION OF TEACHERS. (3 cr; prereq 15 cr in education incl
5184, 8250 or HED 5182 or CSPP 8140 or #) III-IV S

SPRING QUARTER, 1975

5180. ANALYSIS OF THE TEACHING PROCESS. (3 cr; prereq tchg exper or #) IX-X T
5182. LABORATORY APPROACHES IN TEACHER EDUCATION. (3 cr) IX-X W
5184. SUPERVISION OF CLINICAL EXPERIENCES. (3 cr; prereq #) IX-X T, FolH 108,
Monk
5186. ALTERNATIVE SCHOOL DESIGNS: IMPLICATIONS FOR TEACHER EDUCATION.
(3 cr) IX-X M, Howey
8229. SEMINAR: BASIC ISSUES IN HIGHER EDUCATION. (1-4 cr; prereq #) IX-X W
8250. HIGHER EDUCATION IN THE UNITED STATES. (3 cr; prereq 18 cr in education
or yr grad study in any field) IX-X Th
8251. CURRICULUM TRENDS IN AMERICAN COLLEGES. (3 cr; prereq 8250, 18 cr in
education or yr grad study in any field) IX-X M
8252. EFFECTIVE COLLEGE TEACHING. (3 cr; prereq 8250, yr of grad study in any
field or 18 cr in education) IX-X W
8286. PROFESSIONAL EDUCATION OF TEACHERS. (3 cr; prereq 8285 or #) III-IV S

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305; limited to 30
students; \$90 plus \$5 special fee) This offering for 6 credits. Section 1—4:30-
9:30 M, Aero 309; Section 2—4:30-9:30 T, Aero 225; Section 3—4:30-9:30
W, McNH 103 (StP); Section 4—4:30-9:30 Th, McNH 103 (StP)

WINTER QUARTER, 1975

5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305; limited to 30
students; \$90 plus \$5 special fee) This offering for 6 credits. Section —4:30-
9:30 M, McNH 103 (StP); Section 6—4:30-9:30 T, McNH 103 (StP); Section
7—4:30-9:30 W, Aero 309; Section 8—4:30-9:30 Th, Aero 309

SPRING QUARTER, 1975

5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305; limited to 30 students; \$90 plus \$5 special fee) This offering for 6 credits. Section 9—4:30-9:30 M, Aero 309; Section 10—4:30-9:30 T, FolH 308; Section 11—4:30-9:30 W, McNH 103 (StP); Section 12—4:30-9:30 Th, McNH 103 (StP)

Art Education (ArEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5318. ART EDUCATION IN EUROPE. (3 cr) IX-X M, WuH 110, Slettehaugh
5389. APPLICATION OF AESTHETIC THEORY IN EDUCATION. (3 cr) I-II S, WuH 110, Slettehaugh
8306. SEMINAR: ART EDUCATION. (1 cr) IX-X T, MuH 130, Olson

WINTER QUARTER, 1975

5303. CURRICULUM BUILDING IN ART EDUCATION: PROGRAMS FOR EXCEPTIONAL CHILDREN. (3 cr) IX-X M
8300. RESEARCH IN ART EDUCATION. (3 cr) III-IV S, Slettehaugh
8306. SEMINAR: ART EDUCATION. (1 cr) IX-X T, WuH 130, Olson

SPRING QUARTER, 1975

5302. CURRICULUM BUILDING IN ART EDUCATION: INNOVATIONS. (4 cr) IX-X W
5316. INTERCULTURAL EDUCATION THROUGH ART. (3 cr) IX-X M
5389. APPLICATION OF AESTHETIC THEORY IN EDUCATION. (3 cr) I-II S, Slettehaugh
8306. SEMINAR: ART EDUCATION. (1 cr) IX-X T, Olson

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

3001. SURVEY OF ART ACTIVITIES. (4 cr; \$56; not open to art education majors) 6:20-8:50 Th, WuH 240, Olson
3009. WEAVING WITHOUT A LOOM. (4 cr; \$56; limited to 30 students) 6:20-8:50 Th, WuH 340, Smits
3020. CONTEMPORARY CRAFTS. (3 cr; \$42 plus \$5 course fee; limited to 25 students) 6:20-8:50 T, WuH 210, Kremer
5001. ART MEDIA TECHNIQUES. (1-12 cr [max 12]; \$15 per cr plus \$2 course fee; limited to 30 students) This offering for 1 credit will focus on bookbinding—hard cover and Japanese types. Special Term—October 26, 10:00 am-12:30 pm, 1:30-3:30 pm; November 2, 10:00 am-12:30 pm, 1:00-3:00 pm, WuH 120, Olson

WINTER QUARTER, 1975

3009. WEAVING WITHOUT A LOOM. (4 cr; \$56; limited to 30 students) 6:20-8:50 Th, WuH 340, Smits

3030. PUPPETRY. (3 cr; \$42; limited to 30 students) 6:20-8:50 Th, WuH 220, Olson

SPRING QUARTER, 1975

3001. SURVEY OF ART ACTIVITIES. (4 cr; \$56) 6:20-8:50 Th, WuH 240, Olson

3009. WEAVING WITHOUT A LOOM. (4 cr; \$56; limited to 30 students) 6:20-8:50 T, WuH 340, Smits

5001. ART MEDIA TECHNIQUES. (1-12 cr [max 12]; \$15 per cr plus \$2 course fee; limited to 30 students) This offering for 1 credit will focus on textile design with emphasis on batik and tie-dyeing. Special Term—April 5, 10:00 am-12:30 pm, 1:00-3:30 pm; April 12, 10:00 am-12:30 pm, 1:00-3:30 pm

Elementary Education (Elem)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5100. ELEMENTARY SCHOOL CURRICULUM. (3 cr; prereq 3101) Section 1—IX-X Th, FolH 105, Mitchell

5107. DIAGNOSIS AND TREATMENT OF LEARNING DIFFICULTIES. (3 cr) IV-V S, Bu 123, Aualls

5316. TEACHING AND SUPERVISION OF ENGLISH IN THE ELEMENTARY SCHOOLS. (3 cr; prereq 3316 or elem tchg exper) IX-X M, CD 218, Chase

5331. TEACHING AND SUPERVISION OF READING IN THE ELEMENTARY SCHOOL. (3 cr; prereq 9 cr in education) IX-X Th, Bu 120, Pearson

5333. INSTRUCTIONAL LEADERSHIP IN ELEMENTARY READING. (3 cr; prereq 5331 or #) IX-X T, Pt 111, Manning

5334. READING DIFFICULTIES. (3 cr; prereq 5331 or SeEd 5344) IX-X M, Bu 120, Pearson

5337. BEGINNING READING INSTRUCTION. (3 cr; prereq 3331 and #) IX-X M, Pt 215, Manning

5350. ELEMENTARY SCHOOL SCIENCE: MATERIALS AND RESOURCES. (3 cr; prereq 5349) IX-X T, Pt 102, Humphreys

5361. TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. (3 cr; prereq 3101 or equiv) IX-X Th, Pt 214, Cogan

5363. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL SOCIAL STUDIES. (Cr ar [max 9]; prereq elem tchg exper and #) IX-X W, Pt 214, Ellis

5376. CURRENT TRENDS IN KINDERGARTEN EDUCATION. (3 cr; prereq tchg exper in kindergarten or primary or #) IX-X T, FolH 205, Hansen

WINTER QUARTER, 1975

5100. ELEMENTARY SCHOOL CURRICULUM. (3 cr; prereq 3101) III-IV S

5108. SUPERVISION AND IMPROVEMENT OF INSTRUCTION. (3 cr; prereq 9 cr in education) IX-X T

5120. PLANNING AND EVALUATION OF EDUCATIONAL ALTERNATIVES. (3 cr) IX-X W

5300. LITERATURE FOR THE ELEMENTARY SCHOOL. (3 cr) I-II S

5317. MATERIALS LABORATORY FOR TEACHING ENGLISH IN ELEMENTARY SCHOOLS. (3 cr; prereq 3316 or elem tchg exper) IX-X Th
5319. TEACHING FOREIGN LANGUAGE IN ELEMENTARY SCHOOL. (3 cr; prereq elem education major with foreign language minor and #) III-IV S
5331. TEACHING AND SUPERVISION OF ENGLISH IN THE ELEMENTARY SCHOOL. (3 cr; prereq 9 cr in education) IX-X M
5334. READING DIFFICULTIES. (3 cr; prereq 5331 or SeEd 5344) IX-X T, Pearson
5338. TEACHING READING IN THE INTERMEDIATE GRADES. (3 cr; prereq 3331 and #) IX-X W
5349. ELEMENTARY SCHOOL SCIENCE: CURRICULUM AND SUPERVISION. (3 cr; prereq 3346 or 5346) IX-X Th
5362. MATERIALS LABORATORY FOR ELEMENTARY SCHOOL SOCIAL STUDIES TEACHERS. (3 cr; prereq 3361 or 5361 or #) IX-X M

SPRING QUARTER, 1975

5100. ELEMENTARY SCHOOL CURRICULUM. (3 cr; prereq 3101) IX-X Th
5107. DIAGNOSIS AND TREATMENT OF LEARNING DIFFICULTIES. (3 cr) IX-X T, Aulls
5108. SUPERVISION AND IMPROVEMENT OF INSTRUCTION. (3 cr; prereq 9 cr in education) IX-X Th
5300. LITERATURE FOR THE ELEMENTARY SCHOOL. (3 cr) IX-X W
5334. READING DIFFICULTIES. (3 cr; prereq 5331 or SeEd 5344) IX-X W, Pearson
5337. BEGINNING READING INSTRUCTION. (3 cr; prereq 3331 and #) IX-X Th, Manning
5350. ELEMENTARY SCHOOL SCIENCE: MATERIALS AND RESOURCES. (3 cr; prereq 5349) III-IV S
5363. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL SOCIAL STUDIES. (Cr ar [max 9]; prereq elem tchg exper and #) I-II S
5377. KINDERGARTEN: MATERIALS AND RESOURCES. (3 cr; prereq 3377 or 5376 and tchg exper) IX-X T
8300. SPECIAL COLLECTIONS OF CHILDREN'S LITERATURE. (3 cr) IX-X T
8317. RESEARCH IN SKILL DEVELOPMENT IN SPELLING, HANDWRITING, AND LISTENING. (3 cr; prereq 5316) IX-X M
8346. RESEARCH FOUNDATIONS OF ELEMENTARY SCHOOL SCIENCE TEACHING. (3 cr; prereq 5346 or #) IX-X M
8363. SEMINAR: ELEMENTARY SOCIAL STUDIES EDUCATION. (3 cr; prereq 3361 or 5361 and 8362 or #) IX-X W

EXTENSION CLASSES

(See inside back cover for registration procedures)

WINTER QUARTER, 1975

5103. WORKSHOP: CURRICULUM LABORATORY PRACTICE. (1-6 cr; prereq elem tchg exper and #; limited to 15 students) This offering for 3 credits will focus on working with materials in Kerlan-Hess special collections. 6:20-8:50 T, WaLib 109, Stein

Mathematics Education (MthE)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5101. WORKSHOP: ELEMENTARY SCHOOL MATHEMATICS. (1-12 cr [max 12]; prereq #; not open to math education majors) I-III S, Pt 111, ar
5311. TEACHING AND SUPERVISION OF MATHEMATICS IN ELEMENTARY SCHOOL. (3 cr; prereq Elem 3391 or #) IX-X W, Pt 111, Jackson
5312. TEACHING AND SUPERVISION OF MATHEMATICS IN THE SECONDARY SCHOOL. (3 cr; prereq math tchg exper or #) IX-X Th, PeikH 315, Johnson
5321. MATERIALS LABORATORY FOR ELEMENTARY SCHOOL MATHEMATICS INSTRUCTION. (3 cr; prereq 5311 or Elem 3391 or #) IX-XI M, Pt 111, Post
8590. SEMINAR: MATHEMATICS EDUCATION. (Cr ar [max 8]; prereq #) IX-X T, PeikH 315, House

WINTER QUARTER, 1975

5322. MATERIALS LABORATORY FOR SECONDARY SCHOOL MATHEMATICS INSTRUCTION. (3 cr; prereq 5312 or #) IX-XI W
5331. CURRENT DEVELOPMENTS IN ELEMENTARY SCHOOL MATHEMATICS INSTRUCTION. (3 cr; prereq 5311 or #) IX-XI M
5332. NEW CONTENT AND METHODS IN SECONDARY SCHOOL MATHEMATICS INSTRUCTION. (3 cr; prereq 5312 or #) IX-XI M
5355. MATHEMATICS FOR SLOW LEARNING CHILDREN. (3 cr; prereq 5311 or Elem 3391 or #) IX-XI W
5366. COMPUTER-ASSISTED MATHEMATICS INSTRUCTION. (3 cr; prereq 5311 or 5312 or ScEd 3365 or #; lab fee required) IX-XI M
8500. THEORY AND CLASSICAL RESEARCH IN MATHEMATICS. (4 cr; prereq 5311 or 5312 or ScEd 3365 or #) IX-XI Th
8590. SEMINAR: MATHEMATICS EDUCATION. (Cr ar [max 8]; prereq #) IX-X T, House

SPRING QUARTER, 1975

5101. WORKSHOP: ELEMENTARY SCHOOL MATHEMATICS. (1-12 cr [max 12]; prereq #; not open to math education majors) IX-XI M
5355. MATHEMATICS FOR SLOW LEARNING CHILDREN. (3 cr; prereq 5311 or Elem 3391 or #) IX-XI W
8590. SEMINAR: MATHEMATICS EDUCATION. (Cr ar [max 8]; prereq #) IX-X T, House

Music Education (MuEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5111. BIBLIOGRAPHY. (3 cr) IX-X Th, ScH 20, Turrentine
5211. PHILOSOPHIES OF MUSIC EDUCATION. (3 cr) IX-X T, ScH 3, Buckner

8281. SEMINAR: HISTORICAL, PHILOSOPHICAL, AND PSYCHOLOGICAL ISSUES. (2 cr; prereq MA in music or music education or #) IX-X T, S:H 20, Turrentine

WINTER QUARTER, 1975

5214. PSYCHOLOGICAL FOUNDATIONS. (3 cr; prereq #) IX-X M, Caswell
5514. ADVANCED WIND AND PERCUSSION TECHNIQUES. (3 cr; prereq BS in music education or #) IX-X Th, Turrentine
8282. SEMINAR: HISTORICAL, PHILOSOPHICAL, AND PSYCHOLOGICAL ISSUES. (2 cr; prereq MA in music or music education or #) IX-X T, Borg

SPRING QUARTER, 1975

5217. HISTORICAL FOUNDATIONS OF MUSIC EDUCATION. (3 cr; prereq #) IX-X Th, Turrentine
5306. TEACHING MUSIC LITERATURE. (3 cr; prereq 3011 or 3302 or #) IX-X T, Borg
5581. SELECTION OF INSTRUMENTAL MATERIAL I. (3 cr) IX-X W, Turrentine
8283. SEMINAR: HISTORICAL, PHILOSOPHICAL, AND PSYCHOLOGICAL ISSUES. (2 cr; prereq MA in music or music education or #) IX-X T, Caswell

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5750. WORKSHOP: MUSIC EDUCATION. (Orff-Schulwerk for Teachers—Beginning Level) (1-12 cr [max 12]; \$45) This offering for 3 credits will explore American folk material illustrating harmonic, melodic, and polyphonic settings in elemental style. 7:00-9:00 W, ScH 4, Caswell
5750. WORKSHOP: MUSIC EDUCATION. (Seminar on the Physics of Brass Instruments) (1-12 cr [max 12]; \$45) This offering for 3 credits will focus on the physical characteristics and processes involved in the playing of brass (lip-reed) musical instruments. 6:20-9:30 W, ScH 2, Turrentine, Roll
5750. WORKSHOP: MUSIC EDUCATION. (Orchestral Conducting Problems) (1-12 cr [max 12]; \$30) This offering for 2 credits will review basic baton techniques, score reading techniques, editing of string parts, and stylistic analysis. 4:00-6:00 W, MacPhC, Massman
5750. WORKSHOP: MUSIC EDUCATION. (Music for Early Childhood) (1-12 cr [max 12]; \$30) This offering for 2 credits is designed to meet the needs of nursery school teachers and others working in the area of early childhood education. 7:00-9:00 T, MacPhC, Cortright

WINTER QUARTER, 1975

5750. WORKSHOP: MUSIC EDUCATION. (String Repair) (1-12 cr [max 12]; \$30) This offering for 2 credits will acquaint the participant with basic string repair tools and the scientific procedures for making the basic repairs and adjustments on violins and violas. Student will be required to purchase a string repair kit (\$20). 4:00-6:00 M, MacPhC, Tartaglia
5750. WORKSHOP: MUSIC EDUCATION. (Music for Early Childhood) (1-12 cr [max 12]; \$30) This offering for 2 credits is designed to meet the needs of nursery school teachers and others working in the area of early childhood education. 7:00-9:00 T, MacPhC, Cortright

SPRING QUARTER, 1975

- 5750. WORKSHOP: MUSIC EDUCATION.** (Orff-Schulwerk for Teachers—Intermediate Level) (1-12 cr [max 12]; \$45) This offering for 3 credits will explore American folk material illustrating harmonic, melodic, and polyphonic settings in elemental style. 7:00-9:00 W, Caswell
- 5750. WORKSHOP: MUSIC EDUCATION.** (Cello Pedagogy) (1-12 cr [max 12]; \$30) This offering for 2 credits will cover varied topics including differences between violin and cello techniques, teaching of thumb position, editing fingerings, and the teaching of vibrato. 4:00-6:00 M, MacPhC, Van Valkenberg

Secondary Education (SeEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

- 5105. AUDIO-VISUAL MATERIALS IN EDUCATION.** (3 cr; prereq sr; lab fee required) Section 2—Lect I-II S, NH 211; Section 4—Lab III-IV S, WeH 206, Pearson
- 5107. RADIO AND TELEVISION IN EDUCATION.** (3 cr; prereq 9 cr in education; lab fee required) Lect IX-X M, PeikH 345, 2 hrs ar
- 5110. APPLIED INSTRUCTIONAL MEDIA EVALUATION AND SELECTION.** (3 cr; prereq 5105 or equiv) IX-X T, WeH 206, 2 hrs ar
- 5113. PRINCIPLES OF SECONDARY SCHOOL CURRICULUM.** (3 cr; prereq 3155 or equiv) IX-X M, PeikH 215, Stockton
- 5129. TRENDS AND ISSUES IN SECONDARY SCHOOL CURRICULUM.** (3 cr; prereq 5113 or equiv) IX-X T, PeikH 375, Kimpston
- 5131. INSTRUCTIONAL SIMULATIONS AND LEARNING GAMES: DEVELOPMENT AND CLASSROOM USE.** (3 cr) IX-XI M, PeikH 315, Johnson
- 5152. TECHNIQUES OF INSTRUCTION IN SOCIAL STUDIES.** (3 cr; prereq 5150) IX-X W, PeikH 165, Mackey
- 5153. NEW PERSPECTIVES IN SOCIAL STUDIES.** (Teaching about Politics) (1-3 cr [max 12]) IX-X M, PeikH 165, Glenn
- 5191. WORKSHOP: TEACHING OF FOREIGN LANGUAGES.** (1-10 cr [max 10]) IX-X T, PeikH 215, Jorstad, Lange
- 5194. CURRICULUM DEVELOPMENT IN SECONDARY ENGLISH AND SPEECH.** (3 cr; prereq 3326 or equiv) IX-X M, PeikH 225, Piché
- 5340. TEACHING SPEECH AND FORENSICS IN SECONDARY SCHOOL.** (3 cr; prereq Spch 1101 or 1102 and 1106 or #) IX-X Th, PeikH 225, Caruson
- 5344. TEACHING READING IN SECONDARY SCHOOLS.** (3 cr; prereq 9 cr in education) IX-X T, PeikH, Graves
- 5347. LINGUISTICS AND READING.** (3 cr) IX-X W, PeikH 225, Graves
- 5385. TOPICS IN THE TEACHING OF FOREIGN LANGUAGES.** (3 cr) I-II S, PeikH 215, Jorstad
- 8322. SEMINAR: SECONDARY CURRICULUM AND INSTRUCTION.** (1 cr per qtr [total 3 cr]; prereq 5113) IX-X W, PeikH 250, Kimpston
- 8387. SEMINAR: FOREIGN LANGUAGE EDUCATION.** (1-3 cr; prereq #) IX-X F, PeikH 215, Jorstad, Lange
- 8642. FIELD PRACTICUM: SUPERVISION AND CURRICULUM DEVELOPMENT.** (1-3 cr; prereq 5113, 5170 or Elem 5101) IX-X Th, Bu 226, Kimpston
- 8869. INFORMATION SOURCES IN FOREIGN LANGUAGE TEACHING AND RESEARCH.** (3 cr) III-IV S, PeikH 215, Lange

WINTER QUARTER, 1975

5106. COORDINATING AN AUDIO-VISUAL EDUCATION PROGRAM. (3 cr; prereq 5105 or 2; lab fee required) IX-X T
5107. RADIO AND TELEVISION IN EDUCATION. (3 cr; prereq 9 cr in education; lab fee required) Lect IX-X M and 2 hrs ar
5108. NONPROJECTED AUDIO-VISUAL MATERIALS AND EQUIPMENT LABORATORY. (3 cr; prereq 5105 or 5105; lab fee required) Lect IX-X W, lab ar
5111. MECHANICS OF CINEMATOGRAPHY. (3 cr) Lect IX-X Th, lab ar
5113. PRINCIPLES OF SECONDARY SCHOOL CURRICULUM. (3 cr; prereq 3155 or equiv) IX-X T, Stockton
5115. FINDING EDUCATIONAL INFORMATION. (3 cr) 7:15-9:00 T
5122. LANGUAGE CONVERSATION FOR TEACHERS. (4 cr; prereq Δ) I-II S, IX-X T
5150. ADVANCED METHODS OF TEACHING SOCIAL STUDIES. (3 cr) IX-X M
5153. NEW PERSPECTIVES IN SOCIAL STUDIES. (1-3 cr [max 12]) IX-X W or Th
5170. PROGRAMS AND PROCEDURES OF CURRICULUM DEVELOPMENT. (3 cr; prereq 5113 or Elem 5100) IX-X T
5172. SUPERVISION OF SECONDARY INSTRUCTION. (3 cr; prereq 5113) 7:00-9:00 T
5189. MATERIALS AND CURRICULUM CONSTRUCTION IN MODERN LANGUAGES. (3 cr; prereq 5385 and 2) I-II S
5321. TEACHING LITERATURE IN SECONDARY SCHOOLS. (3 cr; prereq grad, MED or tchg exper) 4:15-6:30 Th
5390. CURRENT DEVELOPMENTS IN SECONDARY SCHOOL SCIENCE TEACHING. (3 cr; prereq 3356, 3357, 3358 or 3352 or equiv or science tchg exper) III-IV S
8322. SEMINAR: SECONDARY CURRICULUM AND INSTRUCTION. (1 cr per qtr [total 3 cr]; prereq 5113) IX-X W, Kimpston
8362. RESEARCH IN SOCIAL STUDIES. (3 cr, §Elem 8362; prereq 5152, 8104) IX-X M
8387. SEMINAR: FOREIGN LANGUAGE EDUCATION. (1-3 cr; prereq 2) IX-X F, Jorstad, Lange
8642. FIELD PRACTICUM: SUPERVISION AND CURRICULUM DEVELOPMENT. (1-3 cr; prereq 5113, 5170 or Elem 5101) IX-X Th, Kimpston
8887. RESEARCH FOUNDATIONS OF SECONDARY SCHOOL SCIENCE TEACHING. (3 cr) I-II S
8892. INTRODUCTION TO RESEARCH IN ENGLISH AND SPEECH EDUCATION. (3 cr) IX-X MW

SPRING QUARTER, 1975

5105. AUDIO-VISUAL MATERIALS IN EDUCATION. (3 cr; prereq sr; lab fee required) Lect IX-X T, lab ar
5107. RADIO AND TELEVISION IN EDUCATION. (3 cr; prereq 9 cr in education; lab fee required) Lect IX-X M and 2 hrs ar
5109. PROJECTED AUDIO-VISUAL MATERIALS AND EQUIPMENT LABORATORY. (3 cr; prereq 5105 or 5105; lab fee required) Lect IX-X W, lab ar
5113. PRINCIPLES OF SECONDARY SCHOOL CURRICULUM. (3 cr; prereq 3115 or equiv) IX-X M, Stockton
5114. INTERDISCIPLINARY APPROACHES TO CURRICULUM. (3 cr) IX-X Th
5115. FINDING EDUCATIONAL INFORMATION. (3 cr) 7:15-9:00 W
5117. MULTIMEDIA PRODUCTION. (3 cr; prereq 5109 or 2) Lect IX-X Th, lab ar
5122. LANGUAGE CONVERSATION FOR TEACHERS. (4 cr; prereq Δ) I-II S, IX-X T
5153. NEW PERSPECTIVES IN THE SOCIAL STUDIES. (1-3 cr [max 12 cr]) IX-X M

5155. MATERIALS LABORATORY FOR SOCIAL STUDIES TEACHERS. (3 cr; prereq 5150, 5152) IX-X Th
5173. PREPARATION OF CURRICULUM MATERIALS. (1-12 cr) IX-X T
5324. CURRICULUM PROBLEMS AND ISSUES IN TEACHING THEATRE ARTS IN SECONDARY SCHOOLS. (3 cr; prereq Upper Division or grad) IX-X T
5326. WORKSHOP: FILM STUDIES. (3 cr; lab fee required) 4:15-6:30 Th
5344. TEACHING READING IN SECONDARY SCHOOLS. (3 cr; prereq 9 cr in education) IX-X T, Graves
5371. CURRICULUM WORKSHOP. (1-3 cr; prereq 5113 or Elem 5100 or #) Section 1—for language teachers only, III-IV S; Section 2—computers in instruction, IX-XI W
5382. TESTING AND EVALUATION IN FOREIGN LANGUAGE TEACHING AND LEARNING. (3 cr; prereq PsyF 5120) I-II S
5404. LANGUAGE, CULTURE, AND EDUCATION. (3 cr; prereq Spch 5404) IX-X MW
8104. CURRICULUM DEVELOPMENT IN THE SOCIAL STUDIES. (3 cr; prereq 5150, 5152) IX-X W
8188. SEMINAR: RESEARCH IN SECOND-LANGUAGE LEARNING AND TEACHING. (3 cr; prereq 5385, 8869, doctoral student) 6:00-8:00 T
8322. SEMINAR: SECONDARY CURRICULUM AND INSTRUCTION. (1 cr per qtr [total 3 cr]; prereq 5113) IX-X W, Kimpston
8364. SEMINAR: SOCIAL STUDIES EDUCATION. (3 cr; prereq MA or equiv) IX-X T
8387. SEMINAR: SECONDARY LANGUAGE EDUCATION. (1-3 cr; prereq #) IX-X F, PeikH 215, Jorstad, Lange
8642. FIELD PRACTICUM: SUPERVISION AND CURRICULUM DEVELOPMENT. (1-3 cr; prereq 5113, 5170 or Elem 5101) IX-X T
8870. SEMINAR: CURRICULUM, LEARNING, AND TEACHING OF FOREIGN LANGUAGES IN ELEMENTARY AND SECONDARY SCHOOLS. (3 cr; prereq 8869, PsyF 5110, MA student) 6:00-8:00 T

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5112. FAMILY LIFE EDUCATION. (3 cr; \$45) 6:20-8:50 M, Bu 123, Latts

WINTER QUARTER, 1975

5171. TEACHER SELF-APPRAISAL OBSERVATION SYSTEMS. (3 cr; \$45) 7:00-9:30 T, Media Center, Lindberg HS, Hopkins; Weidner
5396. METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE. (3 cr; prereq Ling 5001 or #; \$45) 6:20-8:50 T, Bu 123, Robinett

SPRING QUARTER, 1975

5171. TEACHER SELF-APPRAISAL OBSERVATION SYSTEMS. (3 cr; \$45) 7:00-9:30 T, Media Center, Lindberg HS, Hopkins; Weidner

EDUCATIONAL ADMINISTRATION (EdAd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5101. PUBLIC SCHOOL ADMINISTRATION. (3 cr; prereq sr. 9 cr in education; not open to majors in educational administration) III-IV S, Bu 125, Jackson
8201. FORMAL ORGANIZATIONS IN EDUCATION. (3 cr) IX-X M, ClaOff D25, Ammentorp
8202. POLITICS OF EDUCATION. (3 cr) IX-X W, ClaOff D25, Mazzoni
8210. ECONOMICS OF EDUCATION. (3 cr) IX-X Th, ClaOff B30, Mueller
8215. THE ELEMENTARY SCHOOL PRINCIPALSHIP. (3 cr; prereq 8201, 8202 or #) IX-X M, ClaOff B30, Lambert
8224. LEGAL IMPLICATIONS OF ACTS BY SCHOOL BOARDS, ADMINISTRATORS, AND TEACHERS. (3 cr) IX-X T, ClaOff B30, Hooker
8226. EDUCATIONAL FACILITIES PLANNING. (3 cr) IX-X T, ClaOff B36, Alkire
8238. SEMINAR: THEORY AND RESEARCH. (3 cr; prereq 8218, 8235, educational administration major or #) IX-X Th, ClaOff B36, Mazzoni, Morris
8242. ADMINISTRATIVE ORGANIZATION AND STAFFING OF SCHOOL SYSTEMS. (3 cr; prereq #) IX-X Th, ClaOff 27, Staff
8253. ADMINISTRATION IN HIGHER EDUCATION. (3 cr; prereq Educ 8250) IX-X T, ClaOff B42, Keller
8264. THE SECONDARY SCHOOL PRINCIPALSHIP. (3 cr) Section 1—IX-X M, ClaOff B36, Nickerson; Section 2—I-II S, ClaOff B36, Nickerson
8274. THE TWO-YEAR COLLEGE. (3 cr) IX-X W, ClaOff B30, Morgan
8278. RECENT RESEARCH IN TWO-YEAR COLLEGE ADMINISTRATION. (1-3 cr [max 3]; prereq #) III-IV S, HS 209 (StP), Hendrix, Morgan
8340. POLICY SYSTEMS IN EDUCATION. (3 cr; prereq 8220 and Δ) IX-X W, ClaOff 31, Ammentorp

WINTER QUARTER, 1975

5167. JUNIOR HIGH SCHOOL. (3 cr; prereq 9 cr in education) IX-X T, Mazzoni
8202. POLITICS OF EDUCATION. (3 cr) IX-X W
8212. SCHOOL BUDGETING. (3 cr; prereq 8220) IX-X M
8216. RECENT RESEARCH IN ELEMENTARY SCHOOL ADMINISTRATION. (3 cr; prereq 8215) IX-X T
8225. EDUCATIONAL POLICY AND THE LAW. (3 cr) IX-X W
8227. PUBLIC SCHOOL PERSONNEL PROGRAMS. (3 cr) IX-X Th
8234. SEMINAR: EDUCATIONAL FINANCE. (3 cr; prereq 8210 or #) IX-X Th
8238. SEMINAR: THEORY AND RESEARCH. (3 cr; prereq 8218, 8235, educational administration major or #) IX-X M
8265. ADMINISTERING THE HIGH SCHOOL PROGRAM. (3 cr) IX-X T
8275. TWO-YEAR COLLEGE ADMINISTRATION. (3 cr; prereq 8274 or #) IX-X W
8278. RECENT RESEARCH IN TWO-YEAR COLLEGE ADMINISTRATION. (1-3 cr [max 3]; prereq #) III-IV S, Hendrix, Morgan
8341. ANALYSIS OF EDUCATION POLICY SYSTEMS. (3 cr; prereq 8340) IX-X M

SPRING QUARTER, 1975

5101. PUBLIC SCHOOL ADMINISTRATION. (3 cr; prereq sr, 9 cr in education; not open to educational administration majors) IX-X M
5103. SUPERVISION AND ADMINISTRATION OF SPECIAL EDUCATION. (3 cr; prereq #) IX-X M
8201. FORMAL ORGANIZATIONS IN EDUCATION. (3 cr) IX-X Th
8202. POLITICS OF EDUCATION. (3 cr) III-IV S
8210. ECONOMICS OF EDUCATION. (3 cr) IX-X M
8213. FINANCIAL RESOURCE MANAGEMENT. (3 cr; prereq 8212 or #) IX-X M
8214. SCHOOL MANAGEMENT INFORMATION SYSTEMS. (3 cr, §8222; prereq 8220, 8212) IX-X T
8215. THE ELEMENTARY SCHOOL PRINCIPALSHIP. (3 cr; prereq 8201, 8202, or #) IX-X T. Lambert
8217. SEMINAR: ELEMENTARY SCHOOL ADMINISTRATION. (3 cr; prereq 8216 or #) IX-X W
8224. LEGAL IMPLICATIONS OF ACTS BY SCHOOL BOARDS, ADMINISTRATORS, AND TEACHERS. (3 cr) IX-X W
8230. SCHOOL-COMMUNITY RELATIONS. (3 cr) IX-X Th
8237. SEMINAR: EDUCATIONAL LAW. (1-3 cr; prereq 8224 or 8225) IX-X T
8264. THE SECONDARY SCHOOL PRINCIPALSHIP. (3 cr) IX-X W
8276. SEMINAR: ADMINISTRATION OF CURRICULUM IN THE TWO-YEAR COLLEGE. (3 cr; prereq 8274) IX-X W
8278. RECENT RESEARCH IN TWO-YEAR COLLEGE ADMINISTRATION. (1-3 cr [max 3]; prereq #) III-IV S
8290. FINANCING HIGHER EDUCATION. (3 cr; prereq #) IX-X Th
8340. POLICY SYSTEMS IN EDUCATION. (3 cr; prereq 8220 and Δ) IX-X W

PHYSICAL EDUCATION, RECREATION, AND SCHOOL HEALTH EDUCATION

Physical Education (PE)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5100. TEACHING PHYSICAL EDUCATION FOR THE HANDICAPPED. (3 cr; prereq #) IX-X M and ar, CH 214, Cato
5120. ADVANCED KINESIOLOGY. (3 cr; prereq undergrad kinesiology or #) III-IV S and ar, CH 420, Stoner
5125. ADVANCED PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT. (3 cr; prereq 3125 or #) 7:00-9:00 M and ar, CH 214, Osterhoudt
5130. MOTOR LEARNING AND HUMAN PERFORMANCE. (3 cr; prereq 3113 or #) 4:15-6:00 T and ar, CH 214, Bole
5150. TEACHING ELEMENTARY SCHOOL PHYSICAL EDUCATION. (3 cr; prereq tchg certificate or #) IX-X W and ar, CH 214, Plack
5160. EVALUATION IN PHYSICAL EDUCATION. (3 cr; prereq 3150 or equiv) 7:00-9:00 T and ar, CH 214, Shick

5255. INTRAMURALS-EXTRAMURALS. (4 cr) 4:15-5:30 MW, CH 215, B Anderson, Mueller
8113. COLLEGE PHYSICAL EDUCATION ADMINISTRATION. (3 cr; prereq 8110) IX-X
Th and ar, CH 214, Jaeger

WINTER QUARTER, 1975

5101. PHYSICAL EDUCATION ACTIVITIES FOR THE HANDICAPPED. (3 cr; prereq 5100 or SpEd 5101) 4:15-6:00 M, Cato
5122. APPLIED PHYSIOLOGY. (3 cr; prereq PubH 3386 or PhsI 3051 or equiv) III-IV S, Alexander, Serfass
5170. FOUNDATIONS OF PHYSICAL EDUCATION. (3 cr; prereq grad or MEd) 7:00-9:00 Th, LaPoint
5980. INTRODUCTION TO RESEARCH. (3 cr, §Hlth 5980; prereq #) 4:15-5:30 TTh, Shick
8121. KINESIOLOGY: ELECTROMYOGRAPHIC ANALYSIS. (3 cr; prereq 5120, #) 4:15-6:00 W, Stoner
8330. SEMINAR: MOTOR LEARNING AND HUMAN PERFORMANCE. (3-9 cr [max 9]; prereq 5130 or #) 7:00-9:00 M, Bole

SPRING QUARTER, 1975

5102. PRACTICUM: PHYSICAL EDUCATION FOR THE HANDICAPPED. (3 cr; prereq 5101 or #) I-II S, Cato
5110. SUPERVISION OF SCHOOL HEALTH EDUCATION. (3 cr, §Hlth 5110; prereq #) III-IV S, Hauptfuehrer
5123. ANALYSIS OF MOVEMENT IN GYMNASTICS. (3 cr; prereq 3111 and 3174 or 3322 or #) 7:00-9:00 W, Roethlisberger, Stoner
5134. PERCEPTUAL-MOTOR DEVELOPMENT IN CHILDHOOD. (3 cr; prereq 3113 or #) 4:15-6:00 M, Plack
5161. PRACTICUM: CONSTRUCTION OF MOTOR PERFORMANCE TESTS. (3-6 cr; prereq 5160 or #) 7:00-9:00 Th, Shick
8150. PROFESSIONAL PREPARATION OF PHYSICAL EDUCATION TEACHERS. (3 cr; prereq 5151 or equiv) 4:15-6:00 Th, Young
8980. RESEARCH PROBLEMS. (3 cr; prereq 5980, PsyF 5110 or #) 4:15-6:00 W, Staff

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5700. WORKSHOP: DANCE IN EDUCATION. (Cr ar [max 12]; \$60; limited to 20 students)
This offering for 4 credits will focus on creative dance for children at the elementary level. 4:30-8:30 W, NGW Dance Studio, Jette
5700. WORKSHOP: DANCE IN EDUCATION. (Cr ar [max 12]; \$60; limited to 25 students)
This offering for 4 credits will focus on nonpartner folk dances. 4:30-8:30 T, StP Campus Gym 107, Stern

WINTER QUARTER, 1975

5700. WORKSHOP: DANCE IN EDUCATION. (Cr ar [max 12]; \$60; limited to 25 students)
This offering for 4 credits will focus on modern dance technique, improvisation, and composition, beginner and intermediate. 4:30-8:30 T, NGW Dance Studio, Rice

5700. WORKSHOP: DANCE IN EDUCATION. (Cr ar [max 12]; \$60; limited to 25 students)
This offering for 4 credits will focus on teaching of folk dance. 4:30-8:30 W, StP
Campus Gym 107, Stern

SPRING QUARTER, 1975

5620. PRACTICUM: PREVENTION AND CARE OF ATHLETIC INJURIES. (3 cr; prereq
Anat 1027 or equiv; \$45 plus \$5 course fee; limited to 35 students) 7:00-9:30
W, BFAB 125, Stein

Recreation and Park Administration (Rec)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

WINTER QUARTER, 1975

8990. RESEARCH PROBLEMS. (3 cr; prereq 5980, PsyF 5110 or #) 4:15-6:00 W

SPRING QUARTER, 1975

8980. RESEARCH PROBLEMS. (3 cr; prereq 5980, PsyF 5110 or #) 4:15-6:00 W

School Health Education (Hlth)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5150. FAMILY LIFE AND SEX EDUCATION IN SECONDARY SCHOOLS. (3 cr; prereq
FSoS 5001 or #) 4:15-6:00 M and 1 hr ar, NGW 3, Slocum

WINTER QUARTER, 1975

5140. ADMINISTRATION OF SCHOOL HEALTH PROGRAM. (3 cr) 4:00-5:30 TTh

5980. INTRODUCTION TO RESEARCH. (3 cr, §PE 5980; prereq #) 4:15-5:30 TTh

SPRING QUARTER, 1975

5110. SUPERVISION OF SCHOOL HEALTH AND PHYSICAL EDUCATION. (3 cr, §PE
5110; prereq #) III-IV S

5140. ADMINISTRATION OF SCHOOL HEALTH PROGRAM. (3 cr) 4:15-6:00 M

5350. FAMILY LIFE AND SEX EDUCATION IN ELEMENTARY SCHOOLS. (3 cr) 4:15-
6:00 W

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5100. DRIVER EDUCATION I. (4 cr; \$60 plus \$12 special fee; limited to 32 students)
7:00-10:00 W, Richfield HS 116, Lewis

5350. FAMILY LIFE EDUCATION IN ELEMENTARY SCHOOLS. (3 cr; \$45) 4:00-6:15 M, Eden Prairie HS, Room 202, 8025 School Rd., Eden Prairie, Peterson

WINTER QUARTER, 1975

5101. DRIVER EDUCATION II. (4 cr; prereq 5100; \$60 plus \$12 special fee; limited to 32 students) 7:00-10:00 W, Richfield HS 116, Lewis

SPRING QUARTER, 1975

5130. SAFETY EDUCATION. (4 cr; prereq sr; \$60; limited to 32 students) 7:00-10:00 T, NGW 201

5350. FAMILY LIFE AND SEX EDUCATION IN ELEMENTARY SCHOOLS. (3 cr; \$45) 4:00-6:15 M, Consolidated Elementary School, 409 E. Case, St. Paul, Peterson

5602. THE DRIVER SIMULATOR. (4 cr; prereq 5100; \$60 plus \$12 special fee) 7:00-10:00 W, Richfield HS 116, Lewis

PSYCHOEDUCATIONAL STUDIES

Counseling and Student Personnel Psychology (CSPP)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5101. FOUNDATIONS OF CAREER DEVELOPMENT. (3 cr) IX-X W, Bu 125, Hansen

5130. INTRODUCTION TO GUIDANCE. (3 cr; prereq 9 cr in education) IX-X T, Bu 125, Tennyson

5300. WORKSHOP: COUNSELING PSYCHOLOGY. (1-6 cr [max 12]; prereq #) IX-X M, Bu 125

5650. PRACTICUM: PSYCHOLOGICAL EDUCATION. (1-3 cr [max 9]; prereq 5550 or 5550, #) IX-X T, Bu 123, Erickson, Sprinthal

WINTER QUARTER, 1975

5331. CAREER DEVELOPMENT: PRINCIPLES AND PRACTICE I. (3 cr) IX-X W

5650. PRACTICUM: PSYCHOLOGICAL EDUCATION. (1-3 cr [max 9]; prereq 5550 or 5550, #) IX-X T, Erickson, Sprinthal

SPRING QUARTER, 1975

5332. CAREER DEVELOPMENT: PRINCIPLES AND PRACTICE II. (3 cr) IX-X W

5650. PRACTICUM: PSYCHOLOGICAL EDUCATION. (1-3 cr [max 9]; prereq 5550 or 5550, #) IX-X T, Erickson, Sprinthal

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5110. COUNSELING PROCEDURES. (3 cr; \$45; limited to 30 students) 7:00-9:30 Th, Richfield HS 220, Shaffer

5130. INTRODUCTION TO GUIDANCE. (3 cr; prereq 9 cr in education; \$45) 6:00-8:30 W, Pt 214, Tennyson

5300. WORKSHOP: COUNSELING PSYCHOLOGY. (1-6 cr [max 12]; prereq #; \$45; limited to 35 students) This offering for 3 credits will focus on the clinical use of ability tests and deficit functioning. 6:00-8:30 M, VA Hospital; Lumry, Warnken

WINTER QUARTER, 1975

5110. COUNSELING PROCEDURES. (3 cr; \$45; limited to 35 students) 7:00-9:30 M, Bu 125, Shaffer

5300. WORKSHOP: COUNSELING PSYCHOLOGY. (1-6 cr [max 12]; prereq #; \$45; limited to 35 students) This offering for 3 credits will focus on objective personality tests. 6:00-8:30 M, VA Hospital; Braatz, Warnken

SPRING QUARTER, 1975

5110. COUNSELING PROCEDURES. (3 cr; \$45; limited to 35 students) 7:00-9:30 M, Bu 120, Shaffer

5300. WORKSHOP: COUNSELING PSYCHOLOGY. (1-6 cr [max 12]; prereq #; \$45; limited to 35 students) This offering for 3 credits will focus on projective techniques. 6:00-8:30 M, VA Hospital; Lumry, Braatz

Special Education (SpEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5100. CHILDHOOD LANGUAGE DEVELOPMENT: CLASSROOM IMPLICATIONS. (3 cr) IX-X MW, Jones 11

5101. EDUCATION OF EXCEPTIONAL CHILDREN. (3 cr) IX-X MW, Pt 102, Force

5112. EDUCATION OF LEARNING-DISABLED CHILDREN. (3 cr) IX-X TTh, NH 207, Balow

5120. INTRODUCTION TO MENTAL RETARDATION. (4 cr, §CPsy 5315; prereq 5101) IX-X MW, Arch 5, Bruininks

5147. AURAL REHABILITATION OF HEARING-IMPAIRED CHILDREN. (3 cr; prereq #) IX-X Th, Pt 111

WINTER QUARTER, 1975

5101. EDUCATION OF EXCEPTIONAL CHILDREN. (3 cr) IX-X W

5120. INTRODUCTION TO MENTAL RETARDATION. (4 cr, §CPsy 5315; prereq 5101) IX-X MW, Bruininks

5143. TEACHING LANGUAGE TO THE HEARING IMPAIRED I. (3 cr; prereq 5140) IX-X Th

5145. TEACHING SPEECH TO THE HEARING IMPAIRED I. (3 cr; prereq #) IX-X Th

5150. EDUCATION OF EMOTIONALLY DISTURBED AND SOCIALLY MALADJUSTED CHILDREN. (3 cr; prereq grad or #) IX-X TTh

5180. EDUCATION OF THE DISADVANTAGED. (3 cr; prereq 12 cr in psychology, educational psychology or sociology) IX-X W
5190. OUTSTANDING ABILITIES AND THE EDUCATIONAL PROCESS. (3 cr) IX-X T

SPRING QUARTER, 1975

5100. CHILDHOOD LANGUAGE DEVELOPMENT: CLASSROOM IMPLICATIONS. (3 cr)
7:00-9:00 MW
5101. EDUCATION OF EXCEPTIONAL CHILDREN. (3 cr) IX-X MW, Force
5112. EDUCATION OF LEARNING-DISABLED CHILDREN. (3 cr) IX-X TTh, Balow
5121. METHODS AND MATERIALS FOR ELEMENTARY AND SECONDARY MENTALLY
RETARDED PUPILS. (4 cr; prereq 5101 or equiv) IX-X W
5144. TEACHING LANGUAGE TO THE HEARING IMPAIRED II. (3 cr; prereq #) IX-X
W
5146. TEACHING SPEECH TO THE HEARING IMPAIRED II. (3 cr; prereq #) IX-X Th
5301. CONTINGENCY MANAGEMENT IN SPECIAL EDUCATION SYSTEMS. (3 cr) IX
MW, X W
8520. EDUCATIONAL AND SOCIOCULTURAL THEORY AND RESEARCH IN MENTAL
RETARDATION. (4 cr; prereq 5101, PsyF 5110, CPsy 5315 or equiv or #) 6:00-
8:00 W
8580. SEMINAR: THE DISADVANTAGED. (3 cr; prereq #) IX-X W

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5112. EDUCATION OF LEARNING-DISABLED CHILDREN. (3 cr; \$45) 6:00-8:30 M, Kellogg HS 168-170, Balow
5150. EDUCATION OF EMOTIONALLY DISTURBED AND SOCIALLY MALADJUSTED
CHILDREN. (3 cr; prereq #; \$45) 7:00-9:30 W, Kellogg HS 168-170, McCauley

WINTER QUARTER, 1975

5100. CHILDHOOD LANGUAGE DEVELOPMENT: CLASSROOM IMPLICATIONS. (3 cr;
\$45) 7:00-9:00 M, Pt 214
5301. CONTINGENCY MANAGEMENT IN SPECIAL EDUCATION SYSTEMS. (3 cr; \$45)
7:00-9:30 W, Kellogg HS 233, Deno

SPRING QUARTER, 1975

5150. EDUCATION OF EMOTIONALLY DISTURBED AND SOCIALLY MALADJUSTED
CHILDREN. (3 cr; prereq #; \$45) 7:00-9:30 W, Sandburg JHS 209
5170. INTRODUCTION TO EDUCATION OF VISUALLY HANDICAPPED CHILDREN. (3
cr; prereq #; \$45) 7:00-9:30 W, CD 105, Martin

SOCIAL, PSYCHOLOGICAL, AND PHILOSOPHIC FOUNDATIONS OF EDUCATION

Psychological Foundations (PsyF)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM. (3 cr) IX-X MW, Bu 123, Stecklein
5141. PSYCHOLOGY OF SCHOOL LEARNING. (3 cr) IX-X Th, NH 216, Bart
5162. PERSONALITY AND SOCIAL DEVELOPMENT. (3 cr; prereq 5 cr in introductory psychology) 6:20-8:50 W, Bu 120, Rest
5170. SOCIAL PSYCHOLOGY IN EDUCATION. (4 cr) 4:30-6:30 TTh, Jones 4, D Johnson

WINTER QUARTER, 1975

5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM. (3 cr) IX-X MW, Joselyn
5148. PSYCHOLOGY AND PEDAGOGY OF READING. (3 cr) 4:30-6:30 W, Samuels
8572. ORGANIZATIONAL DEVELOPMENT AND CHANGE. (4 cr; prereq 5170 or equiv) IX-X TTh, D Johnson
8980. RESEARCH PROBLEMS: INSTRUCTIONAL SYSTEMS. (Cr ar [max 9]; prereq 8561, 8581 or ♯) 7:00-10:00 Th, Rhett

SPRING QUARTER, 1975

5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM. (3 cr) IX-X MW, Kellogg
5141. PSYCHOLOGY OF SCHOOL LEARNING. (3 cr) IX-X T, Bart
5162. PERSONALITY AND SOCIAL DEVELOPMENT. (3 cr; prereq 5 cr in introductory psychology) 6:20-8:50 W, Rest
8548. PSYCHOLOGICAL ANALYSIS OF VERBAL LEARNING AND READING. (3 cr; prereq 5148 or introductory course in learning or ♯) 4:30-6:30 W, Samuels

EXTENSION CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5162. PERSONALITY AND SOCIAL DEVELOPMENT. (3 cr; prereq 5 cr introductory psychology; \$45) 6:20-8:50 W, Bu 120, Rest
5170. SOCIAL PSYCHOLOGY OF EDUCATION. (4 cr; \$60) 4:30-6:30 TTh, Bu 125, Johnson
5176. PSYCHOLOGY OF DRUG ABUSE. (3 cr; \$45 plus \$5 special fee) 7:30-8:00 T, KTCA-TV, Channel 2, St. Paul-Minneapolis; 7:30-8:00 T, WDSE-TV, Channel 8, Duluth; 7:30-8:00 T, KWCM-TV, Channel 10, Appleton; 7:30-8:00 T, KFME-TV, Channel 13, Fargo-Moorhead, Wong
5330. COMPUTER PROGRAMMING. (3 cr; prereq sr; \$45) 6:20-8:50 M, Bu 125, Anderson

WINTER QUARTER, 1975

5110. INTRODUCTORY STATISTICAL METHODS. (3 cr; \$45) 6:20-8:50 Th, Bu 125, Stecklein
5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM. (3 cr; \$45) 4:15-6:00 MW, Bu 123, Joselyn
5148. PSYCHOLOGY AND PEDAGOGY OF READING. (3 cr; \$45) 4:15-6:00 W, Bu 125, Samuels

SPRING QUARTER, 1975

5110. INTRODUCTORY STATISTICAL METHODS. (3 cr; \$45) 6:20-8:50 Th, Bu 125, Stecklein
5141. PSYCHOLOGY OF SCHOOL LEARNING. (3 cr; \$45) 4:15-6:00 T, NH 216, Bart

Social and Philosophic Foundations of Education (HEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5110. INTERCULTURAL EDUCATION: SOCIAL SCIENCE AND SYSTEMS PERSPECTIVES. (3 cr) IX-X M, Arch 15, Harkins
5141. CRITICAL ISSUES IN CONTEMPORARY EDUCATION. (3 cr) IX-X Arch 15, Beck
5155. HISTORY OF WESTERN EDUCATIONAL THOUGHT. (3 cr) IX-X T, Pt 215, Bagley
5170. AMERICAN PRAGMATISM AND EDUCATION. (3 cr) IX-X Th, CD 105, Bagley
5190. SOCIOLOGY OF EDUCATION. (3 cr, §Soc 5953) IX-X T, NH 209, Weidman

WINTER QUARTER, 1975

5125. ADOLESCENCE IN CHANGING SOCIAL INSTITUTIONS. (3 cr) IX-X T
5131. COMPARATIVE EDUCATION. (3 cr) IX-X W
5156. HISTORY OF IDEAS IN AMERICAN EDUCATION. (3 cr) IX-X Th, Burt
5192. SOCIOLOGY OF HIGHER EDUCATION. (3 cr, §Soc 5958; prereq introductory statistics or 2) IX-X T
5209. EDUCATION IN FUTURE SOCIAL SYSTEMS. (3 cr, §5212) IX-X W, Harkins
5210. SOCIAL FORECASTING AND EDUCATIONAL FUTURES. (3 cr) IX-X W

SPRING QUARTER, 1975

5182. COMPARATIVE PHILOSOPHIES OF EDUCATION. (3 cr) IX-X W
5190. SOCIOLOGY OF EDUCATION. (3 cr, §Soc 5953) IX-X T, NH 209, Weidman
5191. PROFESSIONALIZATION AND TEACHING. (3 cr) IX-X M
5205. INTERCULTURAL EDUCATION: WORKSHOP IN COMMUNITY SOCIAL SIMULATIONS. (3 cr) IX-X F
5211. SOCIAL DESIGN AND EDUCATIONAL FUTURES. (3 cr, §5212) IX-X W

VOCATIONAL AND TECHNICAL EDUCATION

Agricultural Education (AgEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5024. HISTORY AND PHILOSOPHY OF EXTENSION SERVICES. (3 cr; prereq #) IX-X Th,
ClaOff 143, Norenberg
8010. CURRENT ISSUES IN AGRICULTURAL EDUCATION. (Cr ar; prereq #) IX-X T,
ClaOff 143, M Peterson

WINTER QUARTER, 1975

5025. EXTENSION PROGRAM DEVELOPMENT. (3 cr) IX-X Th
8001. RESEARCH IN AGRICULTURAL EDUCATION. (Cr ar; prereq 15 cr in education)
IX-X T
8020. SEMINAR: AGRICULTURAL EDUCATION. (Cr ar) IX-X M

SPRING QUARTER, 1975

5026. ADMINISTRATION OF EXTENSION SERVICES. (3 cr; prereq #) IX-X Th
8303. SEMINAR: GRADUATE STUDIES REVIEW. (1-3 cr) IX-X M

Business Education (BsEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5107. MATERIALS AND METHODS IN OFFICE EDUCATION. (3 cr; lab fee required)
IX-X M, PeikH 255, McLean
5108. CURRICULUM CONSTRUCTION IN BUSINESS EDUCATION. (3 cr) IX-X Th, FolH
104, Lambrecht
5112. PROGRAM DEVELOPMENTS IN BUSINESS EDUCATION. (1-12 cr [max 12]) IX-X
W, PeikH 255, Hopkins
5114. OFFICE OCCUPATIONAL EXPERIENCE. (3-12 cr, §SeEd 3100; prereq #; S-N op-
tional) 6:15-7:30 M and ar, PeikH 250, Lambrecht

WINTER QUARTER, 1975

5102. TEACHING BASIC BUSINESS SUBJECTS. (3 cr) IX-X T
5109. BUSINESS EDUCATION FOR THE CULTURALLY DIFFERENT. (3 cr) IX-X W
5111. MATERIALS AND METHODS FOR A SIMULATED OFFICE COURSE. (3 cr; prereq
sr) IX-X M
5114. OFFICE OCCUPATIONAL EXPERIENCE. (3-12 cr, §SeEd 3100; prereq #; S-N op-
tional) 6:15-7:30 M and ar

SPRING QUARTER, 1975

5100. RESEARCH AND METHODS IN TEACHING ACCOUNTING AND BUSINESS DATA PROCESSING. (3 cr) IX-X M
5104. OFFICE COORDINATION TECHNIQUES. (3 cr, §DE 5105) 5:15-7:00 T
5114. OFFICE OCCUPATIONAL EXPERIENCE. (3-12 cr, §SeEd 3100; prereq #; S-N optional) 6:15-7:30 M and ar

Distributive Education (DE)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5110. CURRICULUM IN COOPERATIVE VOCATIONAL EDUCATION. (2 cr) 4:00-5:30 W, PeikH 275, Meyer, Whiteford
5111. CURRICULUM IN COOPERATIVE DISTRIBUTIVE EDUCATION. (2 cr; prereq 5110 or ¶5110) 5:45-6:30 W, PeikH 275, Meyer
5305. TEACHING MERCHANDISE DISPLAY. (3 cr; prereq #; lab fee required) 4:00-6:00 M, PeikH 275, Klaurens

WINTER QUARTER, 1975

5105. COORDINATION TECHNIQUES. (2 cr) 4:00-5:30 W
5106. COORDINATION TECHNIQUES IN COOPERATIVE DISTRIBUTIVE EDUCATION. (2 cr; prereq 5105 or ¶5105) 5:45-6:30 W
5120. BUSINESS AND DISTRIBUTIVE PROGRAMS FOR ADULTS. (3 cr) 4:00-6:30 M
5400. PROGRAM DEVELOPMENTS IN DISTRIBUTIVE EDUCATION. (1-12 cr [max 12]; prereq #) 4:00-6:30 T

SPRING QUARTER, 1975

5100. ORGANIZATION AND ADMINISTRATION OF DISTRIBUTIVE EDUCATION. (3 cr) 4:00-6:30 W
5115. POSTSECONDARY BUSINESS AND DISTRIBUTIVE EDUCATION. (3 cr) 4:00-6:30 M
5125. ISSUES AND TRENDS IN DISTRIBUTIVE EDUCATION. (3 cr; prereq sr or grad, #) 4:00-6:30 T
5300. MATERIALS AND METHODS IN COOPERATIVE VOCATIONAL EDUCATION. (2 cr) 4:00-5:30 M
5301. MATERIALS AND METHODS IN COOPERATIVE DISTRIBUTIVE EDUCATION. (2 cr; prereq 5300 or ¶5300) 5:45-6:30 M
5330. TEACHING SUPERVISORY TRAINING. (3 cr) 4:00-6:30 W

Home Economics Education (HEEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5111. CURRICULUM IN HOME ECONOMICS OCCUPATIONAL EDUCATION. (2 cr; prereq DE 5110 or ¶DE 5110) 5:45-6:30 W, NH 122, Whiteford

WINTER QUARTER, 1975

5106. COORDINATION TECHNIQUES IN HOME ECONOMICS OCCUPATIONAL EDUCATION. (2 cr; prereq DE 5105 or ¶DE 5105) 5:45-6:30 W
5315. EVALUATION: THEORETICAL AND TECHNICAL ASPECTS. (3 cr; prereq 3530 and #) IX-X W

SPRING QUARTER, 1975

5301. MATERIALS AND METHODS IN HOME ECONOMICS OCCUPATIONAL EDUCATION. (2 cr; prereq DE 5300 or ¶DE 5300) 5:45-6:30 M

Industrial Education (Ind)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5301. TESTS IN INDUSTRIAL SUBJECTS. (3 cr; prereq SeEd 3155) IX-X W, PeikH 315, Pucel
5310. COORDINATION. (3 cr; prereq 3330 or 5325 or #) IX-X M, PeikH 65, Miletich
5320. VOCATIONAL GUIDANCE. (3 cr; prereq SeEd 3155) IX-X Th, Pt 215, Bjorkquist
5360. INDUSTRIAL INSTRUCTION. (3 cr; prereq 3340, SeEd 3155 and #) IX-X M, Pt 214, Randleman

WINTER QUARTER, 1975

5305. CRITICAL ISSUES IN INDUSTRIAL EDUCATION. (3 cr) IX-X M
5314. ADMINISTRATION OF INDUSTRIAL EDUCATION. (3 cr; prereq 3330 or #) IX-X Th
5330. INDUSTRIAL COURSE CONSTRUCTION. (3 cr, §3330) IX-X Th
5600. INSTRUCTIONAL MATERIALS LABORATORY. (3-6-9 cr; prereq major, tchg exper or #) IX-X T
8310. RESEARCH. (3 cr; prereq #) IX-X W

SPRING QUARTER, 1975

5303. INSTRUCTIONAL AIDS. (3 cr; prereq 3360 or 5360 or equiv) IX-X M
5312. SUPERVISION OF INDUSTRIAL EDUCATION. (3 cr; prereq 3330 or 5314) IX-X W
5330. INDUSTRIAL COURSE CONSTRUCTION. (3 cr, §3340) IX-X W
5360. INDUSTRIAL INSTRUCTION. (3 cr; prereq 3340, SeEd 3155 and #) IX-X Th

Vocational Education (VoEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

(See inside back cover for registration procedures)

FALL QUARTER, 1974

5300. PHILOSOPHY AND PRACTICE OF VOCATIONAL EDUCATION. (3 cr) IX-X T,
PeikH 65, Kavanaugh

SPRING QUARTER, 1975

5200. EVALUATION OF LOCAL VOCATIONAL EDUCATION PROGRAMS. (3 cr) IX-X
M, IX-X W, Copa
5300. PHILOSOPHY AND PRACTICE OF VOCATIONAL EDUCATION. (3 cr) IX-X Th,
Hopkins

WHERE TO OBTAIN INFORMATION

The following is a list of departments, program areas, and offices where information can be obtained about courses, programs, requirements for degrees and teaching certification, and special resources.

General Information and Admission	Education Career Development Office 1425 University Avenue S. E.	373-2234
Adult Education	Harlan G. Copeland 206 Burton Hall	376-3501
Agricultural Education	Roland L. Peterson 130 Classroom Office Building St. Paul Campus	373-1021
Art Education	George K. Olson 135 Wulling Hall	373-4050
Bureau of Field Studies and Surveys	Charles H. Sederberg 300 Health Service Building St. Paul Campus	373-2251
Business Education	Charles R. Hopkins 254 Peik Hall	373-3306
Center for Early Education and Development	Shirley G. Moore 180 Child Development	373-9854
Child Psychology	John C. Masters 104 Child Development	373-9867
Coaching Certification Men	James LaPoint 221A Cooke Hall	373-4221
Women	Marjorie Cowmeadow 165 Norris Gymnasium	376-3212
Communication Disorders	Clark D. Starr 110 Shevlin Hall	373-4116
Counseling and Student Personnel Psychology	Norman A. Sprinthall	373-5217
Curriculum and Instruction	Robert Dykstra 130 Peik Hall	
Dean's Office	104 Burton Hall	373-9880
Distributive Education	Richard D. Ashmun 270 Peik Hall	373-9724
Drug Education	Helen M. Slocum 101 Norris Gymnasium	373-3403
Economic Education	William E. Becker 1169 Business Administration Building West Bank	373-4469
Educational Administration	Van D. Mueller 218 Health Service Building St. Paul Campus	373-5836
Educational Research and Development Council	225 Health Service Building St. Paul Campus	373-4860
Education Student Board	1425 University Avenue S.E.	373-5155
Elementary Education	250 Burton Hall	373-3974

English Education (Speech-Communication, Theatre Arts)	Gene L. Piché 350 Peik Hall	373-5198
Field Experiences (Student Teaching)	Eugene M. Anderson 1425 University Avenue S.E.	373-2246
Financial Assistance	Student Financial Aid 107 Armory	373-4021
Foreign Languages	Dale L. Lange 224 Peik Hall	373-7992
General Curriculum	Richard D. Kimpston 226 Burton Hall	373-5157
Graduation Requirements (Balance Sheet Clerk)	Window 2 Morrill Hall	373-7758
Higher Education	Robert J. Keller 211 Burton Hall	376-7558
Home Economics Education	Roxana R. Ford 107 McNeal Hall St. Paul Campus	373-1530
Human Relations	Chester W. Oden 206 Burton Hall	376-5027
Industrial Education	Erwin Geigle 125 Peik Hall	373-7220
Instructional Systems Resource Center	Robert D. Tennyson 117 Burton Hall	373-5158
Library Science	Lowell Olson 3 Walter Library	373-5256
Mathematics Education	James E. Stochl 1407 University Avenue S.E.	373-4140
Methodological Foundations of Education	John Stecklein	376-3207
Minnesota Research Coordination Unit for Vocational Education	Brandon B. Smith 145 Peik Hall	373-3843
Music Education	Adrian Lauritzen 104 Scott Hall	373-3452
Nursery-Kindergarten Program	Shirley G. Moore 180 Child Development Building	373-9854
Physical Education	Mary L. Young 223 Cooke Hall	373-3215
Placement	Arnold S. Woestehoff 1425 University Avenue S.E.	373-2266
Planning and Development Office	Theodore E. Kellogg 103 Burton Hall	373-5841
Psycho-Educational Center	Maynard Reynolds 249 Burton Hall	373-3483
Psychoeducational Studies	Maynard Reynolds 249 Burton Hall	373-3483
Psychological Foundations of Education	David W. Johnson	373-5829

Readmission Procedures	Education Career Development Office 1425 University Avenue S.E.	373-2257
Recreation and Park Administration	Glenn Cheatham 209 Cooke Hall	373-4232
Registration Information	Education Career Development Office 1425 University Avenue S.E.	373-2234
Remedial Reading and Reading Supervisor Certification	Robert L. Schreiner 214 Burton Hall	373-5834
Research, Development, and Demonstration Center, Special Education Programs		373-4955
School and Community Health Education	Helen M. Slocum 101 Norris Gymnasium	373-3403
School Psychology	Marian D. Hall N550 Elliott Hall	373-3286
Science Education	Clarence H. Boeck 370 Peik Hall	373-9764
Secondary Education (see academic fields)		
Social and Philosophic Foundations of Education	Arthur M. Harkins 203 Burton Hall	373-3178
Social, Psychological, and Philosophic Foundations of Education	Clyde A. Parker 206 Burton Hall	373-0210
Social Studies Education	James Mackey 152 Peik Hall	373-9721
Southeast Alternatives Experimental School Project (SEA) (see Teacher Center)		
Special Education	Dewey G. Force 101 Pattee Hall	373-5020
Student Progress Committee	Education Center Development Office 1425 University Avenue S.E.	373-2257
Teacher Center (MPS/UM)	Frederick V. Hayen 155 Peik Hall	376-4580
Teacher Education	Gordon M. A. Mork	376-7553
Vocational Education	Gordon I. Swanson 130 Classroom Office Building St. Paul Campus	373-5183

All students and prospective students should refer also to the *General Information Bulletin*. Some may wish to refer to bulletins of other divisions of the University: Liberal Arts, Biological Sciences, Business Administration, General College, Institute of Technology, Agriculture, Home Economics. Bulletins for any of these areas may be obtained at the Morrill Hall information booth or by writing to the Office of Admissions and Records, University of Minnesota, Minneapolis, Minnesota 55455.

POSTBACCALAUREATE PROGRAMS IN EDUCATION

The following listing is provided to identify areas in which postbaccalaureate programs in education are available. Master of education (M.Ed.) programs are described in detail in the *College of Education Bulletin*. Students interested in the master of arts, doctor of education, doctor of philosophy, and specialist degree programs should contact the department indicated and should obtain the *Graduate School Bulletin* for details of admission and program requirements.

<i>Field or Emphasis</i>	<i>M.Ed.</i>	<i>M.A.</i>	<i>Ph.D.</i>	<i>Ed.D.</i>	<i>Specialist</i>
Adult Education	no	Education			
Agricultural Education	yes	Agricultural Education	Education or Vocational Education	Vocational Education	
Art Education	yes	Art Education	Education		
Business Education	yes	Business Education	Education or Vocational Education	Vocational Education	Business Education
Child Psychology	no	Child Psychology	Child Psychology		
Counseling and Student Personnel Psychology	no	Educational Psychology	Educational Psychology		Counseling
Distributive Education	yes	Distributive Education	Education or Vocational Education	Vocational Education	Distributive Education
Early Childhood Education	yes				
Education	no	Education	Education		
Educational Administration	no	Educational Administration	Educational Administration	Educational Administration	See fields in this section
Educational Psychology	no	Educational Psychology	Educational Psychology		
Elementary Education	yes	Elementary Education	Education		
English Education	yes	Education or Secondary Education	Education		
Foreign Languages	no	Education or Secondary Education	Education		

<i>Field or Emphasis</i>	<i>M.Ed.</i>	<i>M.A.</i>	<i>Ph.D.</i>	<i>Ed.D.</i>	<i>Specialist</i>
General Curriculum	no	Education or Secondary Education	Education		General Curriculum Supervision
Higher Education	no	Education	Education		
History and Philosophy of Education	See Social and Philosophic Foundations of Education				
Home Economics Education	yes	Home Economics Education	Education or Vocational Education	Vocational Education	
Industrial Education	no	Industrial Education	Education or Vocational Education	Industrial Education or Vocational Education	
Library	no	Library School			
Mathematics Education	yes	Mathematics Education	Education		Mathematics Education
Music Education	yes	Music Education	Education		
Physical Education	yes	Physical Education	Physical Education	Physical Education	
Psychological Foundations	no	Educational Psychology	Educational Psychology		
Recreation and Park Administration	yes	Recreation and Park Administration	Physical Education		
Secondary Education	See fields	Education or Secondary Education	Education		
School Psychology	no	Educational Psychology	Educational Psychology		School Psychology
School Health Education	yes	Physical Education or Education	Physical Education		
Special Education	no	Educational Psychology	Educational Psychology		Special Education
Social and Philosophic Foundations of Education	no	Social and Philosophic Foundations of Education	Education		
Social Studies	yes	Education or Secondary Education	Education		
Teacher Education	no	Education	Education		
Vocational Education	See fields			Vocational Education	Vocational Education

CALENDAR 1974-75

FALL QUARTER

September

- 2 Holiday (Labor Day)
- 12 Fall quarter fees due for students registered through September 7
- 16 Last date to file application for fall quarter admission for adult special and new postbaccalaureate special students (except College of Education)¹
- 20 Last day for registration and payment of fees for undergraduate students including adult special students (except in-service teachers)
- 23 Fall quarter classes begin
- 27 Last day for registration and payment of fees for graduate students and in-service teachers

October

- 19 Homecoming Day
- 24 Twin Cities Assembly meeting, 3:30 p.m.
- 28 Holiday (Veterans Day)

November

- 15 Last date to file application for winter quarter admission to the undergraduate colleges or for change of college within the University¹
- 21 Senate meeting, 3:15 p.m.
- 28-29 Holiday (Thanksgiving Day)
Classes excused (except Medical School)

December

- 4 Deadline for application for admission to Graduate School for winter quarter
- 5 Study day
- 6-12 Final examination period
- 12 Fall quarter closes
All-University Commencement (Twin Cities Campus)
- 16 Last date to file application for winter quarter admission for adult special or new postbaccalaureate special students (except College of Education)¹

WINTER QUARTER

December

- 17 Last day for payment of winter quarter fees for undergraduate students in residence fall quarter including adult special students (except in-service teachers)
- 24-25 Holiday (Christmas Day)

January

- 1 Holiday (New Year's Day)

- 6 Winter quarter classes begin
- 10 Last day for registration and payment of fees for graduate students and in-service teachers
- 17 Senate meeting, 3:15 p.m.

February

- 5 Twin Cities Assembly meeting, 3:15 p.m.
- 17 Holiday (Presidents' Day)
- 18 Last date to file application for spring quarter admission to the undergraduate colleges or for change of college within the University¹
- 28 Senate meeting, 3:15 p.m.

March

- 3 Deadline for application for admission to Graduate School for spring quarter
- 6 Senate meeting, 3:15 p.m.
- 15 Study day
- 17-22 Final Examination period
- 21 Last day for payment of spring quarter fees for undergraduate students in residence winter quarter including adult special students (except in-service teachers)
- 22 Winter quarter closes
No All-University Commencement scheduled

SPRING QUARTER

April

- 1 Spring quarter classes begin
- 7 Last day for registration and payment of fees for graduate students and in-service teachers
- 17 Senate meeting, 3:15 p.m.
- 24 Twin Cities Assembly meeting, 3:30 p.m.

May

- 16 Deadline for application for admission to Graduate School for first term of Summer Session
- 22 Senate meeting, 3:15 p.m.
- 26 Holiday (Memorial Day)

June

- 7 Study day
- 9-14 Final examination period
- 14 Spring quarter closes
All-University Commencement (Twin Cities Campus)

¹ Students applying to or planning to transfer to colleges, schools, and programs other than CLA and General College should consult the appropriate college to determine the deadlines. Many of these are different from that indicated above.

SUMMARY OF LATE AFTERNOON AND SATURDAY MORNING CLASSES

<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday (I-II)</i>	<i>Saturday (III-IV)</i>
FALL QUARTER						
CPsy 5315	CPsy 8336	CPsy 5315	CPsy 8336	SeEd 8387	Educ 8250	Elem 5107
CPsy 8347	Educ 5104	CPsy 8347	Educ 8251		ArEd 5389	SeEd 5105
Educ 5103	Educ 5184	Educ 5106	Elem 5100		MthE 5101	SeEd 8869
Educ 5186	Educ 8252	Educ 5180	Elem 5331		SeEd 5105	EdAd 5101
ArEd 5381	ArEd 8306	Elem 5363	Elem 5361		SeEd 5385	EdAd 8278
Elem 5316	Elem 5333	MthE 5311	MthE 5312		EdAd 8264	PE 5120
Elem 5334	Elem 5350	SeEd 5152	MuEd 5111			
Elem 5337	Elem 5376	SeEd 5347	SeEd 5340			
MthE 5321	MthE 8590	SeEd 8322	SeEd 8642			
SeEd 5107	MuEd 5211	EdAd 8202	EdAd 8210			
SeEd 5113	MuEd 8281	EdAd 8274	EdAd 8238			
SeEd 5131	SeEd 5110	EdAd 8340	EdAd 8242			
SeEd 5153	SeEd 5129	PE 5150	EdAd 8113			
SeEd 5194	SeEd 5191	PE 5255	SpEd 5112			
EdAd 8201	SeEd 5344	CSPP 5101	SpEd 5147			
EdAd 8215	EdAd 8224	SpEd 5100	PsyF 5170			
EdAd 8264	EdAd 8226	SpEd 5101	HEd 5170			
PE 5100	EdAd 8253	SpEd 5120	AgEd 5024			
PE 5125	PE 5130	SpEd 5140	BsEd 5108			
PE 5255	PE 5160	PsyF 5120	Ind 5320			
Hlth 5150	CSPP 5130	PsyF 5162				
CSPP 5300	CSPP 5650	HEd 5141				
SpEd 5100	SpEd 5112	BsEd 5112				
SpEd 5101	SpEd 5141	DE 5110				
SpEd 5120	PsyF 5141	DE 5111				
PsyF 5120	PsyF 5170	Ind 5301				
HEd 5110	HEd 5155	HEEd 5111				
BsEd 5107	HEd 5190					
BsEd 5114	AgEd 8010					
DE 5305	VoEd 5300					
Ind 5310						
Ind 5360						
WINTER QUARTER						
CPsy 5315	CPsy 8343	CPsy 5315	CPsy 8343	SeEd 8387	CPsy 5319	Educ 8285
CPsy 8333	ArEd 8306	CPsy 8333	Educ 8250		Elem 5300	ArEd 8300
Educ 8188	Elem 5108	Educ 5182	Elem 5317		SeEd 5122	Elem 5100
Educ 8284	Elem 5334	Educ 8229	Elem 5349		SeEd 5189	Elem 5319
ArEd 5303	MthE 8590	Elem 5120	MthE 8500		SeEd 8887	SeEd 5390
Elem 5331	MuEd 8282	Elem 5338	MuEd 5314			EdAd 8278
Elem 5362	SeEd 5106	MthE 5322	SeEd 5111			PE 5122
MthE 5331	SeEd 5113	MthE 5355	SeEd 5153			
MthE 5332	SeEd 5115	SeEd 5108	SeEd 5321			
MthE 5366	SeEd 5122	SeEd 5153	SeEd 8642			
MuEd 5214	SeEd 5170	SeEd 8322	EdAd 8227			
SeEd 5107	SeEd 5172	SeEd 8892	EdAd 8234			
SeEd 5150	EdAd 5167	EdAd 8202	PE 5170			
SeEd 8362	EdAd 8216	EdAd 8225	PE 5980			
SeEd 8892	EdAd 8265	EdAd 8275	Hlth 5140			
EdAd 8212	Hlth 5140	PE 8121	Hlth 5980			
EdAd 8238	Hlth 5980	Rec 8980	SpEd 5143			
EdAd 8341	CSPP 5650	CSPP 5331	SpEd 5145			
PE 5101	SpEd 5150	SpEd 5101	SpEd 5150			
PE 8330	SpEd 5190	SpEd 5120	PsyF 8572			
SpEd 5120	PsyF 8572	SpEd 5180	PsyF 8980			
SpEd 5150	HEd 5125	PsyF 5120	HEd 5156			
PsyF 5120	HEd 5192	PsyF 5148	AgEd 5025			
AgEd 8020	AgEd 5025	HEd 5131	Ind 5314			
SeEd 5111	AgEd 8001	HEd 5209	Ind 5330			
SeEd 5114	BsEd 5102	HEd 5210				
PE 5120	DE 5400	BsEd 5109				
Ind 5305	DE 5600	DE 5105				
		DE 5106				
		DE 8310				
		HEEd 5106				
		HEEd 5315				

(Continued next page)

<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday (I-II)</i>	<i>Saturday (III-IV)</i>
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SPRING QUARTER

CPsy 8341	CPsy 8345	CPsy 8341	CPsy 8345	SeEd 8387	ArEd 5389	Educ 8286
Educ 5186	Educ 5180	Educ 5182	Educ 8250	HEd 5205	Elem 5363	Elem 5350
Educ 8251	Educ 5184	Educ 8229	Elem 5100		SeEd 5122	EdAd 8202
Educ 8284	ArEd 8306	Educ 8252	Elem 5108		SeEd 5371	EdAd 8278
ArEd 5316	Elem 5107	ArEd 5302	Elem 5337		SeEd 5382	PE 5110
Elem 8317	Elem 5377	Elem 5300	MuEd 5217		PE 5102	Hlth 5110
Elem 8346	Elem 8300	Elem 5334	SeEd 5114			
MthE 5101	MthE 8590	Elem 8363	SeEd 5117			
SeEd 5107	MuEd 5306	MthE 5355	SeEd 5155			
SeEd 5113	MuEd 8283	MuEd 5581	SeEd 5326			
SeEd 5153	SeEd 5105	SeEd 5109	FdAd 8201			
SeEd 5404	SeEd 5122	SeEd 5115	EdAd 8230			
EdAd 5101	SeEd 5173	SeEd 5371	EdAd 8290			
EdAd 5103	SeEd 5324	SeEd 5404	PE 5161			
EdAd 8210	SeEd 5344	SeEd 8104	PE 8150			
EdAd 8213	SeEd 8188	SeEd 8322	SpEd 5112			
PE 5134	SeEd 8364	EdAd 8217	SpEd 5146			
Hlth 5140	SeEd 8642	EdAd 8224	SpEd 5301			
SpEd 5100	SeEd 8970	EdAd 8264	AgEd 5026			
SpEd 5101	EdAd 8214	EdAd 8276	Ind 5360			
SpEd 5301	EdAd 8215	EdAd 8340	VoEd 5300			
PsyF 5120	FdAd 8237	PE 5123				
HEd 5191	CSPP 5650	PE 8980				
AgEd 8303	SpEd 5112	Rec 8980				
BsEd 5100	HED 5190	Hlth 5350				
BsEd 5114	BsEd 5104	CSPP 5332				
DE 5115	DE 5125	SpEd 5100				
DE 5300		SpEd 5101				
DE 5301		SpEd 5121				
Ind 5303		SpEd 5144				
HEEd 5301		SpEd 5301				
VoEd 5200		SpEd 8520				
		SpEd 8580				
		PsyF 5120				
		PsyF 5162				
		PsyF 8548				
		HEd 5182				
		HEd 5211				
		DE 5100				
		DE 5330				
		Ind 5312				
		Ind 5330				
		VoEd 5200				

SUMMARY OF EXTENSION CLASSES

<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
FALL QUARTER					
CPsy 3301	CPsy 3301	Educ 5305	CPsy 5331		ArEd 5001
CPsy 5311	CPsy 5319	MuEd 5750	Educ 5305		
Educ 5305	Educ 5305	MuEd 5750	ArEd 3001		
SeEd 5122	ArEd 3020	MuEd 5750	ArEd 3009		
Hlth 5350	MuEd 5750	PE 5700	CSPP 5110		
CSPP 5300	PE 5700	Hlth 5100	PsyF 5170		
SpEd 5112	PsyF 5170	CSPP 5130			
PsyF 5330	PsyF 5176	SpEd 5150			
		PsyF 5162			
WINTER QUARTER					
CPsy 5313	CPsy 3301	CPsy 3301	CPsy 5315		
Educ 5305	CPsy 5303	CPsy 5311	Educ 5305		
MuEd 5150	Educ 5305	Educ 5305	ArEd 3009		
CSPP 5110	Elem 5103	PE 5700	ArEd 3030		
CSPP 5300	MuEd 5750	Hlth 5101	PsyF 5110		
SpEd 5100	SeEd 5171	SpEd 5301			
PsyF 5120	SeEd 5396	PsyF 5120			
	PE 5700	PsyF 5148			
SPRING QUARTER					
CPsy 5311	CPsy 3301	CPsy 5331	Educ 5305		ArEd 5001
Educ 5305	CPsy 5303	Educ 5305	ArEd 3001		
MuEd 5750	Educ 5305	MuEd 5750	PsyF 5110		
Hlth 5350	ArEd 3009	PE 5620			
CSPP 5110	SeEd 5171	Hlth 5602			
	Hlth 5130	SpEd 5150			
	PsyF 5141	SpEd 5170			

REGISTRATION PROCEDURES

Late Afternoon and Saturday Morning Classes

Adult Special Students

- If not previously *admitted and registered* as an adult special, apply in 6 Morrill Hall
- Obtain *permit to register* in 6 Morrill Hall, Window 2 Morrill Hall, or Education Career Development Office, 1425 University Avenue S.E.

Those who return the forms by mail may obtain a permit to register at the Education Career Development Office, 1425 University Avenue S.E. approximately 2-3 weeks after returning the forms; if time permits, those who personally return their adult special application forms to 6 Morrill Hall will receive a permit to register at the time they return the forms.

Students who have been admitted to the College of Education as adult specials but did not register during the previous quarter may obtain the permit at Window 2 Morrill Hall; those who registered during the previous quarter may obtain the permit at the Education Career Development Office, 1425 University Avenue S.E.

- Obtain registration materials at the Education Career Development Office, 1425 University Avenue S.E.
- Secure approval from any adviser in the area in which you are taking courses (elementary, secondary, etc.)
- Return all forms to the Education Career Development Office, 1425 University Avenue S.E. for College of Education approval
- Secure fee statement at Window 2 Morrill Hall and pay fees

Master of Education Degree Students (M.Ed.)

Follow the same procedure as adult special students but secure approval from your assigned adviser

Master of Arts, Doctor of Education, and Doctor of Philosophy Degree Students (M.A., Ed.D., Ph.D.)

- Obtain *application for admission* forms in 310 Johnston Hall and return completed forms to that office.
- If registered during the previous quarter, obtain *registration* materials in your departmental office; all others obtain *registration* materials in 316 Johnston Hall
- Complete registration forms
- Secure adviser's approval
- Secure fee statement at Window 4 Morrill Hall and pay fees

Extension Classes

- Register in 101 Wesbrook Hall from 12 noon to 8 p.m., September 5 through 13