

UNIVERSITY of
MINNESOTA
BULLETIN 1976
JULY 30, 1976
1978

College of
Education



UNIVERSITY OF MINNESOTA

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College of Education

UNIVERSITY OF MINNESOTA

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College of Education

I. GENERAL INFORMATION

The College

MISSION AND 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 AND RESOURCES

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.

GOVERNANCE OF THE COLLEGE

The 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 play a significant role in governing the college through the Education Student Board (ESB). 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 serve as representatives on 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 227 R Burton Hall.

Education Career Development Office

The first stop for any student seeking direction or information is the Education Career Development Office (ECDO) located at 1425 University Avenue S.E. (373-2268). This office provides special facilities and staff to help students plan

General Information

professional goals and meet personal needs and maintains a relationship with students from the time of initial contact through placement in educational careers. The office coordinates admission, enrollment, counseling, record keeping, field experiences (student teaching), information services, and job placement for 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 in the Education Career Development Office 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 education students new to the Minneapolis 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. Employers in most of the states and many foreign countries list open positions with ECDO. All graduating seniors (except majors in music therapy, and recreation and park administration) 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 have established a Teacher Center as a vehicle for the preparation and renewal of educational personnel. The center conducts a variety of programs in both preservice and in-service teacher education. New cooperative relationships between the college and the Minneapolis Public Schools can be facilitated through center staff and resources. The center also serves as an information and dissemination vehicle for many 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 related to instruction, administration, finance, and physical plant planning. In performing these services the bureau also functions as a resource center for instruction in educational administration.

Educational Research and Development Council—The council is a nonprofit consortium of school districts in the Twin Cities metropolitan area with the College of Education existing to improve education through conduct of needed research, development of instructional programs, and training of school personnel. As a component of the Department of Educational Administration, graduate students have the opportunity to work closely with the council in research, development, and planning activities on a multidistrict basis.

Education Library—Located on the second floor of Walter Library, the major resource for education students and faculty is the College of Education Library. Its print collection is considered one of the largest sources of research materials in the fields of education and psychology. Among the library's unique holdings are an extensive ERIC microfiche collection, the renowned Kerlan Collection of children's literature, and a collection of bulletins of colleges and universities the world over. As one of the reference services available, the staff offers computer searches of the files of the Educational Resources Information Center (ERIC), the National Technical Information Services (NTIS), Abstracts of Instructional and Research Materials (AIM/ARM), Exceptional Child Abstracts, and Psychological Abstracts. The Learning Resources Center, 204 Walter Library, houses playback equipment and class assigned programs on audiotape, videotape, slides, and film.

Instructional Systems Laboratory—This is an educational development and research resource center whose major purpose is to facilitate the application of educational technology in the instructional programs of the College of Education. In addition, the ISL offers such activities as design and development of prototype instructional systems, support of the teacher education program, research dealing with variables and conditions associated with instruction and systems, dissemination of research findings and prototype systems, and the state media certification programs. The instructional systems graduate program offers interdisciplinary areas of study in instructional development, technology, psychology, evaluation, administration, and personnel and organizational development.

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 state. Its four functions are to stimulate and facilitate research, disseminate information, increase the number and improve the competence of researchers, and identify 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 interdepartmental 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.

General Information

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 research programs deal with personality and social development, language and cognitive development, perceptual development, psychophysiological processes, genetics and ethology, and learning and motivation in children. The institute operates a laboratory nursery school for observation, research, and the training of nursery school teachers, and is the administrative home of the University Child Care Center.

Education Planning and Development Office—EPDO is an administrative office with college-wide planning and informational responsibilities. Its functions include assisting in college planning activities, maintaining a planning information base, developing approaches to program evaluation, facilitating the acquisition of external funding, facilitating communication within the college and between the college and external groups, and maintaining liaison with University offices having related functions.

Financial Aids

Students seeking financial assistance should direct inquiries to the Office of Student Financial Aid, 107 Armory Building, University of Minnesota, Minneapolis, Minnesota 55455. Applications for fall quarter filed during the preceding 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.

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 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. Its youth studies program is designed to augment established degree programs offered through the Colleges of Education, Home Economics, and Liberal Arts and the 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, University of Minnesota, St. Paul, Minnesota 55108.

Statement on Human Rights

The Board of Regents has committed itself and the University of Minnesota to the policy that there shall be no discrimination on the basis of race, creed, color, sex, age, or national origin. In adhering to this policy, the University abides by the requirements of Titles VI and VII of the Civil Rights Act of 1964, Revised Order No. 4, Executive Orders 11246 and 11375, Sections 799A and 845 of the Public Health Service Act, the Equal Pay Act of 1963, and all other federal regulations and pertinent acts of Congress.

It is also the policy of the University of Minnesota not to discriminate on the basis of sex in its educational programs, admissions, activities, or employment policies as required by Title IX of the Education Amendments of 1972.

Inquiries regarding compliance may be directed to Lillian H. Williams, Director, Office of Equal Opportunity and Affirmative Action, 419 Morrill Hall, Minneapolis, Minnesota 55455, (612) 373-7969, or to the Director of the Office of Civil Rights, Department of Health, Education and Welfare, Washington, D.C. 20201.

How to Use 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 greatest 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, this bulletin cannot serve as 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.

II. UNDERGRADUATE PROGRAMS IN THE COLLEGE OF EDUCATION

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. Upon completion of that program, students will be awarded the degree of bachelor of science. 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, students are recommended by the college for certification in their 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 may 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 required 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-communication, 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 applied toward the liberal education distribution requirements. For example, students with a major in social studies may use courses required for that major 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, and Symbolic Systems*—8 credits
History and structure of English, foreign language, and communication skill; linguistics, rhetoric, logic, philosophic analysis; mathematics
- Group B. Physical and Biological Sciences*—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
Vocational-Industrial
Education

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

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

Science with majors in physical science, life science, broad area science

Second languages and cultures with majors in French, German, Hebrew,
Latin, Russian, Spanish

Social studies with emphases in anthropology, economics, geography,
history, political science, psychology, 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 in this section of the bulletin.

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. Students who plan to enter the College of Education should read carefully the requirements for the program of their choice in this section, and should discuss transfer with a counselor in the Education Career Development Office as early as possible in their 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.
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 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.

Procedures and Policies in the College of Education

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 entry. Applications should be received in the Office of Admissions and Records very 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.

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 the policy of the college to give equal consideration to students 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., University of Minnesota, Minneapolis, Minnesota 55455, 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

Students 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 a teacher's certificate and a B.S. degree from the college. 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 Policies in the College of Education

Procedures for the most efficient use of college facilities are described in general in the following paragraphs; more detailed information and help with specific procedures 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.
2. Students applying for transfer from other collegiate institutions should write to the Office of Admissions and Records, Morrill Hall, University of Minnesota, Minneapolis, Minnesota 55455, 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 to 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—Students 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 individual 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.

Examination for Credit—Credit for material mastered prior to admission or outside of class may sometimes be obtained by special examination. Students who believe that they are as well prepared in a particular subject as students successfully completing a course should apply to the Student Progress Committee, 1425 University Avenue S.E., 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 at the Education Career Development Office, 1425 University Avenue S.E.

Change of Registration—Students who find it necessary to make program changes 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 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,

Procedures and Policies in the College of Education

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 registration in a course to a different grading system after the second week of classes.

Change in Major—Students who wish to change from one major to another within the College of Education should see a counselor in the Education Career Development Office.

Application for a Degree—Students should file an application for a degree at the information window, Office of Admissions and Records, 1 full year before they expect 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 the adviser as a checklist of completed requirements.

Senior Physical Examination—A physical examination is required for graduation and for teacher certification in the state of Minnesota. It is the responsibility of each student to make an appointment at the Boynton 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 at 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 on 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 (2.00) in courses in the teaching minor.
4. Completion of basic junior courses (SeEd 3150 and 3155 for secondary education and Elem 3100 and 3102 for elementary education).
5. Completion of admission clearances for the College of Education, including psychological tests and a satisfactory Mantoux test within 1 year prior to student teaching.
6. In modern languages, passing a special proficiency examination.

Students may be required at any time to cancel registration in student teaching if they fail to meet the requirements or if their work is unsatisfactory.

Unsatisfactory Progress—Students who are not making satisfactory progress in the curriculum in which they are 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. Committee representatives

Undergraduate Programs in the College of Education

are available at 1425 University Avenue S.E. to help students clarify their records, and counselors will attempt to advise individual students with respect to academic progress.

Teaching Certification—When senior students who wish to teach in Minnesota register for the final quarter in the College of Education, they are expected to apply for teaching certification. They obtain the application form in the Education Career Development Office, attach a money order for the certification fee (payable to the Commissioner of Education, State of Minnesota), and leave 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, qualified graduates are recommended for the appropriate certificate to teach in Minnesota schools.

GRADUATION REQUIREMENTS

Students who complete the following requirements graduate from the College of Education with a 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. Students should read carefully the credit requirements of the curriculum in which they are interested, as listed 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 average 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 approved certificate programs. 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 Division 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).

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. Students who do not enter the College of Education by the fall or winter quarter of their junior year may need to register for the summer terms preceding their 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 at 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 Hartup, Chairman, 190 Child Development

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 description for that field in Section III of this bulletin and consult the *Graduate School Bulletin*.

Curriculum and Instruction

Robert Dykstra, Chairman, 130 Peik Hall

ART EDUCATION

The curriculum in art education prepares students for Minnesota certification for teaching art in elementary and secondary schools. The 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. No students are admitted for winter quarter or summer terms.

Undergraduate Programs in the College of Education

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) faculty review of a portfolio with representative samples of the applicant's work. In addition, the nature and scope of the applicant's prior work with children and assessment of personal characteristics are considered.

The C+(2.50) major average, which is required for admission to the college, admission to student teaching, and 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.

All courses in art education are offered A-N only.

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:

- ArH 1001—Introduction to Visual Arts (4)
- ArH 1015—Art of Western Civilization (4)
- ArH 3008—History of Ancient Art (4)
- ArH 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—Photo Medium (4)
- ArtS 1801—Ceramic Processes (4)
- ArtS 3220—Commercial Art Media and Studio Techniques (4)
- Th 1504—Elements of Technical Theatre (4)

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

- ArtS 1101, 1102—Drawing I, II (4 cr each)
- ArtS 1301, 1302—Sculpture (4 cr each)

- ArtS 1510, 3510—Printmaking: Intaglio (4 cr each)
ArtS 1520, 3520—Printmaking: Lithography (4 cr each)
ArtS 3120—Painting (4)

Professional Education Courses (minimum 48 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)
HEd 3090—School and Society (3)
SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
(seniors)
Electives in education—3 credits
Electives in art 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—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—Teaching and Supervision of Art (2)

ELEMENTARY EDUCATION

The curricula outlined in this section prepare students for recommendation for certification to teach in elementary schools. 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. Completion of all but 12 credits or fewer 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 Communication: Oral Communication (4) (or) Spch 1102—Fundamentals of Speech Communication: Communication Processes (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 chosen 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 excess of the 13-credit requirement, 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 second language, geography, history, humanities, mathematics, music, philosophy, political science, psychology, science, 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)

(Students may use only two basic methods courses taken outside of the College of Education. Students must complete a minimum of 12 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

ArEd 3001—Survey of Art Activities (4)

HEd 3090—The School and Society (3)

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

MuEd 3011—Teaching Music in the Elementary School (4)

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

Satisfactory 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

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student must plan to complete these deficiencies during the summer terms prior to the fall quarter in which he or she 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 attend full time and 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)

Minimum of 10 credits in student teaching from Elem 3600, 3601, 3603, 3605, 3606, 3607, 3610

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

PE 3327—Teaching Physical Education in the Elementary School (3)

PsyF 3380—Introduction to Human Relations (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 above:

Elem 3376—Nursery School-Kindergarten Curriculum I (3)

Elem 3377—Nursery School-Kindergarten Curriculum II (3)

Elem 3603—Student Teaching in the Kindergarten (6)—substituted for Elem 3601 in the elementary major

CPsy 1301—Child Psychology (4)

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 who wish to be recommended for Minnesota state nursery school teacher certification must be admitted to this program. Interested students should consult the program adviser, 226B Child Development, or call 373-2389. Junior or senior undergraduate students from any program within the University or students who already have a degree may apply to this program, which can be taken in conjunction with a student's undergraduate program, graduate program, or with adult special status. The state requirement for course work in the area of human

relations must be met and students should consult the program adviser about appropriate course work, offered either on campus or through Continuing Education and Extension in the community.

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 (6)

Child Psychology—12 credits

CPsy 1301—Introductory Child Psychology (4)
Two additional courses from List A, or one course from List A and one course from List B:

List A

- CPsy 3302—Infancy (4)
- CPsy 3311 or 5311—Behavioral and Emotional Problems (4 cr each)
- CPsy 3330—Directed Experiences (4)
- CPsy 3331 or 53331—Processes of Socialization of Children (4 cr each)
- CPsy 3347—Children's Learning and Intellectual Skills (4)
- CPsy 5310—Topics in Child Psychology (1-4)
- CPsy 5329—Genetics, Ethology, and Development (4)
- CPsy 5333—Personality Development (4) (offered alternate years)
- CPsy 5335—Peer Relations (4)
- CPsy 5339—Parent-Child Relations (4) (offered alternate years)
- CPsy 5341—Perceptual Development (4)
- CPsy 5343—Cognitive Development (4)
- CPsy 5345—Language in Children (4)

List B

- Anth 5183—Human Physical Growth and Development (5)
- FSoS 5200—Family Relationships (5)
- Soc 5505—Family Development (5)

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 or she 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 and (2) three pieces of different styles, such as a Bach invention or

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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 music intelligence, standard songs in good English (the simpler classics recommended); demonstrate ability 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. The student 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 private one-hour lessons. A student may not register for a course in applied music for credit until he or she 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 or her specific requirements.

Major Requirements for All Students—At least 22 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 10 credits at the 3000 level required, for which a student may register after completing 12 credits at the 1000 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, second 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)
- 22 credits in applied music from Mus 1201 through 1225 (or 1301 through 1325) and 3201 through 3325 (or 3301 through 3325)
- Ensemble experience during every quarter of on-campus study, to be determined in consultation with an adviser

Professional Education Courses (minimum 25 credits)

- 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—Every applicant 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)
- Electives—3 credits

Additional courses are available for students who desire further specialization in elementary, secondary, or general choral music. Students desiring such 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 may begin 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 or 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 (4 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 1101, General Biology; Psy 1001, Introduction to 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) average 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) average 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 1101—General Biology (5)

Phys 1002—Human Physiology (4)

Psy 1001—Introduction to General Psychology (5)

Psy 3604—Introduction to 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 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)

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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, second 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 25 credits in the major, or 15 credits in the major and 10 credits in a teaching minor.
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 in these fields must have completed a minimum of 25 credits 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. Students wishing to teach outside of Minnesota may have their program modified to meet the specific requirements of the state in which they plan to teach. In selecting a major or minor, students should (a) choose from those subjects commonly taught in high schools, with regard to placement opportunities; (b) study the requirements 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 their 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 or her 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 56 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) (or) Engl 5831—American English (4) (or) Engl 5843—American Social Dialects (4)
- 8 credits in composition: Comp 1027—Intermediate Composition (4) (or) Comp 3030—Topics in Advanced Composition (4) (and) 4 credits from Comp 1027, 3030, (or) Comp 5107—Writing of Nonfiction (4) (or) Comp 5108—Writing of Nonfiction (4) (or) any 1000-level creative writing course
- 8 credits in speech and theatre: one course from Spch 1101, 1102, 1104 (and) one course from Th 1101, 1504, 3801
- Electives—12 credits in 3000- and 5000-level courses chosen from English; humanities; AmSt 3111, 3112, 3113; ArtH 3921

Professional Education Courses (minimum 37 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- SeEd 3320—Bases for Instruction in Language in Secondary English Curricula (3)
- SeEd 3325—Instructional Practice in English, Speech, and Theatre Arts (3)
- SeEd 3326—Teaching Adolescent Literature (3)
- SeEd 3327—Teaching of Writing in Secondary Schools (3)
- SeEd 3621—Directed Experience in Teaching English, Speech, and Theatre Arts (6-9)
- HEd 3090—The School and Society (3)
- Electives—one course from SeEd 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 32 credits)

- 8 credits in history and development of English literature: 4 credits at the 1000 level and 4 credits at the 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 Composition (4) (or) Comp 3030—Topics in Advanced Composition (4)
- Spch 1101—Fundamentals of Speech Communication: Oral Communication (4)
- Th 1101—Introduction to Theatre Arts (4) (or) Th 1504—Elements of Technical Theatre (4) (or) Th 3801—Oral Interpretation of Fiction (4)

Undergraduate Programs in the College of Education

Professional Education Courses

SeEd 3329—Teaching Language Arts in Secondary Schools (3) (not required of students majoring in speech-communication or theatre arts)

Major in Speech-Communication

Students majoring in speech-communication will take course work for the first 2 years in liberal education areas, completing a minimum of 16 credits in speech including Spch 1101 and a minimum of 8 credits of English beyond freshman English. 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 courses is required.

Major Courses (minimum 48 credits)

Spch 1101—Fundamentals of Speech Communication: Oral Communication (4)
28 credits from the listed courses distributed in the following areas of study:

1. Theory and practice in advanced public speaking
Spch 3605—Public Speaking (4)
2. Speech science
CDis 3101—Introduction to Speech Pathology and Audiology (4)
3. Theory and practice in the deliberative process
Spch 3641—Discussion and Conference Methods (4) (or) Spch 3601—Approaches to Public Discourse (4)
4. Theory and practice in oral interpretation
Th 3801—Oral Interpretation of Fiction (4)
5. Communication theory, language and human behavior
Spch 3401—Theories of Interpersonal Communication (4) (or) Spch 5404—Language, Culture, and Education (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)

Electives—16 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 cr each)

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

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

SeEd 5340—Teaching 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 of Speech Communication: Oral Communication (4)
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

Students 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 and a minimum of 8 credits of English beyond freshman English. 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 46 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 3513, 3515—Technical Theatre Production I, II (4 cr each)
- Th 3708—Play Production: Secondary School (4) (or) Th 3711—Stage Direction (4) (or) Th 5711—Stage Direction (4)
- Th 3801—Oral Interpretation of Fiction (4)
- Th 5712—Stage Direction (4)
- Spch 1104—Fundamentals of Speech Communication: The Creative Process and the Mass Media (4)
- Electives—8 credits in theatre courses selected with CLA and College of Education theatre advisers

Undergraduate Programs in the College of Education

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 Theatre 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.

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—Fundamentals of Speech Communication: The Creative Process and the Mass Media (4)

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

Mathematics

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). Students will select one or more minors from those subjects commonly taught in the high school, or a supporting field chosen with the approval of the mathematics education adviser. 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 also in this section of the bulletin. Appropriate major courses may be used toward these requirements.

The requirements listed below are in effect for all students entering the program during or after fall quarter 1976.

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) (or) Math 3511—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 list

One course in probability or mathematical statistics from list

Computer programming: CSci 3101 or equivalent

Courses to complete 48 credits chosen from the following lists:

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

Algebra: Math 3142, 3582, 5151, 5209, 5242, 5243, 5244, 5282, 5283, 5284

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

Probability and Statistics: Stat 3091, 5121, 5131; Math 5679, 5681

Professional Education Courses (minimum 36 credits)

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

SeEd 3365—Teaching Secondary School Mathematics (4)

SeEd 3368—Teaching Secondary School Mathematics (3)

12 credits in SeEd 3661—Student Teaching in Mathematics (3-6-9-12)

4 credits in SeEd 3152—Practicum: Secondary Education (1-7) (1 credit taken concurrently with each of SeEd 3150 and 3155; 2 credits taken concurrently with SeEd 3665)

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

Undergraduate Programs in the College of Education

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) (or) Math 3511—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 from listings of major courses

Professional Education Courses

- SeEd 3365—Teaching Secondary School Mathematics (4)
- 6 credits in SeEd 3661—Student Teaching in Mathematics (3-6-9-12)
- 2 credits in SeEd 3152—Practicum: Secondary Education (1-7) to be taken concurrently with SeEd 3365

Science

A student planning to teach science in Minnesota high schools will be recommended for appropriate certification upon completion of a program (major or minor) for junior and senior high school, grades 7 through 12, in life science, earth science, or physical science; or a program for grades 7 through 9 for junior high school sciences. The requirements as detailed in the programs which follow will be in effect for all students who will graduate from the college in June 1979 and thereafter. They will affect all students to be admitted to the college who will enroll in courses beginning fall quarter 1977. Students admitted to the college prior to fall quarter 1977 will complete the program in effect at the time of their entry.

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. Students are expected to complete the liberal education distribution requirements detailed in this bulletin. Appropriate science courses may be used to meet both these requirements and those of the major or certification program.

Professional Education Courses and Special Requirements for All Students are listed following the description of the majors and minors.

Major in Earth Science (Grades 7-12)

Students completing this program will be recommended for Minnesota certification to teach earth sciences, full time, in the junior and senior high schools. It is recommended that a course in the history of science be included in Group C of the liberal education distribution requirements. Averages of C+ (2.50) in the earth sciences and C (2.00) in the broad base science courses are required.

Broad Base Science Course Requirements (minimum 38 credits)

- One course in general biology and two additional courses in biological science
- Two courses in general chemistry
- Two courses in general physics with laboratory. A full 3-quarter sequence of courses is recommended for students wishing to elect further work in earth science.
- One elective course in either chemistry or physics

Earth Science Courses (minimum 40 credits)

One course in each of the following areas selected with consent of an adviser: physical and historical geology, oceanography or limnology, environmental or man-oriented geology, astronomy, soil science, meteorology, plus electives to total 40 credits

Professional Education Courses and Special Requirements for All Students are listed at the end of the major and minor requirements

Minor in Earth Science (Grades 7-12)

Students completing this program together with another College of Education certification program or major will be recommended for certification to teach junior and senior high school earth science part time. An average of C (2.00) in all sciences is required.

Broad Base Science Course Requirements (minimum 29 credits)

One course in general biology and one additional course in biological science
Two courses in general physics with laboratory
Two courses in general chemistry

Earth Science Courses (minimum 22 credits)

One course in each of the areas of physical and historical geology, astronomy, meteorology, and soil science

Professional Education Courses (minimum 7 credits)

SeEd 3357—Teaching Secondary School Science (4) (science majors exempt)
3 credits in SeEd 3651—Student Teaching in Science (1-3-6-9-12)

Major in Life Science (Grades 7-12)

Students completing this program will be recommended for Minnesota certification to teach senior high school life science (biology) full time, junior high school life science full time, and junior high school physical science part time. It is recommended that a course in the history of biology be included in Group C of the liberal arts distribution requirements. Averages of C+ (2.50) in life science courses and C (2.00) in broad base science courses are required.

Broad Base Science Course Requirements (minimum 30 credits)

Two courses in general physics with laboratory
Two courses in general chemistry
One course in geology
One course in astronomy

Life Science Courses (minimum 50 credits)

50 credits selected with the consent of an adviser including two courses in biochemistry or organic chemistry and at least one course in each of the following fields: ecology, general biology, general botany or plant biology, general zoology or animal biology, genetics, history of biology, microbiology, and physiology

Professional Education Courses and Special Requirements for All Students are listed at the end of the major and minor requirements

Undergraduate Programs in the College of Education

Minor in Life Science (Grades 7-12)

Students completing this program together with another College of Education certification program or major will be recommended for Minnesota certification to teach junior and senior high school life science part time. An average of C (2.00) in life science and broad base science courses is required.

Broad Base Science Course Requirements (minimum 30 credits)

- Two courses in general chemistry and two courses in general physics with laboratory
- One course in geology and one course in astronomy

Life Science Courses (minimum 29 credits)

29 credits selected with the consent of an adviser from the following fields: general biology, general botany or plant biology, general zoology or animal biology, ecology, physiology, and microbiology

Professional Education Courses (minimum 7 credits)

- SeEd 3357—Teaching Secondary School Science (4) (science majors exempt)
- 3 credits in SeEd 3651—Student Teaching in Science (1-3-6-9-12)

Major in Physical Science (Grades 7-12)

Students completing this program will be recommended for Minnesota certification to teach senior high school physical science including chemistry and physics full time and physical science full time in the junior high school. It is recommended that a course in the history of science or the history of physics be included in Group C of the liberal education distribution requirements. Averages of C+ (2.50) in either chemistry or physics and C (2.00) in all other sciences are required.

Broad Base Science Course Requirements (minimum 21 credits)

- One course in each of these areas: physical geology, calculus-based astronomy, and meteorology
- One course in general biology and at least one course in biological science

Physical Science Courses (minimum 56 credits)

- A 3-quarter sequence general physics course with laboratory
- Two courses in general chemistry
- One course selected with consent of the adviser in each of these areas: wave concepts, modern physics, solution chemistry, analytical chemistry, organic chemistry, and physical chemistry
- Electives in chemistry and physics

Professional Education Courses and Special Requirements for All Students are listed at the end of the major and minor requirements

Minor in Chemistry (Grades 7-12)

Students completing this program together with another College of Education certification program or major will be recommended for certification to teach chemistry part time in senior high schools, and junior and senior high school physical science part time. An average of C (2.00) in chemistry and broad base science courses is required.

Broad Base Science Course Requirements (minimum 27 credits)

- One course in general biology and one additional course in biological science
- One course each in geology, astronomy, meteorology
- At least 2 quarters of a 3-quarter sequence of general physics with laboratory

Chemistry Courses (minimum 22 credits)

- Two courses in general chemistry
- One course in organic chemistry
- Electives from solution, analytical, or physical chemistry

Professional Education Courses (minimum 7 credits)

- SeEd 3357—Teaching Secondary School Science (4) (science majors exempt)
- 3 credits in SeEd 3651—Student Teaching in Science (1-3-6-9-12)

Minor in Physics (Grades 7-12)

Students completing this program together with another College of Education certification program or major will be recommended for certification to teach physics part time in senior high schools, and junior and senior high school physical science part time. An average of C (2.00) in physics and broad base science courses is required.

Broad Base Science Course Requirements (minimum 27 credits)

- One course in general biology and one course in biological science
- One course in geology and calculus-based astronomy or meteorology
- Two courses in general chemistry

Physics Courses (minimum 23 credits)

- A 3-quarter sequence general physics course with laboratory
- One course each in wave concepts and modern physics

Professional Education Courses (minimum 7 credits)

- SeEd 3357—Teaching Secondary School Science (4) (science majors exempt)
- 3 credits in SeEd 3651—Student Teaching in Science (1-3-6-9-12)

Major in Broad Area Science (Grades 7-9)

Students completing this program will be recommended for Minnesota certification to teach life science, earth science, physical science, junior high science, and general science in junior high schools full time. It is recommended that a course in the history of science be included in Group C of the liberal arts distribution requirements. An average of C+ (2.50) is required in two of the three fields—life science, earth science, and physical science—and C (2.00) in the third.

Life Science Course Requirements (minimum 24 credits)

- At least one course selected with consent of an adviser in each of the following: ecology, general biology, general botany or plant biology, general zoology or animal biology, microbiology

Earth Science Course Requirements (minimum 22 credits)

- At least one course selected with the consent of an adviser in each of the following: astronomy, physical and historical geology, meteorology, soil science, limnology

Undergraduate Programs in the College of Education

Physical Science Course Requirements (minimum 30 credits)

Courses selected with consent of an adviser should include two courses in general chemistry and one elective course in chemistry, two courses in general physics with laboratory and one elective course in physics

History of Science Course Requirement

One course in history of science

Major in Life Science and Broad Area Science (Grades 7-12)

Students completing this program will be recommended for Minnesota certification to teach senior high school life science (biology) full time; life science, earth science, physical science, junior high science, and general science in junior high schools full time. It is recommended that a course in the history of science be included in Group C of the liberal arts distribution requirements. An average of C+ (2.50) is required in life science and in one of the two remaining fields of earth science and physical science, with a C (2.00) in the third.

Life Science Course Requirements (minimum 45 credits)

Courses selected with the consent of an adviser which include two courses in biochemistry or organic chemistry, and at least one course in each of the following fields: ecology, general biology, general botany or plant biology, general zoology or animal biology, genetics, history of biology, microbiology, and physiology

Earth Science Course Requirements (minimum 22 credits)

At least one course selected with the consent of an adviser in each of the following: astronomy, physical and historical geology, meteorology, soil science, or limnology

Physical Science Course Requirements (minimum 25 credits)

Courses selected with consent of an adviser which include two courses in general chemistry, two courses in general physics with laboratory, and one elective course in physics

In addition to those courses listed in the majors above, all students will complete:

Professional Education Courses (minimum 30 credits)

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

SeEd 3356, 3357—Teaching Secondary School Science (1-4)

12 credits in SeEd 3651—Student Teaching in Science (1-3-6-9-12)

4 cr in SeEd 3152—Practicum: Secondary Education (1-7)

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

Second Languages and Cultures

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 teaching minors in French, German, Hebrew,

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. Sixteen credits in major courses numbered 3000 or above must be completed or in progress at the time of application.

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 students take courses in the areas Man and Society and Artistic Expression which relate to the specific language they are preparing to teach.

All students will meet the Modern Language Association minimum qualifications in language skills as required by the state of Minnesota certification requirements for modern foreign language teachers.

One or more minors must be selected from those subjects commonly taught in the high school; double majors are suggested when possible to increase employment possibilities. Upon entrance to the College of Education students must plan their program with an adviser in the Second Languages and Cultures program.

Foreign study and experience in the appropriate country are *strongly recommended* before student teaching. The student's proficiency in listening, speaking, reading, writing, culture and civilization, linguistics, and professional preparation will be tested before entrance into SeEd 3334, Teaching Second Languages, and SeEd 3631, Student Teaching in Second 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 50 credits)

50 credits of 3000- or 5000-level courses in French, to include courses in language, literature, culture, and linguistics. It is suggested that prior to any French linguistics course the student take an introductory linguistics course (Ling 1001 or 3001)

Professional Education Courses (minimum 38 credits)

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

9 credits in SeEd 3334, 3335—Teaching Second Languages (6, 3)

12 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)

SeEd 5122—Strategies for Teaching Culture in the Second Language Classroom
(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 French

Minor Courses (minimum 30 credits)

30 credits in 3000- and 5000-level courses in French to include courses in language, literature, and culture. Foreign study is *strongly* recommended.

Undergraduate Programs in the College of Education

Professional Education Courses (minimum 13 credits)

SeEd 3334—Teaching Second Languages (6)

3 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)

SeEd 5122—Strategies for Teaching Culture in the Second Language Classroom
(4)

Major in German

Major Courses (minimum 52 credits)

52 credits in 3000- and 5000-level courses in German to include courses in language, literature, culture, and linguistics. It is suggested that prior to any German linguistic course the student take an introductory course in linguistics (Ling 1001 or 3001). Foreign study is *strongly* recommended.

Professional Education Courses (minimum 38 credits)

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

9 credits in SeEd 3334, 3335—Teaching Second Languages (6-3)

12 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)

SeEd 5122—Strategies for Teaching Culture in the Second Language Classroom
(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)

32 credits in 3000- and 5000-level courses in German to include courses in language, literature, and culture. Foreign study is *strongly* recommended.

Professional Education Courses (minimum 13 credits)

SeEd 3334—Teaching Second Languages (6)

3 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)

SeEd 5122—Strategies for Teaching Culture in the Second Language Classroom
(4)

Major in Hebrew

Major Courses (minimum 52 credits)

52 credits in 3000- and 5000-level courses in Hebrew and Middle Eastern studies to include courses in language, literature, and culture. It is suggested that students take an introductory course in linguistics (Ling 1001 or 3001). Foreign study is *strongly* recommended.

Professional Education Courses (minimum 41 credits)

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

SeEd 3220—Teaching and Learning in the Hebrew School (3)

9 credits in SeEd 3334, 3335—Teaching Second Languages

12 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)

SeEd 5122—Strategies for Teaching Culture in the Second Language Classroom (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 Hebrew

Minor Courses (minimum 32 credits)

32 credits in 3000- and 5000-level courses in Hebrew and Middle Eastern studies to include courses in language, literature, and culture. Foreign study is strongly recommended.

Professional Education Courses (minimum 12 credits)

SeEd 3220—Teaching and Learning in the Hebrew School (3)

SeEd 3334—Teaching Second Languages (6)

3 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)

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.

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) (or)

Lat 3464—Advanced Undergraduate Latin: Catullus (5) (or) Lat 3471—Advanced Undergraduate Latin: Virgil (5)

3 credits from Lat 5701, 5702, 5703—Structure of Latin (1-2 cr each)

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 Architecture (5)

Clas 5105—Roman Painting and Mosaics (5)

Clas 5106—Greek Painting (5)

15 credits in Latin courses numbered Lat 3460 and above

Professional Education Courses (minimum 34 credits)

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

9 credits in SeEd 3334, 3335—Teaching Second Languages (6, 3)

12 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)

HED 3090—The School and Society (3)

Undergraduate Programs in the College of 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

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)
- 30 credits in 3000- and 5000-level courses in Russian literature, culture, and linguistics. It is suggested that prior to any Russian linguistics course students take an introductory course in linguistics (Ling 1001 or 3001). Foreign study is *strongly* recommended. See Russ 5021—Soviet Union Study Tour (12-24 cr).

Professional Education Courses (minimum 38 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- 9 credits in SeEd 3334, 3335—Teaching Second Languages (6, 3)
- 12 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)
- SeEd 5122—Strategies for Teaching Culture in the Second Language Classroom (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 Russian

Minor Courses (minimum 30 credits)

- Russ 3011, 3012, 3013—Russian Composition (3 cr each)
- Russ 3021, 3022, 3023—Russian Conversation (2 cr each)
- 15 credits in 3000- and 5000-level courses in Russian literature and culture. Foreign study is *strongly* recommended. See Russ 5021—Soviet Union Study Tour (12-24 cr).

Professional Education Courses (minimum 9 credits)

- SeEd 3334—Teaching Second Languages (6)
- 3 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)

Major in Spanish

Major Courses (minimum 50 credits)

- 50 credits in 3000- and 5000-level courses in Spanish, to include courses in language, literature, culture, and linguistics. It is suggested that prior to any Spanish linguistics course, students take an introductory linguistics course (Ling 1001 or 3001). Foreign study is *strongly* recommended.

Professional Education Courses (minimum 38 credits)

- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- 9 credits in SeEd 3334, 3335—Teaching Second Languages (6, 3)

- 12 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)
SeEd 5122—Strategies for Teaching Culture in the Second Language Classroom
(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 30 credits)

- 30 credits in 3000- and 5000-level courses in Spanish, to include courses in language, literature, and culture. Foreign study is *strongly* recommended.

Professional Education Courses (minimum 13 credits)

- 6 credits in SeEd 3334—Teaching Second Languages (6)
3 credits in SeEd 3631—Student Teaching in Second Languages (3-6-9-12)
SeEd 5122—Strategies for Teaching Culture in the Second Language Classroom
(4)

Social Studies

Majors in social studies should select one of the social sciences for major emphasis and should meet the requirements specified for that emphasis as outlined in the next pages. Because most social studies positions involve teaching in more than one social science field, all majors are expected to complete the supporting field requirements as well as the requirements for the field of emphasis. Programs must be planned with the help of an adviser, since education courses are taken in sequence.

In Minnesota, the State Department of Education requires completion of a competency-based program in social studies education prior to certification. A description of the program at the University is available in 152 Peik Hall or from the Education Career Development Office, 1425 University Avenue S.E. Successful completion of one of the programs for majors involves demonstration of all required competencies plus completion of an additional teaching minor or major or demonstration of three additional competencies elected with the approval of an adviser in social studies education. These additional competencies may be demonstrated either in the required program or by satisfying requirements for some additional courses. Completion of the requirements qualifies a student for recommendation for Minnesota certification to teach social studies full time in junior high schools. Some students (particularly those with majors in other teaching fields) may be able to omit certain parts of the education program by demonstrating that previous experiences have enabled development of some of the competencies required of a major. Consult the undergraduate coordinator in secondary social studies education.

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 courses taken in the social sciences.

Anthropology Emphasis

Major Courses (minimum 60 credits)

Area Requirement

- A course in anthropology or in any of the other social sciences in one of the

Undergraduate Programs in the College of Education

following areas: the Soviet Union, Asia, or Africa. The course may count toward credit requirements listed below.

- Anthropology**—minimum 28 credits including
Anth 1002—Introduction to Anthropology (5)
Anth 5151—Cultural Change and Development (5)
Anth 5171—Method and Theory in Archaeology (5) (or) HED 5174—
Method in Anthropology and Education (3)
One course in ethnology from Group II in *CLA Bulletin*
One additional topical course from Group I in *CLA Bulletin*
One additional course at the 3000 or 5000 level
- Supporting Fields**—minimum 29 credits including
Hist 1301, 1302—American History (4 cr each)
Pol 1001—American Government and Politics (5)
One course in each of the areas of economics, geography, history, and sociology. No additional course in psychology is required since one is required of all education students.
One additional course at the 3000 or 5000 level
- One additional course to meet major requirement of 60 credits. If HED 5174 is substituted for Anth 5171, take the additional course from anthropology.

Professional Education Courses and Special Requirements for All Students are listed at the end of the major requirements for individual emphases.

Economics Emphasis

Major Courses (minimum 60 credits)

Area Requirement

A course in economics or in any of the other social sciences in one of the following areas: the Soviet Union, Asia, or Africa. Econ 5307 or 5313 may be used to satisfy the Soviet Union requirement. The course may count toward credit requirements listed below.

- Economics**—minimum 32 credits including
Econ 1001—Principles of Macroeconomics (4)
Econ 1002—Principles of Microeconomics (4)
Econ 3101—Microeconomic Theory (4)
Econ 3102—Macroeconomic Theory (4)
One course in each of these areas as designated in *CLA Bulletin*: labor economics, comparative economics, public finance, and either economic development or international economics
- Supporting Fields**—minimum 26 credits including
Hist 1301, 1302—American History (4 cr each)
Pol 1001—American Government and Politics (5)
One course in each of the areas of anthropology, geography, and sociology.
No additional course in psychology is required since one is required of all education majors.
One additional course at the 3000 or 5000 level
- One additional course taken in economics or one of the supporting fields to meet the major requirement of 60 credits

Professional Education Courses and Special Requirements for All Students are listed at the end of the major requirements for individual emphases.

Geography Emphasis

Major Courses (minimum 65 credits)

Area Requirement

A course in geography or in any of the other social sciences in one of the following areas: the Soviet Union, Asia, or Africa. The course may count toward credit requirements listed below.

Geography—minimum 35 credits including

Geog 1301—Human Geography (6)

Geog 1401—Physical Geography (5)

Geog 3001—Introduction to Geographic Inquiry (4)

One regional course (4 cr); one course in geographic techniques (4 cr); one additional topic study (4 cr); and two additional courses at the 3000 or 5000 level

Supporting Fields—minimum 30 credits including

Hist 1301, 1302—American History (4 cr each)

Pol 1001—American Government and Politics (5)

One course in each of the areas of anthropology, economics, and sociology.

No additional course required in psychology since one already is required of all education majors.

Professional Education Courses and Special Requirements for All Students are listed at the end of the major requirements for individual emphases.

History Emphasis

Major Courses (minimum 61 credits)

Area Requirement

A course in history or in any of the other social sciences in one of the following areas: the Soviet Union, Asia, or Africa. The course may count toward credit requirements listed below.

History—minimum 35 credits including

Hist 1001, 1002, 1003—Introduction to Modern European History (4 cr each)

Hist 1301, 1302—American History (4 cr each)

Supporting Fields—minimum 26 credits including

Pol 1001—American Government and Politics (5)

One course in each of the areas of anthropology, economics, geography, and sociology. No additional course required in psychology since one already is required of all education majors.

Professional Education Courses and Special Requirements for All Students are listed at the end of the major requirements for individual emphases.

Political Science Emphasis

Major Courses (minimum 60 credits)

Area Requirement

A course in political science or in any of the other social sciences in one of the following areas: the Soviet Union, Asia, or Africa. The course may count toward credit requirements listed below.

Political Science—minimum 30 credits

Pol 1001—American Government and Politics (5)

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Pol 1051—Introduction to Political Analysis (5)

20 credits in courses at the 3000 and 5000 levels, including one in each of the areas of political theory, comparative government and politics, international relations, politics and behavior, and American governmental systems and processes as identified in the *CLA Bulletin*

Supporting Fields—minimum 29 credits including

Hist 1301, 1302—American History (4 cr each)

One course in each of the areas of anthropology, economics, geography, and sociology. No additional course required in psychology since one already is required of all education majors.

Additional social science courses to meet major requirement of 60 credits

Professional Education Courses and Special Requirements for All Students are listed at the end of the major requirements for individual emphases.

Psychology Emphasis

Major Courses (minimum 60 credits)

Area Requirement

A course in one of the social sciences in one of the following areas: the Soviet Union, Asia, or Africa. The course may count toward credit requirements listed below.

Psychology—minimum 34 credits including

Psy 1004, 1005—Introductory Laboratory Psychology (5 cr each)

Psy 3011—Introduction to Psychology of Learning (4)

Psy 3101—Introduction to Personality (4) (or) Psy 3604—Introduction to Abnormal Psychology (4)

Psy 3124—Psychology of Individual Differences (4)

Psy 3201—Introduction to Social Psychology (4)

Psy 3801—Introduction to Measurement and Statistical Methods (4)

CPsy 5303—Adolescent Psychology (4)

Supporting Fields—minimum 26 credits including

Hist 1301, 1302—American History (4 cr each)

Pol 1001—American Government and Politics (5)

One course in each of the areas of anthropology, economics, geography, and sociology

Professional Education Courses and Special Requirements for All Students are listed at the end of the major requirements for individual emphases.

Sociology Emphasis

Major Courses (minimum 60 credits)

Area Requirements

A course in sociology or in any of the other social sciences in one of the following areas: the Soviet Union, Asia, or Africa. The course may count toward credit requirements listed below.

Sociology—minimum 32 credits including

Soc 1001—Introduction to Sociology (4)

One course in each of the following areas as identified in the *CLA Bulletin*: criminology and deviance, social psychology, social change and social movements, social organization, family studies, and minority group relations

One additional course at the 3000 or 5000 level

Physical Education, Recreation, and School Health Education

Supporting Fields—minimum 26 credits including

Hist 1301, 1302—American History (4 cr each)

One course in each of the areas of anthropology, economics, geography, and political science. No additional course required in psychology since one is required of all education majors.

One additional course at the 3000 or 5000 level

One additional course in sociology or one of the social sciences to meet the major requirement of 60 credits

Professional Education Courses and Special Requirements for All Students are listed below

In addition to the requirements for each emphasis as detailed above, students will complete the following:

Professional Education Courses (minimum 52 credits)

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

4 credits in SeEd 3152—Practicum: Secondary Education (1-7)

SeEd 3156, 3157—The Social Sciences and Social Studies (3 cr each)

SeEd 3348, 3349, 3350, 3351—Teaching Social Studies in Secondary Schools (3, 3, 3, 1 cr)

15 credits in SeEd 3641—Student Teaching in Social Studies (3-15)

HEd 3090—The School and Society (3)

Two additional credits selected with approval of the adviser

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 Service, 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

John Alexander, Acting Director, 109 Cooke Hall

The School of Physical Education and Recreation offers professional programs of instruction in physical education, coaching, 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.

Physical activity courses numbered below 1500 are open to any University student who may elect them as a part of general education in accordance with the regulations of the college in which he or she is enrolled. All courses involve

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participation requiring a high energy expenditure level and are to be considered high intensity in nature unless otherwise indicated. It is therefore recommended that students know their health status and any limitations on their ability to safely participate in the activities involved in the course in which they plan to register. Students who have questions about their health status should seek advice from a personal physician. See Section IV of this bulletin and the *Class Schedule* for further information about each activity course.

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 Admissions and Records early in the previous spring quarter and 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 a 7.00 numeric average if transfer is from the General College; completion of freshman English or equivalent; and 3 credits in physical education activity courses. Consideration will be given to entrance examination test scores and background experience. Because of the strenuous activity in the physical education curriculum, each applicant must satisfactorily pass a physical examination before final acceptance.

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+ (2.50) average in the 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.

Major in Physical Education

Related Course Requirements

One course in speech

NSci 1004, 1005—The Physical World: Physics, Chemistry (4 cr each)

Phys 1061—Physics of Human Motion (4)

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 for Nursing and Physical Therapy Students (5) (and) PE 3115—Physiological Application to Sports (3)

Major Courses (minimum 50 credits)

1. Activities—10 credits

9 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 of in PE 1980

1 credit to demonstrate competency at an advanced level through registration in an approved physical education activity or in PE 1981

2. Required of All—31 credits

PE 1521, 1522—Gymnastics (1 cr each)

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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 3100—Adapted Physical Education (3)

PE 3111—Mechanics of Movement (3)

PE 3113—Motor Learning and Motor Development (4)

PE 3120—Curriculum and Administration (5)

PE 3125—Philosophy of Physical Education and Sport (3) (or)

PE 3130—History of Physical Education and Sport (3)

PE 3150—Introduction to Evaluation (4)

3. Area of Emphasis or Electives

Each student must complete one of the following areas:

a. Adapted Physical Education—10 credits

PE 3100—Adapted Physical Education (3)

PE 3625—Supervised Practical Experience (3)

SpEd 5101—Education of Exceptional Children (3)

One credit in an individual study project in adapted physical education

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—Aquatic 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

Completion of the coaching certificate program meets this requirement

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)

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

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Men:

PE 3160—Programming Recreational Sports (3)
4 credits from PE 3625, 3900

Women:

PE 3160—Programming Recreational 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 33 credits)

PE 1875—Orientation to Teaching Physical Education (2)
PE 3323—Teaching Physical Education (5)
PE 3607—Student Teaching: College (1)
PE 3621—Student Teaching: Elementary (6)
PE 3622—Student Teaching: Secondary (6)
SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
HEd 3090—The School and Society (3)

Special Requirements for 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, or a regular teaching minor of the College of Education

Electives to complete 186 credits

Minnesota Public Secondary School Coaching Certification for Boys and Girls Interscholastic Sports

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 Division of Physical Education for admission.

Students who successfully complete this program will be recommended for certification for coaching both girls and boys interscholastic sports in Minnesota public secondary schools.

All Required (minimum 28 credits)

Anat 1027—Anatomy for Physical Education Students (4) (or) PE 3110—Human Anatomy (3)
Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2) (or) current Standard American Red Cross First Aid card
PubH 3385, 3386—Physiological Hygiene (4 cr each) (or) PE 3115—Physiological Application to Sport (3)
PE 3111—Mechanics of Movement (3)
PE 3113—Motor Learning and Motor Development (4)
PE 3114—Prevention and Care of Injuries (3) (or) PE 5620—Practicum: Prevention and Care of Injuries (3)
PE 3143—Organization and Management of Sport (3)
PE 3125—Philosophy of Physical Education and Sport (3) (or) PE 3130—History of Physical Education and Sport (3)

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PE 3624—Student Teaching: Coaching (3)

2 credits from PE 3170, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3370, 3625, 5123

1 credit from PE 1080, 1081, 1082, 1083, 1650, 1651, 1656, 1657, or the equivalent

Required of All: one sport season of participation on an interscholastic, extramural, intercollegiate team, or equivalent

Dance Minor

The minor in dance requires a minimum of 30 credits and is open to all College of education students interested in teaching dance. Consultation should be held with a dance adviser as early as possible to plan individual programs.

Minor Courses (minimum 30 credits)

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

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

Ten credits from PE 1020, 1022, 1122, 1023, 1123, 1517, 1518, 1618, 1718, 3180, 3181, 3321, 3326, 3392, 3394, 3395, 3396, 3397, 5700

Ten credits selected from two of the following areas with consent of the dance adviser: art, music, physical education, psychology, theatre

RECREATION AND PARK ADMINISTRATION

The purpose of this professional degree program is to prepare individuals for assuming leadership, supervisory, or beginning administrative responsibilities in various park, recreation, and leisure service agencies.

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 and 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 a minimum of 1 year of liberal education course work (at least 45 quarter credits) including the freshman English requirement.
2. An overall grade point average of at least C (2.00) with preference given to applicants with a higher average.
3. Assessment of personal and professional characteristics through recommendations and interviews; preference is given on the basis of an evaluation of the nature and scope of previous recreation and/or related experience.

The curriculum leads to the B.S. degree and is designed to provide for a program planned individually in consultation with a major adviser. Students must file a program during the second quarter after admission indicating any emphasis within the broad field of recreation, parks, and leisure services. For graduation, the student must complete a minimum of 186 credits and earn an average of C+ (2.50) in course work with a "Rec" prefix. A minor is not required of majors in this program.

Major in Recreation and Park Administration

Related Course Requirements

Students are expected to complete the liberal education distribution requirements as detailed in this section of the bulletin. In addition, Spch 1101 is required in Group A, and Soc 1001 and 1002 are required in Group C. Majors in this program must have a minimum of 23 credits in Group C. The special requirements for graduation from the college must be completed (See Special Requirements for All Students listed after the major). All majors in the curriculum must complete Hlth 1500 and a minimum of 6 credits at the 3000 or 5000 level from CSPP, EdAd, Educ, HEd, PsyF, or SeEd designated courses.

Major Requirements (minimum 92 credits)

- Rec 1520—Orientation to Leisure and Recreation (5)
- 15 credits in Rec 3700—Senior Internship (1-15)
- Rec 5130—Recreation and Park Areas and Facilities (5)
- Rec 5140—Recreation Programming (5)
- Rec 5150—Principles and Practices of Recreation Administration (5)
- 20 credits in courses designated "Rec" selected with the consent of the adviser and related to the area of concentration
- 16 credits in nonrecreation (Rec) courses at the 3000 or 5000 level related to the area of concentration
- 21 credits at the 3000 and 5000 levels selected in consultation with the major adviser

Special Requirements for All Students

- PsyF 3380—Introduction to Human Relations (3)
- PubH 3004—Basic Concepts in Personal and Community Health (4)
- 3 credits in physical education selected from PE 1001 through 1174

Electives to complete 186 credits

Minor in Camping and Outdoor Education

This minor is designed to prepare individuals for part-time and volunteer work in camping and outdoor education. It is a nonteaching minor and cannot be used to meet minor requirements in any curriculum. Enrollment is limited, and applications and proposed programs must be received by the division no later than May 15 of the year prior to anticipated admittance. A student must be a junior to enter this program.

Thirty credits must be chosen in consultation with a minor adviser, and the program must be approved by the minor adviser, the major adviser, and the Division of Recreation, Park, and Leisure Studies. Required are a minimum of 18 credits in coursework with the "Rec" prefix and a minimum of 12 credits in guided related electives. An example of a proposed minor is shown below:

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)
- 3 credits in Rec 3700—Senior Internship (1-15)
- Rec 5170—Camp Administration (3)
- Rec 5300—Foundations of Outdoor Education (3)

Physical Education, Recreation, and School Health Education

Guided Related Electives (minimum 12 credits)

- CPsy 1301—Child Psychology (4)
- Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)
- Th 1101—Introduction to Theatre Arts (4)
- EBB 3004—Fundamentals of Ecology (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. The minor curriculum meets the minimum state of Minnesota certification standards for teaching health in the public school.

Before applying for admission to the College of Education, a student must have completed 90 credits in liberal arts areas with at least a C (2.00) average in all previous work and a C+ (2.50) average in all health and public health courses that will apply toward the major. 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 of Speech Communication: Oral Communication (4)
(or) 1102—Fundamentals of Speech Communication: Communication Process (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: Physics, Chemistry (4 cr each)
- MicB 3103—General Microbiology (5)
- Soc 1001—Introduction to Sociology (4)
- Anth 1002—Introduction to Anthropology (5)

Major Courses (minimum 40 credits)

- Hlth 1500—American Red Cross Standard First Aid and Personal Safety (2)
- Hlth 3100—Curriculum in 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 (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 Practice (6)
- PubH 5072—Community and School Health Education (3) (or) PubH 5080—In-
troduction to Community Health Education (3)
- PubH 5152—Environmental Health (2)
- Anat 1027—Anatomy for Physical Education Students (4) (or) PE 3110—Ana-
tomy (3)

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FSoS 5001—Human Sexual Behavior (4)

PsyF 5162—Personality and Social Development (3) (or) CPsy 5303—Adolescent Psychology (4)

Professional Education Courses (minimum 37 credits)

Hlth 3300—Instructor's Course in 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—Pre-Fall 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: The Human Body (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: Physics, Chemistry (4 cr each)

Minor Courses (minimum 29 credits)

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

Hlth 3100—Curriculum in 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 (5)

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 5303—Adolescent Psychology (4)

FSoS 5001—Human Sexual Behavior (4)

Professional Education Courses (minimum 12 credits)

Hlth 3300—Instructor's Course in 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, 3603

Psychoeducational Studies

Maynard Reynolds, Chairman, 249 Burton Hall

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

- CSPP 5101—Foundations of Career Development
- CSPP 5110—Counseling Procedures
- CSPP 5130—Introduction to Guidance
- SchP 5550—Seminar: Psychological Education
- SchP 5650—Practicum: Psychological Education
- SpEd 5101—Education of Exceptional Children
- SpEd 5107—Mainstreaming: Issues in Individualizing Instruction
- SpEd 5112—Education of Learning Disabled 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 a program.

Social, Psychological, and Philosophical Foundations of Education

Clyde A. Parker, Chairman, 206 Burton Hall

The areas of social and philosophical 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 Minnesota 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.

Undergraduate Programs in the College of Education

In the third quarter of the sophomore year, students should apply at the Office of Admission 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 students must have a GPA of at least 2.00 for all courses taken at this University and a GPA of at least 2.30 for 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 and 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 (4)

Math 1111—College Algebra and Analytic Geometry (5)

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

BioC 1301—Elementary Biochemistry I (5)

Phys 1031—Introductory Physics: Measurement and Applications (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 31 credits)

AgEd 1001—Introduction to Agricultural Education (1)

AgEd 1010—History and Philosophy of Vocational and Community Education (3)

AgEd 3010—Organization and Direction of FFA Activities (2)

AgEd 3031—Student Teaching (8)

AgEd 3041—Practicum: Agricultural Education Technology (1-3)

AgEd 5028—Teaching Methods in Agricultural Education (5)

AgEd 5061—Program Planning and Evaluation (3)

AgEd 5071—Supervised Occupational Experiences in Agriculture (3)

SeEd 3155—Introduction to Secondary School Teaching (5)

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 1011—General Biology (5) (and) Biol 3011—Animal Biology (or) Biol 3012—Plant Biology (or) Bot 1012—Plants Useful to Man (or) Biol 1106—General Zoology

Major Courses (minimum 80 credits)

AgEd 5072—Practicum: Agribusiness and Industry (3)
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)
AnSc 1100—Introduction to Animal Science (5)
AnSc 1401—Principles of Animal Nutrition (5)
AgEn 1020—Agricultural Shop-Metalwork (4)
AgEn 5020—Program Planning and Instructional Methods in Agricultural Mechanics (4)
Electives—21 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—Plant Biology (or) Bot 1012—Plants Useful to Man

Major Courses (minimum 80 credits)

AgEd 5072—Practicum: Agribusiness and Industry (3)
AgEc 1020—Principles of Macroeconomics (5)
AgEc 1030—Principles of Microeconomics (4)
Soil 1222—Introduction to Soil Science (4)
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)
PlPh 3131—Survey of Plant Physiology (4) (and) 3132—Laboratory (2)
Electives—18 credits in horticulture and 15 credits in technical agriculture

Undergraduate Programs in the College of Education

Professional Education Courses

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

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 such courses as 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. Students are encouraged to plan programs with a business education adviser.

A student who has had high school courses or experience in bookkeeping/accounting may be exempted 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 Examination for Credit). A student who has had related occupational experience sufficient for vocational certification may have all the credits required in BsEd 5114 waived. This matter should be discussed with the major adviser.

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

PsyF 5120—Educational Measurement in the Classroom (3)
3 credits of mathematics

Major Courses (minimum 40 credits)

Econ 1001—Principles of Macroeconomics (4) (and) Econ 1002—Principles of Microeconomics (4)
MIS 3098—Elementary Cobol (1)
MIS 3099—Introduction to Programming Using Fortran (1)
MIS 5100—Computers and Systems Design (4)
GC 3531—Writing for Business and the Professions (4)
Acct 1050, 1051—Principles of Accounting (4 cr each)

Vocational and Technical Education

- 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 division recommends that these be in courses numbered at the 3000 and 5000 levels in business administration, economics, instructional media, business education, guidance, psychology of adolescence, social foundations of education, advertising, occupational psychology, office occupational experience, and pre-fall student teaching. A C+ (2.50) average in all major and professional courses completed, except SeEd 3150 and 3155, and HEd 3090, is required for admission to student teaching and for graduation.

Accounting and Data Processing

Major Courses (minimum 39 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 5101—Introduction to Management Information Systems (4)
- BFIn 3000—Finance Fundamentals (4)
- 6 credits in BsEd 5114—Office Occupational Experience (1-18)
- 9 credits at the 3000 and 5000 levels from accounting, data processing, finance, management information systems, and quantitative analysis

Professional Education Courses (minimum 8 credits)

- BsEd 3303—Teaching Accounting and Data Processing (2)
- VoEd 5300—Philosophy and Practice of Vocational Education (3)
- 3 credits in education courses

Basic Business and/or Economics

Major Courses (minimum 36 credits)

- Econ 3101—Principles of Microeconomic Theory (4)
- Econ 3102—Principles of Macroeconomic Theory (4)
- Econ 3751—Money and Banking (4)
- BLaw 3088—Law of Personal Property, Sales Contracts, Commercial Paper, and Wills and Estates (4)

Undergraduate Programs in the College of Education

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

Ins 3100—Risk Management and Insurance (4)

12 credits at the 3000 and 5000 levels from economics and business administration, including at least one of the following: Mktg 3098; Econ 5041, 5051, 5053, 5055

Professional Education Courses (minimum 5 credits)

BsEd 3302—Teaching Basic Business Subjects (2)

3 credits in education courses

Comprehensive Business

Major Courses (minimum 48 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)

6 credits in BsEd 5114—Office Occupational Experience (1-18)

24 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 14 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)

VoEd 5300—Philosophy and Practice of Vocational 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

In addition to the possession of a Bachelor's degree in business education, the state of Minnesota requires that special certification requirements be met to teach in certain vocational programs at the secondary and postsecondary levels. Information about these specialized vocational certificates should be obtained from the major adviser.

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 liberal arts areas. They may enter later if they satisfy the admission requirements. Major advisers should be consulted as early as possible.

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

A student preparing for vocational certification must have had experience, preferably 1,000 hours, in a distributive occupation prior to admission. The equivalent of 4,000 hours of marketing related occupational experience is required for graduation. The student who has had practical business experience or has completed a high school or post-high school cooperative distributive education program may be exempted from part or all of DE 3100. The extent of this exemption will depend on the quality, amount, and recency of such experience. Students who plan to work part time to complete the occupational experience requirement while enrolled will usually have to attend one or two summer sessions in order to meet graduation requirements.

Students are expected to participate in the student organization for distributive education majors as part of their preparation for becoming advisers to high school or postsecondary vocational student groups. Students are also 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 (minimum 69 credits)

3 credits elected from mathematics courses or those including content in business, financial, or merchandise mathematics

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

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

GC 1537—Salesmanship (3)

GC 1553—Marketing: Principles of Management (5) (or) Mgmt 3001—Fundamentals of Management (4)

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

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

Mktg 3000—Principles of Marketing (4)

Mktg 3065—Retail Management (4)

Mktg 3077—Advertising and Sales Promotion (4)

BsEd 1501—Beginning Typewriting (2) (or) GC 1544—Beginning Typewriting (3)

Five courses to be elected from the following: GC 1513, 1535, 1641, 1731; Jour 1201, 5251; Psy 5751; IR 3002; Mktg 3075, 3095, 3098; TexC 3643

Also recommended (for artistic expression): Dsgn 1521, 1525; Ind 1540; GC 1536

Professional Education Courses (minimum 59 credits)

DE 1100—Introduction to Distributive Education (3)

DE 3100—Distributive Occupational Experience (1-15)

Undergraduate Programs in the College of Education

- DE 3302, 3303—Methods: Distributive Education (4 cr each)
- 12 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 5115—Postsecondary Business and Distributive Education (3) (or) DE 5120—Business and Distributive Programs for Adults (3)
- DE 5305—Teaching Merchandise Display (3)
- SeEd 3150, 3155—Introduction to Secondary School Teaching (5 cr each)
- HEd 3090—The School and Society (3)
- CSPP 5110—Counseling Procedures (3) (or) CSPP 5130—Introduction to Guidance (3)
- VoEd 5300—Philosophy and Practice of Vocational Education (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, educational technology (e.g., SeEd 5000, 5001, 5002, 5003, 5004), consumer problems, guidance and counseling, conference leading, psychology of adolescence, social foundations of education, education of the disadvantaged, textiles, design, occupational psychology, vocational psychology, vocational education, and pre-fall student teaching.

The C + (2.50) major average for admission to the program, admission to student teaching, and for graduation is required for GC 1537, Mktg 3000, 3065, 3077, and for all distributive education (DE) courses.

Minor in Distributive Education

Minor Courses (minimum 39 credits)

- Econ 1001—Principles of Macroeconomics (4) (and) Econ 1002—Principles of Microeconomics (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)
- 3 credits in De 3100—Distributive Occupational Experience (1-15)
- DE 3302—Methods: Distributive Education (4)
- 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

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 Vocational Home Economics Certification which is required for teaching in federally aided schools.

During the first 2 years, the student registers in the College of Home Economics. Early in the quarter in which the student will complete 90 credits of specified courses at the designated level, and after completion of HEED 1500 and/or HEED 1510, the student applies for joint registration with the College of Education. The application form and information about admission procedures should be obtained at the Office of Admissions and Records, 130 Coffey Hall, St. Paul Campus. Application for admission for joint registration should be made during the regular academic year.

In order to be eligible for joint registration, for entrance into clinical experience, and for certification, a grade point average of C + (2.50) in all major courses and C (2.00) overall must be maintained.

Departmentally approved alternates may be substituted for specified courses. Advisers will have information about electives. Students are expected to complete the liberal education distribution requirements as detailed in this section of the bulletin. The three curricular options, designed to include appropriate courses to satisfy the liberal education distribution requirements, are (1) consumer-homemaking; (2) family life; and (3) occupational education 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 3551—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 Group D, Artistic Expression

Professional Education Courses (minimum 34 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)

VoEd 5300—Philosophy and Practice of Vocational Education (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—recommended is GC 1442

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

Consumer-Homemaking Option

Related Course Requirements

- Anth 1102—Introduction to Anthropology (5)
- AgEc 5580—Economic Organization of the Household (4) (or) FSoS 5220—Family Economics (3)
- Chem 1004, 1005—General Principles of Chemistry (5 cr each) (or) NSci 1004, 1005—The Physical World: Physics, Chemistry (4 cr each) (and) GC 1132—Biological Science: The Human Body (5)
- Rhet 1222—Public Speaking (4)
- CPsy 1301—Child Psychology (4)
- Four or more elective credits in human development and one course from the following selected in consultation with an adviser: FScN 1020, MicB 3103, Biol 3051, PubH 3151

Major Courses (minimum 52 credits)

- FScN 1212, 1213—Scientific Principles of Food Preparation I, II (4, 3)
- 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 Dwellings 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 3500—Family Consumer Decision Making (3)
- FSoS 5200—Family Relationships (5)
- Two courses in consumer decision making and one elective from each of the following areas, all to be selected in consultation with an adviser: consumer-oriented courses in textiles and clothing, equipment, housing, furnishings, or 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 1102—Introduction to Anthropology (5)
- Biol 1011—General Biology (5)
- Rhet 3266—Discussion Methods (4)
- 12 credits of electives in physical or biological science

Major Courses (minimum 65 credits)

- 50 credits distributed among the following areas with a minimum of 6 credits in each area and 15 credits in human growth and development: anthropology, family social science, psychology, sociology, and other areas relating to the family exclusive of home economics
- 15 credits in home economics courses listed under design, food science and nutrition, textiles and clothing. FSoS 3260 or 3264, 3263 or 5260, 5220 may be included.

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

- FScN 1020—Introductory Microbiology
- 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, 1005—The Physical World: Physics, Chemistry (4 cr each)
- Rhet 1222—Public Speaking (4)
- CPsy 1301—Child Psychology (4)
- Electives in human growth and development (4 or more)

Major Courses (minimum 25 credits)

- FSoS 1401—Household Equipment (3)
- FSoS 3260—Home Management Principles (3)
- FSoS 5200—Family Relationships (5)
- FScN 1212—Scientific Principles of Food Preparation I (4)
- FScN 1602—Principles of Nutrition (4)
- Electives selected with consent of adviser—6 credits

Cluster Requirements:

Food Service Cluster (minimum 18 credits)

- FScN 1700—Introduction to Hospitality and Food Service Management (2)
- FScN 3472—Principles of Food Purchasing (4)
- FScN 3730—Quantity Food Purchasing and Production (5)
- Electives to be selected in consultation with an adviser

Child Development and Care Cluster (minimum 18 credits)

- CPsy 3330—Directed Experiences With Children (4)
- CPsy 3331—Processes of Socialization of Children (4)
- Elem 3378—Social Learning in Early Childhood Education (3)
- Electives to be selected in consultation with an 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 (4)
- 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)
- Electives to be selected in consultation with an adviser

Undergraduate Programs in the College of Education

Professional Education Courses (minimum 15 credits)

- 3 credits in HEEd 5336—Home Economics Occupational Experience (1-9)
- HEEd 3603—Clinical Experience: Teaching Home Economics Occupations (9)
- HEEd 3613—Fieldwork: Home Economics Occupational Education (3)

Optional Program for Teacher Coordinator Certification

Home economics teachers who wish to prepare themselves for the position of coordinator of home economics occupational programs in secondary schools may do so by taking additional occupational experience and a minimum of 6 additional credits including coordination techniques from:

- HEEd 5106—Coordination Techniques in Home Economics Occupational Education (2)
- 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 (minimum 52 credits)

- GC 1431—Fundamental College Mathematics Programs (5) (or) GC 1452—Mathematics and Measurements II (5) (or) Math 1131—Finite Mathematics (5) (or) Math 1111—College Algebra and Analytic Geometry (5)
- Spch 1101—Fundamentals of Speech Communication: Oral Communication (4)
- Rhet 3551—Professional Writing (4) (or) Rhet 3562—Scientific Technical Writing (4)
- NSci 1004, 1005—The Physical World: Physics, Chemistry (4 cr each) (or) Phys 1014—Introductory Physics: Concepts in Physics (4) (and) Phys 1015—Introductory Physics Laboratory (1)
- Minimum of 8 credits to be selected from Econ 1001, 1002, 3501; IR 3002; GC 1232; SSci 3402; CSPP 5101

Major Courses (minimum 50 credits)

- Ind 1600—Drafting (3)
- Ind 1602—Drawing and Design (3)
- Ind 1604—Industrial Materials and Measurement (3)
- Ind 1606—Introduction to Industrial Processes (3)

6 credits from each of two (12 credit total) of the following areas:

Construction:

- Ind 1610, 1612—Construction Technology I, II (3 cr each)

Graphic Communication:

- Ind 1620, 1622—Graphic Communication I, II (3 cr each)

Manufacturing:

- Ind 1630, 1632—Manufacturing I (Processes), II (Production) (3 cr each)

Power and Energy:

- Ind 1640—Introduction to Power and Energy (3)
- Ind 1642—Power and Energy Systems (3)

Transportation:

- Ind 1650, 1652—Transportation I, II (3 cr each)

Occupational Experience: Students without a minimum of 1,500 hours of verified work experience related to their technical area(s) of concentration will complete 8 credits to be selected from Ind 5100, 5101, 5102, 5103 (1-5 cr each)

- Ind 3160—Industrial Education Instructional Management (3)

Electives to complete the 50-credit minimum to be selected from: Ind 1610, 1612, 3110, 3111, 3112, 1620, 1622, 3120, 3121, 3122, 1630, 1632, 3130, 3131, 3132, 1640, 1642, 3140, 3141, 3142, 1650, 1652, 3150, 3141, 3152, 5100, 5101, 5102, 5103

Professional Education Courses (minimum 58 credits plus Career Planning Practicum)

- Ind 1300—Introduction to Industrial Education Teaching (2)
- Ind 3700, 3702, 3704—Student Teaching (3 cr each) plus 1 credit in Ind 3701—Student Teaching Seminar (1-3)
- Ind 3750—Industrial Practices and Processes (3)

Undergraduate Programs in the College of Education

- Ind 5301—Tests in Industrial Subjects (3)
Ind 5303—Instructional Aids (3)
Ind 5320—Vocational Guidance (3)
Ind 5330—Industrial Course Construction (3)
Ind 5360—Industrial Instruction (3)
VoEd 5300—Philosophy and Practice of Vocational Education (3) (or) Ind 5325—Foundations of Industrial Education (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)
Maximum of 8 credits in Ind 1800, 1801, 1802, 1803, 3801, 3802, 3803, 3804—Career Planning Practicum (1 cr each). Students must register each quarter except during the quarter of student teaching and any quarter of full-time off-campus intermediate, advanced, or specialized technical course registration.

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 be selected in consultation with adviser 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 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 about this cooperative clinical training program are invited to confer or correspond with one of the major advisers.

Major in Vocational-Industrial Education

Related Course Requirements

77 credits selected with the consent of an adviser 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)

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 awarded to the student after completion of all other degree requirements.

Vocational and Technical Education

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—Foundations 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 3706, 3901, 3902, 5305, 5344; 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.

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 an initially certifying degree.

M.Ed. programs are extremely flexible. Each student's program is 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; College of Education graduates apply at the Education Window, and all others apply at 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 criteria include 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
Art Education
Business Education
Distributive Education
Early Childhood Education
Elementary Education
English Education
Home Economics Education
Mathematics Education
Music Education
Physical Education
School Health Education

Science Education
Second Languages and
Cultures Education
Social Studies Education
Special Education

Plan II for noncertified
professional personnel:

Agricultural Education
Distributive Education
Home Economics Education
Recreation and Park
Administration

Following admission to an M.Ed. program, the student and his or her adviser design a proposed program suited to the student's needs and interests. The proposed

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program is then submitted to a departmental committee for approval. No more than 20 percent of the credits may be taken on the S-N grading system; no more than 12 credits taken prior to admission may be used in a program; and, in most instances, a maximum of 12 credits taken in Continuing Education and Extension may be used. All work submitted for the degree must be concluded within 7 years after acceptance into the program. 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 during 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 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 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 Business Administration
Intermediate Unit in Educational
Administration
Secondary School Administration
Elementary School Administration
Counseling

School Psychological Services
Special Education
Business Education
Distributive Education
Mathematics Education
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 prior to 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.

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 the 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	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		
Community Education	no	Education (Adult) or Educational Administration or Recreation and Park Administration			
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 (see Second Languages)					
General Curriculum	no	Education or Secondary Education	Education		General Curriculum

<i>Field or Emphasis</i>	<i>M.Ed.</i>	<i>M.A.</i>	<i>Ph.D.</i>	<i>Ed.D.</i>	<i>Specialist</i>
Higher Education	no	Education	Education		Supervision
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	
Instructional Systems	no	Education or Secondary Education	Education		
Library	no	Library School			
Mathematics Education	yes	Mathematics Education	Education		Mathematics Education
Music Education	yes	Music Education	Education		
Physical Education	yes	Physical Education or Education	Physical Education or Education	Physical Education	
Psychological Foundations	no	Educational Psychology	Educational Psychology		
Recreation and Park Administration	yes	Recreation and Park Administration or Education	Physical Education or Education		
School Psychology	no	Educational Psychology	Educational Psychology		School Psychology
School Health Education	yes	Physical Education or Education	Physical Education or Education		
Science Education	yes	Education or Secondary Education	Education		
Second Languages and Cultures Education	yes	Education or Secondary Education	Education		
Secondary Education	See fields	Education or Secondary Education	Education		
Social and Philosophical Foundations of Education	no	Social and Philosophical Foundations of Education	Education		
Social Studies	yes	Education or Secondary Education	Education		
Special Education	yes	Educational Psychology	Educational Psychology		Special Education
Teacher Education	no	Education	Education		
Vocational Education	See fields		Vocational Education	Vocational Education	

DOCTOR OF PHILOSOPHY DEGREE

The degree of doctor of philosophy is granted in recognition of candidates' high attainment and ability in their special fields as demonstrated, first, by required examinations covering both the general and special fields 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 durations 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 a preliminary written examination 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 an adult special student and wish to proceed in a degree program should apply for admission to the specific program early in the first quarter of adult special registration. 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.S. or Ph.D. degree should apply for admission to the chairman of admissions, Institute of Child Development, and to the Graduate School, specifying the 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 the Ph.D. degrees.

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 who complete the M.A. degree in speech pathology or audiology meet the academic and clinical practicum requirements for Minnesota teaching certification and for the American Speech and Hearing Association Certificate of Clinical Competence.

Community Education

Three program areas within the College of Education cooperate to offer graduate-level study to those interested in the design, implementation, evaluation, and administration of community schools and community education programs. Students may prepare for leadership roles in community education through any of the three areas: adult education, educational administration, or recreation and park administration. Students develop programs aimed at both theoretical and practical competencies. Courses appropriate to community education are drawn from these areas as well as from others within the College of Education and elsewhere in the University.

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; early childhood education; elementary education; general curriculum and instruction; higher education; library science; music education; remedial reading and reading supervisory certification; secondary academic fields of English education, mathematics education, science education, second languages and cultures 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 can prepare 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, continuing education of older adults, and training and development. 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.

Advanced Study

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)

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

Electives—25 credits selected with the consent of an adviser

Course Requirements for Elementary School Teachers (minimum 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

Students interested in graduate study in art education should contact the Graduate School for details about 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 in 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 48 credits)

30 credits from child psychology and elementary education with a minimum of 12 credits in child psychology and 12 credits in elementary education, including Elem 5376, 5377, 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 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, 5120, 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. These graduate programs prepare teachers 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*. Applicants should have completed an undergraduate curriculum leading to certification for elementary school teaching. In applying for admission to the Graduate School, applicants should indicate the specific area of interest within elementary education they wish 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 will 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 required for 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. These curricula offer preparation for such roles as curriculum director and coordinator of instruction. Graduate offerings are designed for those majoring in education or 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. Courses 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) the education graduate who holds a valid teaching certificate completes a regular M.A. program; and b) the liberal arts graduate who lacks a teaching certificate completes 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.

MUSIC EDUCATION

The master of education degree in this field, 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

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 degree 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 remedial 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 valid Minnesota teaching certificate, at least 2 years of teaching experience at the appropriate level, and complete the requisite course work.

SECONDARY EDUCATION

See the specific field for M.Ed. program descriptions in English education, science education, second languages and cultures 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 the major as secondary education with a specific area of interest indicated (e.g., secondary education—science education), or as education if a combination of education fields with related work in teaching subjects is desired. 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 such 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 5176—Classroom Research in English Education and Reading (3)

SeEd 5194—English Language Arts Curricula in the Secondary School (3)

Three courses from:

SeEd 5321—Teaching Literature in Secondary Schools (3)

SeEd 5322—Teaching Rhetoric and Composition in Secondary Schools (3)

SeEd 5344—Teaching Reading in Content Areas (3)

SeEd 5404—Language, Culture, and Education (4)

Electives—30 credits selected with the consent of an adviser from SeEd 5195, 5321, 5322, 5323, 5324, 5325, 5340, 5344, 5347, 5350, 5404, 5659, and other adviser-approved courses

Science Education

The M.Ed. program in science education is especially designed for classroom teachers and has as its major goal the improvement of 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)

One course in current developments in science teaching

One course in research foundations of science teaching

Electives—39 credits selected with the consent of the adviser from any or all of the following: school-based projects, courses in science, other education courses including science education, courses from other disciplines

Second Languages and Cultures Education

The M.Ed. degree in second languages and cultures education is available for certified teachers interested in improving classroom instruction and curricula. The program, which provides a variety of course work as well as school-based experience, is planned with a Needs Assessment Group (NAG) composed of the student's adviser(s), departmental chairperson or principal, and the student.

Course Requirements (minimum 45 credits)

SeEd 5186—Alternatives in Second Language Education (3)

SeEd 5189—Planning and Assessing Second Language Curriculum (4)

SeEd 5385—Planning and Assessing Second Language Instruction (4)

Minimum of 3 credits in SeEd 5185—School and Professional Based Experiences in Second Languages and Cultures (1-12)

Minimum of 3 credits in other education courses

Minimum of one 4- or 5-credit course in the student's language

Minimum of 3 credits from other liberal arts courses

Electives—21 credits selected in consultation with the student's Needs Assessment Group

Social Studies Education

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

Course Requirements (minimum 45 credits)

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

SeEd 5113—Introduction to Curriculum Development (3)

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

Advanced Study

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 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 community education, in regional, state, and federal educational agencies, as well as in local, state, and national professional and union groups. Information on programs offered for the M.A. degree, specialist in education certificate, and 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*.

Degrees in Educational Psychology—An interdepartmental program in educational psychology, with psychoeducational studies, is offered. 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.

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

Physical Education, Recreation, and School Health Education

In the School of Physical Education, Recreation, and School Health Education programs are available leading to the M.Ed. degree in those three fields: Plan I for teachers of physical education and school health education or 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 continuing 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 retraining in new areas; and to offer a structure wherein a student may work toward a degree and at the same time satisfy recertification requirements.

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. The major in recreation and park administration also provides for an emphasis in community education. A graduate program leading to the Master's degree in education with an emphasis in school health education is also available. The Ph.D. degree is offered with a major in physical education, or with a major in education with emphasis in physical education, recreation and park administration, or school health education. The Ed.D. degree with a major in physical education may offer emphasis in any one 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 average of at least C+ (2.50) in undergraduate course 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 (Cr ar) (and) PE 5980—Research Methodology (3) (or) PE 5985—Application of Research (3)
- 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 3 credits in PE 5981—Problems (Cr ar)

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 outdoor recreation, public park and recreation administration, therapeutic recreation, and voluntary and youth-serving agencies. The student is expected to have a baccalaureate degree in recreation or a related area, including appropriate courses in psychology, sociology, and natural sciences. 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 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 and professional 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 the appropriate area. 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 Ph.D. degree can be taken with a concentration in this area to prepare for professional or administrative positions at the elementary school, secondary school, or college level. The doctoral program is designed to prepare psychologists for work in educational settings. The major is in educational psychology with a minor or related field generally selected from psychology, family social science, education, or sociology.

Preparation includes clinical practice and supervised experience in school, college, university, or educational agency programs. It also includes course work in psychology of learning, statistics, personality development, measurement, social psychology, and individual and group counseling. Students are advised to become familiar with curricular and administrative problems at either the public school or higher education level. Doctoral students will include advanced courses in statistics and measurement in their programs and will become involved in teaching and research projects.

PSYCHOLOGY IN THE SCHOOL TRAINING PROGRAMS

Two programs, School Psychology and Developmental Education, share a common concern regarding the impact of psychology in the contemporary school setting. The programs share faculty, course offerings, and many basic assumptions about psychological applications to the educational enterprise. Each program, however, has a different training emphasis.

School Psychology—This American Psychological Association approved program offers training 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. A strong interdepartmental emphasis allows doctoral students to choose among majors in child psychology, psychology, and educational psychology. The curriculum prepares psychologists for work in school settings and includes courses in learning, personality, child psychology, learning difficulties, diagnostic and remedial procedures, statistics and measurement, specialized research techniques, special education, and practicum. Applicants for the School Psychology Training Program must fulfill all general standards and requirements of the Graduate School.

Developmental Education—The focus of this doctoral level program is on training educators to more effectively translate psychological knowledge for use in educational practice. The curriculum focuses on planning, developing, implementing, and evaluating curricula to promote psychological growth. Graduate work includes courses in child, adolescent, and adult development; personality theory; counseling skills; learning, statistics, and measurement. Practicum and internship experiences are offered in both school and college settings. Applicants for the Developmental Education 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, to the M.Ed. program, or to adult special status in the College of Education. In addition, the faculty in special education has its own admission procedure which may include an interview with prospective students. Inquiries about admission and advising procedures, state of Minnesota certification requirements, and training sequences should be directed to the Special Education programs admissions office in 101A Pattee Hall.

Students in any college or graduate program may take such specific courses 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 programs provide instruction to educators of exceptional children. Teaching specialties are organized according to the specificity and severity of the child's needs. All program trainees receive a basic orientation in generic

special education which prepares them for subsequent concentration in the specific certification programs dealing with persons who are hearing impaired, physically handicapped, and severely mentally retarded, and interrelated certification programs encompassing learning disabilities, emotional disturbance, and mild mental retardation. Professional preparation opportunities are also available for special education administration and for those persons working with culturally different and gifted children and youth.

Special Education Resource Teacher Training

Special education resource teacher (SERT) training is organized as a professional development step for teachers who hold teaching certification in some area of special education. The emphasis in training is on organizing and implementing special education services for exceptional children who are enrolled full or part time in regular education programs. Particular attention is given to developing skills in consultation, collaboration, and communication with parents and professionals; measurement and evaluation of program effectiveness; training and supervising paraprofessionals and volunteers; and development of special education services consistent with the right to education and the protections of due process. Programs are individually negotiated, and students may work toward graduate degrees or additional certification in conjunction with their training.

Special Learning and Behavior Problems and Educable Mentally Retarded

Teacher training leading to certification and/or graduate degrees in the areas of special learning and behavior problems (learning disabilities, and emotionally disturbed/socially maladjusted) and educable mental retardation is offered at the postbaccalaureate level only. These programs share a common core of basic training plus appropriate special training and experience. Particular attention is paid during training to teaching those children experiencing school-related learning and adjustment problems.

Special Learning and Behavior Problems (SLBP) is an entry-level program for those persons who are, or will be, responsible for the instruction of learning disabled and emotionally disturbed and socially maladjusted children in a variety of school programs or settings. Students may work toward Minnesota certification in either or both areas.

In addition, training related to teaching educable mentally retarded (EMR) children is offered. This is also an entry-level program for students, but the EMR certification can only be earned in conjunction with one of the above SLBP (LD or ED) certificates and requires additional course work and practicum training. Students should not register for courses until they have discussed a program of study with an adviser and have been formally admitted into an approved training sequence. Courses common to these programs are:

- 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 Systems
- SpEd 5601—Practicum: Special Education
- SpEd 5610, 5611—Practicum: Diagnosis and Remediation of Learning Disabilities I, II

CPsy 5315 or SpEd 5120—Introduction to Mental Retardation

Other courses are selected from such program areas as child development, elementary or secondary education, and special education.

Teaching Children With Severe Hearing Impairments

Acceptance into this program requires submission of a formal application through the Special Education programs 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 area 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 Disadvantaged Children and Youth

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

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 or Master's degree level. 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

Advanced Study

- 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

The Program in 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 program combines course work in general school administration and supervision 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 Severely and Profoundly Retarded Pupils

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

M.Ed. Degree Programs

A limited number of students will be admitted to the M.Ed. in special education curriculum in the fall of 1976. Students must choose mild/moderate or severe/profound handicapping conditions as an area of emphasis. Full information can be obtained from the Special Education programs admissions office in 101 Pattee Hall.

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; Specialist Certificates in business education

and in distributive education; Ph.D. degrees in vocational education and education with a special field of interest; and Ed.D. degrees in vocational education and in 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 degree 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

Advanced Study

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

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 (1-12)

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 Distributive Education (2)

DE 5120—Business and Distributive 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 (1-12)

3 credits in business administration and/or liberal arts
Electives—9 credits

The master of arts 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. 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 Admissions 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 programs in home economics education include the master of arts 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. in education with an industrial education emphasis, the Ed.D. in industrial education which emphasizes the needs of instructional personnel in industrial education, the Ph.D. in vocational education, and the Ed.D. 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 specials, 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 the *Class Schedule* carefully for the specific courses offered each quarter.

Symbols

The following symbols are used throughout the course descriptions:

- °Courses in which graduate students may prepare Plan B projects.
- †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)

- 1301. **INTRODUCTORY CHILD PSYCHOLOGY.** (4 cr; prereq 5 cr introductory psychology)
Introduction to the science of child behavior; review of theories and research.
- 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.
- 3302. **INFANCY.** (4 cr; prereq 1301)
Perceptual, motor, emotional, social, and cognitive development during the first 2 years of life; the developing infant in its social and physical environment.
- 3303. **ADOLESCENT PSYCHOLOGY.** (4 cr, *§5303; prereq 5 cr introductory psychology)
Physical, cognitive, and social development during adolescence.
- 3304. **INTRODUCTION TO MATURITY AND AGING.** (4 cr; prereq 1301 or equiv)
Empirical and theoretical issues in developmental psychology of maturity and aging; survey of perceptual-motor, cognitive, and social-psychological changes from young adulthood to old age.
- 3311. **BEHAVIORAL AND EMOTIONAL PROBLEMS.** (4 cr, §5311; prereq 1301 or equiv)
Description, etiology, development of behavioral and emotional problems of children; treatment where germane. Excluded are problems deriving primarily from sensory or physical handicap, mental retardation, or neurological impairment.

Description of Courses

- 3313. PSYCHOLOGY OF ATYPICAL CHILDREN.** (4 cr, §5313; prereq 1301 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.
- 3330. DIRECTED EXPERIENCES.** (4 cr; S-N only; prereq 1301 and §)
Intellectual and/or social development of children, adolescents, and adults as individuals or members of families or peer groups. Active participation with children, adolescents, or adults required.
- 3331. PROCESSES OF SOCIALIZATION OF CHILDREN.** (4 cr, §5331; prereq 1301 or equiv)
Processes of social learning: identification, social influence, imitation, reward and punishment, internalization, object choice.
- 3347. CHILDREN'S LEARNING AND INTELLECTUAL SKILLS.** (4 cr; prereq 1301)
Current research on learning, problem solving, intellectual performance in children; application to practical contexts.
- 3360H. HONORS SEMINAR I: CURRENT RESEARCH IN DEVELOPMENTAL PSYCHOLOGY.** (4 cr; prereq 1301 or equiv, §; primarily for child psychology majors)
Introduction to ongoing research programs, preparation for independent research (thesis research if honors major), discussion of career opportunities, other topics. Open to all students; required for all honors majors. Normally taken in the junior year.
- 3361H. HONORS SEMINAR II: RESEARCH AND THEORY IN DEVELOPMENTAL PSYCHOLOGY.** (4 cr; prereq 1301 or equiv, §; primarily for child psychology majors)
Overview of history, theory, and systems of research in developmental psychology within broader framework of psychology; framework for interpreting recurring issues. Open to all students; required of all honors majors. Normally taken in the senior year.
- 3980. DIRECTED INSTRUCTION.** (1-4 cr [max 4 cr]; S-N only; prereq §)
Undergraduates serve as teaching assistants in courses they have successfully completed for credit.
- 5303. ADOLESCENT PSYCHOLOGY.** (4 cr, §3303; prereq 5 cr introductory psychology)
Physical, cognitive, and social development during adolescence.
- 5310. TOPICS IN CHILD PSYCHOLOGY.** (1-4 cr; prereq 1301 and §)
Selected topics in the general content area.
- 5311. BEHAVIORAL AND EMOTIONAL PROBLEMS.** (4 cr, §3311; prereq 1301 or equiv)
Description, etiology, development of behavioral and emotional problems of children; treatment where germane. Excluded are problems deriving primarily from sensory or physical handicap, mental retardation, or neurological impairment.
- 5313. PSYCHOLOGY OF ATYPICAL CHILDREN.** (4 cr, §3313; prereq 1301 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 1301 or equiv)
Psychological and educational problems related to the mentally retarded.
- 5319. CLINICAL PROCEDURES WITH CHILDREN AND YOUTH.** (4 cr; prereq 12 cr in psychology, educational psychology, sociology or child psychology)
Survey of assessment and intervention procedures of child clinical psychology in clinical and community settings. Primarily for students not majoring in clinical psychology.
- 5329. GENETICS, ETHOLOGY, AND DEVELOPMENT.** (4 cr; prereq 1301 or equiv)
Survey of evolutionary theory, behavioral genetics applied to understanding of development of human behavior; formation of species-typical adaptive behavior and individual differences in infancy, childhood, adolescence.
- 5331. PROCESSES OF SOCIALIZATION OF CHILDREN.** (4 cr, §3331; prereq 1301 or equiv)
Processes of social learning; identification, imitation, reward and punishment, internalization, and object choice.
- 5333. PERSONALITY DEVELOPMENT.** (4 cr; prereq 3331 or 5331)
Psychoanalytic and behavior theory formulations, related research literature in content areas (e.g., attachment, dependency, aggression, competence, 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 contexts.
- 5335. PEER RELATIONS.** (4 cr; prereq 3331 or 5331)
Peer influences; social interactions and social relations; developmental changes.

- 5339. PARENT-CHILD RELATIONS.** (4 cr; prereq 3331 or 5331)
Discussion of parent-child relationships and evaluation of relevant research (e.g., cross-cultural child rearing perspectives, alternative parenting roles, economics of parent-child relations, rights of parents and children).
- 5341. PERCEPTUAL DEVELOPMENT.** (4 cr; prereq 1301)
Perceptual learning and the development of sensory and perceptual processes.
- 5343. COGNITIVE DEVELOPMENT.** (4 cr; prereq 1301)
Development of cognitive processes; discussion of relevant theory, research literature, and methodology.
- 5345. LANGUAGE DEVELOPMENT.** (4 cr; prereq 1301)
Development of structure and function of language; factors influencing development; methodological problems, language scales, theories.
- 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**
- 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**
- 8380. 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.

Description of Courses

- 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)
Multiharness 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.
- 3424. TEACHING ART IN THE ELEMENTARY SCHOOL.** (3 cr; prereq elementary postbaccalaureate 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 each [max 6 cr]; prereq sr in 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 in 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, 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.

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(Description in the *Graduate School Bulletin*)

- 8300. RESEARCH IN ART EDUCATION**
- 8306. SEMINAR: ART EDUCATION**
- 8900.* PROBLEMS: ART EDUCATION**

EDUCATION: ADULT, TEACHER, AND HIGHER (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.
- 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 *)
Topics in teacher education appropriate to the activities and interests of the participants.
- 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.

Description of Courses

- 5202. THEORIES AND TECHNIQUES OF DIAGNOSIS AND PRESCRIPTION FOR THE ABE TEACHER.** (3 cr; prereq 5201 and 15205)
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, 15205)
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 presentations 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.
- 5501. CONTINUING EDUCATION AND THE PROFESSIONS.** (3 cr)
Review of literature; analysis of philosophies, issues, and trends; emphasis on intergrating personal growth, professional needs, and statutory requirements in continuing education programs.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8188. ALTERNATIVE PROGRAMS IN TEACHER EDUCATION**
- 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**
- 8260. 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, 1 student tchg and §)
Curriculum and organizational patterns; unit instruction; reporting, promotion and nonpromotion 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 3102)
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; S-N only; prereq 12 cr methods, Δ)
Five half-days a week of supervised teaching and observing in elementary school.
- 3601. STUDENT TEACHING IN THE ELEMENTARY SCHOOL: HALF-DAY.** (6 cr; S-N only; prereq 6 cr elementary student tchg, Δ)
Five half-days a 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 or her family, and the community in a low socioeconomic area.
- 3603. STUDENT TEACHING IN THE KINDERGARTEN.** (6 cr; S-N only; prereq 6 cr elementary student tchg, Δ)
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; S-N only; prereq approval of major adviser and director of student tchg)
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; S-N only; prereq 15 cr methods, Δ)
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; S-N only; prereq 15 cr methods, Δ)
Five half-days and 2 full days each week in supervised teaching and observing in elementary school in the inner city.
- 3607. STUDENT TEACHING IN ELEMENTARY SCHOOL: FULL DAYS.** (10 cr; S-N only; prereq 18 cr methods, Δ)
Five full days each week teaching and observing in elementary school.

Description of Courses

- 3610. PRE-FALL STUDENT TEACHING: FULL DAYS.** (3 cr; S-N only; prereq 9 cr methods, Δ)
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. PRE-FALL ORIENTATION IN ELEMENTARY SCHOOL.** (1-4 cr; S-N only; prereq Δ)
Supervised observation and participation in classroom and related school activities; a pre-student teacher exploratory experience.
- 3621. JUNIOR PRACTICUM IN ELEMENTARY EDUCATION.** (1 or 2 cr per qtr [max 6 cr]; S-N only; prereq Δ)
Supervised observation and participation in classroom and related school activities; a pre-student teacher exploratory experience.
- 3630. STUDENT TEACHING IN ELEMENTARY SCHOOL LITERATURE.** (3 cr; S-N only; prereq 10 cr elementary student tchg, Δ)
Minimum of 3 hours weekly of supervised teaching and observation in elementary school.
- 3631. STUDENT TEACHING IN ELEMENTARY SCHOOL ENGLISH.** (3 cr; S-N only; prereq 10 cr elementary student tchg, Δ)
Minimum of 3 hours weekly of supervised teaching and observation in elementary school.
- 3633. STUDENT TEACHING IN ELEMENTARY SCHOOL READING.** (3 cr; S-N only; prereq 10 cr elementary student tchg, Δ)
Minimum of 3 hours weekly of supervised teaching and observation in elementary school.
- 3634. STUDENT TEACHING IN ELEMENTARY SCHOOL SCIENCE.** (3 cr; S-N only; prereq 10 cr elementary student tchg, Δ)
Minimum of 3 hours weekly of supervised teaching and observation in elementary school.
- 3636. STUDENT TEACHING IN ELEMENTARY SCHOOL SOCIAL STUDIES.** (3 cr; S-N only; prereq 10 cr elementary student tchg, Δ)
Minimum of 3 hours weekly of supervised teaching and observation in elementary school.
- 3639. STUDENT TEACHING IN ELEMENTARY SCHOOL MATHEMATICS.** (3 cr; S-N only; prereq 10 cr elementary student tchg, Δ)
Minimum of 3 hours weekly of supervised teaching and observation in elementary school.
- 3900. DIRECTED STUDY.** (1-3 cr [max 6 cr]; prereq elementary major and Δ)
Analysis of specific instruction; 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.
- 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.
- 5305. SURVEY OF SPECIAL COLLECTIONS IN CHILDREN'S LITERATURE.** (3 cr; prereq 5300 or §)
Content and accessibility of collections which relate to the creation of books; emphasis on possibilities and methods for interpreting the content of the collections to children.
- 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 audiovisual 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 SECOND LANGUAGES AND CULTURES IN ELEMENTARY SCHOOLS.** (3 cr; prereq Δ)
Methods and materials; alternatives in program format; choice or preparation; teaching the four skills; community involvement; cross-cultural activities; testing and evaluation; use of children's literature, games, songs; developing units and lessons.
- 5320. PRACTICUM: TEACHING SECOND LANGUAGES AND CULTURES IN ELEMENTARY SCHOOLS.** (3 cr; prereq 5319 or §5319, §)
Minimum of 3 hours weekly of supervised teaching and observation in elementary schools.
- 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 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 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 tchg exper)
Offered in summers with focus on a single program for each offering; treating concept foundations, goals, and teaching and evaluation procedures.

Description of Courses

- 5348. WORKSHOP: OUTDOOR SCIENCE EDUCATION.** (3 cr; prereq elementary 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 change 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.
- 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, audiovisual, and other materials; investigation and evaluation of teaching materials and devices.
- 5363. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL SOCIAL STUDIES.** (Cr or [max 9 cr]; prereq elementary tchg exper and §)
Analysis of new instructional materials and recent curriculum developments in the field; training in innovative instructional procedures.
- 5376. CURRENT TRENDS IN EARLY CHILDHOOD 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. EARLY CHILDHOOD EDUCATION: 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 early childhood education programs.
- 5378. CONTEMPORARY PROGRAMS FOR YOUNG CHILDREN.** (1-3 cr [max 3 cr]; prereq MEd student in early childhood education)
Child growth and development aspects of preschool children in light of need for curriculum intervention programs; current trends, program evaluation, recent research.
- 5602. PRACTICUM: IMPROVEMENT OF TEACHING.** (3 cr; S-N only; prereq MEd student in elementary education and §)
Elementary school classroom teaching project designed to improve specific teaching skills, planned by student, approved and directed by student's adviser as part of M.Ed. program.

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(Description in the *Graduate School Bulletin*)

- 8300. RESEARCH IN 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**

- 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])
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 mathematics education majors)
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, audiovisual 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 design 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 cr]; prereq §)
Supervised experience in teaching or related work in school.

Description of Courses

- 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
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; note reading, 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 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 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 high school; aural development.
- 3320. SEMINAR: GENERAL MUSIC.** (4 cr per qtr [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 and the 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.
- 3701. BEGINNING CONDUCTING.** (3 cr; prereq Mus 1506, 1516)
Fundamentals; rehearsal techniques; score reading and arranging; literature and materials for instrumental performance in elementary and secondary schools.
- 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 of music education problems; review of significant research.
- 5115. EVALUATION AND ACCOUNTABILITY IN MUSIC EDUCATION.** (3 cr; prereq *)
Current status of music testing; principles; survey of evaluative, accountability, and testing materials in music.

Description of Courses

- 5211. PHILOSOPHIES OF MUSIC EDUCATION.** (3 cr)
Analysis and interpretation of philosophies in music and education; objectives, trends, curriculum, evaluation.
- 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 RELATED ARTS IN THE ELEMENTARY AND SECONDARY SCHOOLS.** (3 cr; prereq *)
Teaching music to reflect the major developments of Western culture; techniques and materials.
- 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.
- 5313. CONTEMPORARY YOUTH MUSIC IN EDUCATION.** (3 cr; prereq music education major or *)
Analysis of contemporary youth music and utilization through a concept-centered approach in general music classes.
- 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.
- 5323. INTERMEDIATE AND ADVANCED RECORDER INSTRUCTION AND MATERIALS.** (3 cr; prereq intermediate level competence, two octave range or *)
Lecture-demonstrations and assignments in breath and articulation technique, ornamentation, improvisation, solo and ensemble editing, arranging and playing.
- 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 organization of school vocal groups; selection of vocal music.
- 5432. THE ADOLESCENT SINGING VOICE.** (3 cr; 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.
- 5515. ADVANCED WOODWIND TECHNIQUES.** (3 cr; prereq 1515 or §)
Practical performance with lectures and discussion of research in performance techniques.
- 5525. ADVANCED BRASS TECHNIQUES.** (3 cr; prereq 1525 or §)
Practical performance with lectures and discussion of research in performance techniques.
- 5534. ADVANCED PERCUSSION TECHNIQUES.** (3 cr)
Contemporary approaches to teaching percussion in the elementary, junior high, and 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

Description of Courses

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.
- 3152. PRACTICUM: SECONDARY EDUCATION.** (1-7 cr [max 7 cr]; S-N only; prereq \S 3150 for 1 cr, \S 3155 for 1 cr, \S 3365 for 2 cr, Δ)
A pre-student teaching experience to enable students to develop teacher competencies; supervised observation and participation in classroom and related school activities.
- 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.
- 3156, 3157. THE SOCIAL SCIENCES AND THE SOCIAL STUDIES.** (3 cr per qtr [max 6 cr]; prereq social studies major and $\#$)
Social sciences as disciplines with specific attention to methods of inquiry, competing structures, and theories; implications for organizing and teaching social studies in secondary schools.
- 3320. TEACHING AND LEARNING IN THE HEBREW SCHOOL.** (3 cr; prereq 3334)
Methods, materials, techniques relating Hebrew to other subjects learned in Hebrew parochial schools; microteaching practice; curriculum development and evaluation.
- 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)
Methods and materials at secondary level; literature for adolescents; techniques for discussion, planning and evaluating units; reading interests.
- 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.
- 3329. TEACHING LANGUAGE ARTS IN SECONDARY SCHOOLS.** (3 cr; prereq minor in English with major other than speech or theatre)
Methods and content in development of curriculum materials and instruction in language arts.
- 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 SECOND LANGUAGES.** (6 cr; prereq sr or second language minor)
- 3335. TEACHING SECOND LANGUAGES.** (3 cr; prereq sr, \S 3631)
- 3342. TEACHING SOCIAL STUDIES IN SECONDARY SCHOOL.** (3 cr; prereq minor only)
- 3348, 3349, 3350, 3351. TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL.** (3, 3, 3, 1 cr; prereq social studies major, $\#$)
- 3356. TEACHING SECONDARY SCHOOL SCIENCE.** (1 cr; prereq jr, 5 cr introductory psychology, \S 3155)
Procedures in selecting and organizing materials and in teaching secondary school science.

- 3357** (see 3357 below). **TEACHING SECONDARY SCHOOL SCIENCE.** (3 cr; prereq sr, 3155, 3356, admission to student tchg)
- 3357.**** **TEACHING SECONDARY SCHOOL SCIENCE.** (4 cr; prereq science major or minor...for majors, 3356 and ¶3152)
Procedures in selecting and organizing materials for teaching secondary school science.
- 3358.** **TEACHING SECONDARY SCHOOL SCIENCE.** (1 cr; prereq sr, 3357; final offering winter qtr 1977)
- 3365** (see 3365 below).** **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.
- 3365.**** **TEACHING SECONDARY SCHOOL MATHEMATICS.** (4 cr; prereq 3150, 3155, ¶3152 for 2 cr)
Methods, materials, curriculum, and principles of learning pertinent to secondary school mathematics.
- 3366.** **TEACHING SECONDARY SCHOOL MATHEMATICS.** (1 cr; prereq 3365; final offering fall qtr 1977)
Students may substitute MthE 5366 for SeEd 5366.
- 3367.** **TEACHING SECONDARY SCHOOL MATHEMATICS.** (1 cr; prereq 3366; final offering fall qtr 1977)
Students may substitute MthE 5322 for SeEd 3367.
- 3368.††** **TEACHING SECONDARY SCHOOL MATHEMATICS.** (3 cr; prereq 3365)
Methods, materials, curriculum, and principles of learning pertinent to secondary school mathematics.
- 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 5102, 5201, 5202, 5302, 5303, and 5205, or ‡)
For both liberal arts college graduates and College of Education undergraduates intending to become school librarians.
- 3621.** **DIRECTED EXPERIENCES IN TEACHING ENGLISH, SPEECH, AND THEATRE ARTS.** (6-9 cr; prereq 3325, ‡)
- 3631.** **STUDENT TEACHING IN SECOND LANGUAGES.** (3, 6, 9, or 12 cr; prereq sr and 3335 during same yr)
- 3641.** **STUDENT TEACHING IN SOCIAL STUDIES.** (3 to 15 cr [max 15 cr]; prereq 3350, sr)
- 3651** (see 3651 below). **STUDENT TEACHING IN SCIENCE.** (1, 3, 6 or 9 cr; prereq sr, 3357 or ¶3357)
- 3651.‡‡** **STUDENT TEACHING IN SCIENCE.** (1, 3, 6, 9, or 12 cr; prereq sr, 3357 and 4 cr in 3352...for minors, 3357, ‡)
- 3661.** **STUDENT TEACHING MATHEMATICS.** (3, 6, 9, or 12 cr; S-N only; prereq 3365 during same yr, Math 3161 or ¶Math 3161)
- 5000.** **EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL SYSTEMS.** (1 cr, §5102)
Introduction to use of technology in instruction; self-instructional, computer-managed module.
- 5001.** **EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL MEDIA.** (1 cr, §5102)
Introduction to use of media technology in instruction; self-instructional, computer-managed module.
- 5002.** **EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL EQUIPMENT RESOURCES.** (1 cr, §5102)
Introduction to use of technology in instruction; self-instructional, computer-managed module.

**Because of projected changes in the major, effective spring quarter 1977 students will register for this course.

††Because of projected changes in the major, effective winter quarter 1978 students will register for this course as a replacement for 3366 and 3367.

‡‡Because of projected changes in the major, effective fall quarter 1977 students will register for this course.

Description of Courses

- 5003. EDUCATIONAL TECHNOLOGY: COMPUTERS IN THE CLASSROOM.** (1 cr, \$5102)
Introduction to the use of computer technology in instruction; self-instructional, computer-managed module.
- 5004. EDUCATIONAL TECHNOLOGY: CLASSROOM VIDEO.** (1 cr, \$5102)
Introduction to the use of video technology in instruction; self-instructional, computer-managed module.
- 5103. INSTRUCTIONAL TECHNOLOGY WORKSHOP.** (1-3 cr)
Special topics in the use of technology in the classroom and school.
- 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. INTRODUCTION TO CURRICULUM DEVELOPMENT.** (3 cr; prereq 3155 or equiv)
Environment of the secondary school related to educational philosophy, goals, objectives; systematic planning for assessing educational needs; current alternative designs for curriculum and instruction.
- 5114. PRINCIPLES OF CURRICULUM DESIGN: INTERDISCIPLINARY APPROACHES.** (3 cr)
Systematic approaches presented and evaluated emphasizing the development of interdisciplinary curricula.
- 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.
- 5122. STRATEGIES FOR TEACHING CULTURE IN THE SECOND LANGUAGE CLASSROOM.** (4 cr; prereq language major or minor)
Analysis of other cultures; generation of learning materials for developing understanding of other cultures; sections conducted in French, Spanish, German, Hebrew.
- 5129. TRENDS AND ISSUES IN SECONDARY CURRICULUM.** (3 cr; prereq 5113 or equiv)
Comprehensive perspective on the secondary school curriculum; analysis and interpretation of the status which confronts subject fields.
- 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 course 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])
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.
- 5155. MATERIALS LABORATORY FOR SOCIAL STUDIES TEACHERS.** (3 cr; prereq 5150, 5152)
Locating, developing, and using audiovisual 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.
- 5170. MODELS AND PROCEDURES FOR CURRICULUM PLANNING.** (3 cr; prereq 5113 or Elem 5100)
Review and employment of a model for planning and designing a systematic plan for curriculum change.
- 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. DESIGN OF CURRICULUM/INSTRUCTIONAL MATERIALS.** (1-12 cr)
Development and implementation of systematic principles and procedures; writing of goals and objectives, selection of content, development of activities, identification/selection of resources, evaluative activities for measuring objective attainment.
- 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.
- 5175. SECONDARY REMEDIAL READING INSTRUCTION.** (3 cr; prereq 5344 or Elem 5331 or #)
Principles and techniques for developing and conducting programs for secondary students seriously deficient in reading skills.
- 5176. CLASSROOM RESEARCH IN ENGLISH EDUCATION AND READING.** (3 cr; prereq MEd student in English education or #)
Review and analysis of current studies; design and analyses for school-based research.
- 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.
- 5184. EXAMINATION AND ASSESSMENT OF MATERIALS IN SECOND LANGUAGES AND CULTURES.** (2 cr; prereq 3334 or 5385)
Evaluation of the tools of access in language acquisition: dictionaries, grammars, readers, tapes, language learning systems, supplementary and cultural materials.
- 5185. SCHOOL AND PROFESSIONAL BASED EXPERIENCES IN SECOND LANGUAGES AND CULTURES.** (1-12 cr [max 12 cr]; prereq MEd students only)
Opportunity for teachers to work together on curricular, instructional, or evaluation problems; internship experiences; participation in professional activities.
- 5186. ALTERNATIVES IN SECOND LANGUAGE EDUCATION.** (3 cr)
Overview of curricula and instruction in various settings: elementary, secondary, open, free, suburban, and center city schools; bilingual programs, colleges, community colleges, universities, and adult programs including teacher preparation.
- 5189. PLANNING AND ASSESSING SECOND LANGUAGE CURRICULUM.** (4 cr)
Development of competencies in curriculum and materials construction; application to lessons, units, modules, courses, levels of instruction in ongoing programs of second language acquisition in schools.
- 5191. WORKSHOP: TEACHING OF SECOND LANGUAGES AND CULTURES.** (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. SECOND LANGUAGE WORKSHOP: DEVELOPMENT OF CULTURAL MATERIALS ABROAD.** (3-12 cr)
Workshops held in France, Germany, and Spain to develop alternative approaches to teaching another culture in classrooms; individually contracted programs of work, study, travel, and development of culturally based curriculum materials.
- 5194. ENGLISH LANGUAGE ARTS CURRICULA IN THE SECONDARY SCHOOL.** (3 cr; prereq 3326 or equiv)
Growth and development of English as a major school subject; description and evaluation of current curricular direction.

Description of Courses

- 5195. WORKSHOP: CURRICULUM DEVELOPMENT IN SECONDARY SCHOOL ENGLISH LANGUAGE ARTS.** (3 cr; prereq 5194 or 15194 or §)
Establishing curricular goals; planning new programs, courses, experiences; developing and selecting materials and processes.
- 5201. SYSTEMS APPROACH TO DESIGN OF INSTRUCTION.** (3 cr; prereq 5000)
Instructional materials design in accordance with systems principles including design of a specific unit of courseware.
- 5203. RESOURCE MANAGEMENT IN INSTRUCTIONAL PROGRAMS.** (3 cr; prereq 5000 or §)
Processes an instructor or media generalist employs in integrating resources into a planned program; introduction to facilities planning, discussion of environmental health and safety.
- 5205. APPLICATIONS OF COMPUTERS IN EDUCATION.** (2 cr; prereq 5003)
Examination of computer uses for education: instruction, simulation, counseling, testing, and information retrieval; computer-managed course.
- 5207. APPLICATIONS OF TELEVISION IN EDUCATION.** (2 cr; prereq 5004)
Current uses of video systems in education.
- 5209. APPLICATIONS OF AUDIO AND VISUALS IN EDUCATION.** (2 cr, \$5105)
Characteristics, advantages, limitations, and practical classroom use of audiovisual materials of nonprojected and projected types; practice in operation of audiovisual equipment.
- 5211. PREPARATION OF MEDIA MATERIALS: AUDIO.** (1 cr; prereq 5201, 5209)
Prototype development of instructional materials using audio materials.
- 5212. PREPARATION OF MEDIA MATERIALS: COMPUTER.** (2 cr; prereq 5201, 5205)
Prototype development of instructional materials using computer materials.
- 5213. PREPARATION OF MEDIA MATERIALS: PROJECTED.** (2 cr; prereq 5201, 5209)
Prototype development of instructional materials using projected materials.
- 5214. PREPARATION OF MEDIA MATERIALS: NONPROJECTED.** (2 cr; prereq 5201, 5209)
Prototype development of instructional materials using nonprojected media materials.
- 5215. PREPARATION OF MEDIA MATERIALS: VIDEO.** (2 cr; prereq 5201, 5207)
Prototype development of instructional materials using video materials.
- 5321. TEACHING LITERATURE IN SECONDARY SCHOOLS.** (3 cr; prereq 3155 or jr-sr high school tchg exper)
Current theory and methods of instruction; research and response to literature and reading; adolescent literature; growth assessment; curriculum design and evaluation.
- 5322. TEACHING COMPOSITION AND COMMUNICATION IN JUNIOR AND SENIOR HIGH 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 student)
Philosophy, methods, materials of teaching drama in the curriculum and as an extracurricular activity in secondary schools; 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.
- 5326. TEACHING FILM.** (3 cr)
Current theory and methods of teaching film appreciation; use of the short film and filmmaking in the classroom.
- 5340. TEACHING SPEECH AND FORENSICS IN SECONDARY SCHOOL.** (3 cr; prereq Spch 1101 or 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 CONTENT AREAS.** (3 cr; prereq 9 cr in education)
Procedures, objectives, and materials.

Curriculum and Instruction

- 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 or [max 6 cr]; S-N optional; prereq *)
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 SECOND 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. PLANNING AND ASSESSING SECOND LANGUAGE INSTRUCTION.** (4 cr)
Identifying and assessing teaching competency; use of videotapes, simulation, and analysis to develop concept of teaching as a continuing process from planning through evaluation.
- 5390. CURRENT DEVELOPMENTS IN SECONDARY SCHOOL SCIENCE TEACHING.** (3 cr; prereq 3356, 3357, 3358, or 3352 or equiv undergrad courses or exper in tchg science)
Curricula, methods, materials of instruction, evaluation.
- 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.
- 5509. DIRECTED INDIVIDUAL STUDY.** (1-6 cr [max 6 cr])
Review of literature in research and theory of instructional systems.
- 5609. INTERNSHIP.** (Cr ar; prereq MED students only)
- 5615. PRACTICUM IN SECONDARY READING: TUTORING REMEDIAL STUDENTS.** (3 cr per qtr [max 9 cr]; prereq *)
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.** (2/1 cr; prereq *)
On-the-job supervision of social studies student teachers; coordinating seminar.
- 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.

Description of Courses

- 5697. PRACTICUM: TEACHING ENGLISH AS A SECOND LANGUAGE.** (3 cr; prereq 5396 or 5) 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. INFORMATION SOURCES AND RESEARCH IN SECOND LANGUAGE LEARNING AND TEACHING
8301. INSTRUCTIONAL PROBLEMS ANALYSIS
8305. INSTRUCTIONAL DELIVERY SYSTEMS
8307. INSTRUCTIONAL MATERIALS DESIGN
8309. MANAGEMENT SYSTEMS FOR DEVELOPMENT AND ORGANIZATION
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: SECOND LANGUAGE EDUCATION
8411. ADVANCED DESIGNS IN COURSEWARE: COMPUTER
8412. ADVANCED DESIGNS IN COURSEWARE: VIDEO
8413. ADVANCED DESIGNS IN COURSEWARE: VISUAL
8414. ADVANCED DESIGNS IN COURSEWARE: MULTIMEDIA
8415. ADVANCED DESIGNS IN COURSEWARE: MODULAR DESIGN
8416. INSTRUCTIONAL SYSTEMS SEMINAR
8501.° PROBLEMS: INSTRUCTIONAL SYSTEMS
8642. FIELD PRACTICUM: SUPERVISION AND CURRICULUM DEVELOPMENT
8673. INTERNSHIP: COLLEGE TEACHING IN SOCIAL STUDIES EDUCATION
8801.° PROBLEMS: TEACHING SOCIAL STUDIES
8825.° PROBLEMS: SECONDARY SCHOOL SUPERVISION
8871.° PROBLEMS: CURRICULUM CONSTRUCTION
8887.° RESEARCH FOUNDATIONS OF SECONDARY SCHOOL SCIENCE TEACHING
8892. INTRODUCTION TO RESEARCH IN ENGLISH EDUCATION AND READING
8893. SEMINAR: ADVANCED TOPICS IN ENGLISH-LANGUAGE ARTS EDUCATION
8894.° PROBLEMS: SECOND LANGUAGES AND CULTURES EDUCATION
8895. READINGS IN ENGLISH EDUCATION
8896.° PROBLEMS: TEACHING ENGLISH
8897. RESEARCH IN ENGLISH AND SPEECH EDUCATION
8898. READINGS IN SECOND LANGUAGES AND CULTURES EDUCATION
8936. FIELD STUDY IN GENERAL CURRICULUM

Educational 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, §SpEd 5160; 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; S-N optional; prereq practicing education administrator or #)
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.
- 5140. ADMINISTRATION OF EARLY EDUCATION PROGRAM.** (3 cr; prereq #)
Issues and skills relevant to an administration who directs a preschool program or the student planning a leadership position in early education.
- 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 each, §SpEd 8560 and 8561)
Problems of administration and organization of special education programs.
- 5231. PRACTICUM IN SCHOOL-COMMUNITY RELATIONS.** (1-4 cr; S-N grading optional)
Practical experience in design and use of basic tools in a program such as conducting community analysis; preparing copy and news releases; meeting, 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 grading optional)
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 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**

Description of Courses

- 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 ADMINISTRATIVE 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
- 8247. SEMINAR: SCHOOL DISTRICT POLITICS
- 8248. SEMINAR: METROPOLITAN SCHOOL GOVERNANCE
- 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
- 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, Recreation, and School Health Education

PHYSICAL EDUCATION (PE)

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

Adapted activities
Aquatics
Conditioning
Dance

Dual sports and activities
Individual sports and activities
Team sports

The beginning courses, listed first in numerical ordering, require no prerequisite. 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 register for the prerequisite course. Advisers in Cooke and Norris Halls will aid a student who has questions about the appropriate level for registration.

A student who does not attend the first meeting of a class for which enrollment is limited forfeits his or her place. If a class in which enrollment is limited 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 courses numbered through 1499.

All courses involve participation requiring a high energy expenditure level and are to be considered high intensity in nature except Activities for the Handicapped, which is adjusted for each individual; and Archery, Angling, Bowling, Camping, Golf, Hunting, Posture and Individual Exercise, Physical Education for Family Living, and Rifle Marksmanship, which involve a lower level of energy expenditure and are considered moderate intensity in nature. It is recommended that students know their health status and any limitations on their ability to safely participate in the physical activities involved in the course in which they plan to register. Students who have questions about their health status should seek advice from a personal physician.

1001. ACTIVITIES FOR THE HANDICAPPED. (1 cr; prereq ♯; intensity individually prescribed)

1004. DIVING, SPRINGBOARD. (1 cr; prereq men 1007, women 1308)

1007. SWIMMING. (1 cr)

1008. WATER POLO. (1 cr)

Introduction and practice of skills through drills and game situations.

1014. CONDITIONING. (1 cr)

1015. WEIGHT TRAINING. (1 cr)

1016. POSTURE AND INDIVIDUAL EXERCISE. (1 cr; moderate intensity)

1017. RHYTHMIC GYMNASTICS. (1 cr)

Rhythmic exercises following the natural movements of the body.

1020. FUNDAMENTALS, MOVEMENT. (1 cr)

1022. BALLROOM DANCE. (1 cr)

1023. FOLK AND SQUARE DANCE. (1 cr)

1024. MODERN DANCE. (1 cr)

1029. HANDBALL. (1 cr)

Basic fundamentals of skills and shots; rules and game strategy.

Description of Courses

- 1031. SABRE FENCING.** (1 cr; not open to anyone who has had foil fencing)
Development of physical and perceptual skills for fencing; techniques of the sabre; history, rules, practical bouting experience.
- 1032. BADMINTON.** (1 cr)
- 1033. FENCING.** (1 cr)
- 1034. JUDO.** (1 cr)
- 1035. KARATE.** (1 cr)
- 1036. PADDLEBALL-RACQUETBALL.** (1 cr)
- 1037. SQUASH RACQUETS.** (1 cr)
- 1038. TENNIS.** (1 cr)
- 1039. WRESTLING.** (1 cr)
- 1040. TABLE TENNIS.** (1 cr)
Fundamental skills, rules, etiquette, and strategy for singles and doubles play.
- 1045. ANGLING.** (1 cr; moderate intensity)
- 1046. APPARATUS.** (1 cr)
- 1047. ARCHERY.** (1 cr; moderate intensity)
- 1048. BOWLING.** (1 cr; moderate intensity)
- 1049. CAMPING.** (1 cr; moderate intensity)
- 1050. GOLF.** (1 cr; moderate intensity)
- 1051. HUNTING.** (1 cr; moderate intensity)
- 1052. RIFLEMARKSMANSHIP.** (1 cr; moderate intensity)
- 1053. ICE SKATING.** (1 cr)
- 1055. FOUNDATIONS OF PHYSICAL ACTIVITY.** (2 cr)
- 1056. NORDIC (CROSS-COUNTRY) SKIING.** (1 cr)
Basic techniques; participation in exercise and conditioning program preparatory to skiing.
- 1057. SKIING.** (1 cr)
- 1058. PHYSICAL EDUCATION FOR FAMILY LIVING.** (1 cr; moderate intensity)
- 1059. TRACK AND FIELD.** (1 cr)
- 1060. TUMBLING, FLOOR EXERCISE, AND TRAMPOLINE.** (1 cr)
- 1067. BASKETBALL.** (1 cr)
- 1068. CURLING.** (1 cr)
- 1069. FIELD HOCKEY.** (1 cr)
- 1070. HOCKEY, ICE.** (1 cr; prereq 1053 or equiv)
- 1071. LACROSSE.** (1 cr)
- 1072. SOCCER.** (1 cr)
- 1073. SOFTBALL.** (1 cr)
- 1074. VOLLEYBALL.** (1 cr)
- 1107. SWIMMING.** (1 cr; prereq 1007 or equiv)
- 1122. BALLROOM DANCE.** (1 cr; prereq 1022 or equiv)
- 1123. FOLK AND SQUARE DANCE.** (1 cr; prereq 1023 or equiv)
- 1124. MODERN DANCE.** (1 cr; prereq 1024 or equiv)
- 1132. BADMINTON.** (1 cr; prereq 1032 or equiv)
- 1133. FENCING.** (1 cr; prereq 1033 or equiv)
- 1134. JUDO.** (1 cr; prereq 1034 or equiv)
- 1135. KARATE.** (1 cr; prereq 1035 or equiv)
- 1138. TENNIS.** (1 cr; prereq 1038 or equiv)

Physical Education, Recreation, and School Health Education

1139. **WRESTLING.** (1 cr; prereq 1039 or equiv)
1145. **ANGLING.** (1 cr; prereq 1045 or equiv; moderate intensity)
1146. **APPARATUS-GYMNASTICS.** (1 cr; prereq 1046 or equiv)
1147. **ARCHERY.** (1 cr; prereq 1047 or equiv; moderate intensity)
1148. **BOWLING.** (1 cr; prereq men, 1048 and 125 avg...prereq women, 120 avg; moderate intensity)
1150. **GOLF.** (1 cr; prereq 1050 or equiv; moderate intensity)
1154. **FIGURE SKATING.** (1 cr; prereq 1053 or equiv)
1157. **SKIING.** (1 cr; prereq 1057 or equiv)
1159. **TRACK AND FIELD.** (1 cr; prereq 1059 or equiv)
1160. **TUMBLING, FLOOR EXERCISE, AND TRAMPOLINE.** (1 cr; prereq 1060 or equiv)
1167. **BASKETBALL.** (1 cr; prereq 1067 or equiv)
1172. **SOCCER.** (1 cr; prereq 1072 or equiv)
1173. **SOFTBALL.** (1 cr; prereq 1073 or equiv)
1174. **VOLLEYBALL.** (1 cr; prereq 1074 or equiv)
1205. **SCUBA AND SKIN DIVING.** (1 cr; prereq 1107 or equiv)
1207. **SWIMMING.** (1 cr; prereq 1107 or equiv)
1224. **MODERN DANCE.** (1 cr; prereq 1124 or equiv)
1238. **TENNIS.** (1 cr; prereq 1138)
1248. **BOWLING.** (1 cr; prereq 160 average; moderate intensity)
1250. **GOLF.** (1 cr; prereq 1150; moderate intensity)
1254. **FIGURE SKATING.** (1 cr; prereq 1154 or equiv)
1274. **VOLLEYBALL.** (1 cr; prereq 1174 or *)
Basic offensive and defensive skills; advanced skills and strategies; proficient performance during competitive play.
1306. **SENIOR LIFESAIVING.** (1 cr; prereq ability to swim 440 yds)
1307. **SWIMMING.** (1 cr; prereq 1207 or equiv)
1309. **SYNCHRONIZED SWIMMING.** (1 cr; prereq 1207 or equiv)
1324. **MODERN DANCE.** (1 cr; prereq 1224 or equiv)
1410. **WATER SAFETY INSTRUCTOR.** (2 cr; prereq current American Red Cross Senior Lifesaving Certificate)
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.
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 per qtr [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)
Fundamental technique of classical ballet.
1520. **POSTURE AND FUNCTIONAL EXERCISE.** (1 cr)
1521. **GYMNASTICS.** (1 cr)
1522. **GYMNASTICS.** (1 cr; prereq 1521)

Description of Courses

- 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.
- 1524. GYMNASTICS COMPOSITION.** (1 cr; prereq 1521, 1522)
Competition: 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)
Analysis of basic skills, observations, and laboratory experience in teaching activities.
- 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.
- 1615. MODERN DANCE TECHNIQUE AND IMPROVISATION II.** (2 cr; 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.
- 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)
- 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.

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- 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.
- 1801. AQUATIC ADMINISTRATION.** (2 cr; prereq current water safety instructor's certification and §)
Provides students with skills needed to administer an aquatic program in a school or community setting.
- 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.** (2 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; S-N only; prereq physical education major)
Demonstration of competencies at the beginning level in a variety of activities.
- 1981. PHYSICAL EDUCATION ACTIVITIES: ADVANCED.** (1-3 cr; S-N only; 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 minorning in physical education who wish to study a topic or problem under tutorial guidance.
- 3100. ADAPTED PHYSICAL EDUCATION.** (3 cr; prereq 3111)
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, Phys 1061)
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.
- 3115. PHYSIOLOGICAL APPLICATION TO SPORTS.** (3 cr, §PubH 3385, §PubH 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.** (3 cr; prereq physical education major, sr)
Objectives, content, organization, evaluation, and trends in curriculum for the elementary and secondary school.
- 3125. PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT.** (3 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.
- 3126. PSYCHOLOGICAL AND SOCIOLOGICAL DIMENSIONS OF PHYSICAL ACTIVITY.** (3 cr)
Introductory focus on analysis of current literature and theoretical constructs in this dimension of physical activity.
- 3130. HISTORY OF PHYSICAL EDUCATION AND SPORT.** (3 cr)
Introductory description and interpretation of influence of past sociocultural events upon development of physical education and sport from primitive to 20th-century civilization.
- 3143. ORGANIZATION AND MANAGEMENT OF SPORT.** (3 cr; prereq 2 cr coaching course)
Principles, policies, and procedures involved in the coaching of interscholastic sports.
- 3144. ADMINISTRATION.** (2 cr, §3120; prereq physical education major, sr)
Overview of objectives, content of organizations, evaluation and trends in administration of physical education for the elementary and secondary schools.

Description of Courses

- 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 RECREATIONAL SPORTS.** (3 cr)
Basic ingredients for administering recreational sports programs including competitive intramurals, sports clubs, and self-directed exercise.
- 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, generalship, 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 to 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.
- 3181. DANCE THERAPY.** (2 cr)
For students and teachers interested in dance therapy as a means of communication and interaction for the emotionally disturbed and/or handicapped person.
- 3310. ATHLETIC TRAINING LABORATORY.** (1 cr; prereq 3114)
Thirty hours of practical experience in the training room under supervision.
- 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.
- 3323. TEACHING PHYSICAL EDUCATION.** (5 cr; prereq 1875, physical education major, jr, §3607)
Planning, application of general teaching methods; use of multisensory teaching aids to 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 and experimentation of methods, principles and techniques; emphasis on observation, microteaching, assisting with class instruction under supervision, and workshop experiences.

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- 3327. TEACHING PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL.** (3 cr, \$1560, \$3325, \$Hlth 3325; prereq elementary education major)
An overview of the elementary 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; 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 per qtr [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.
- 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. PRE-FALL STUDENT TEACHING.** (3 cr; S-N only; prereq *)
Program and problems of organization and management; begins with fall semester opening of public schools.
- 3604. ADVANCED STUDENT TEACHING.** (3 cr; S-N optional; prereq *)
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; S-N optional; prereq SeEd 3150, 3155 or Elem 3100, physical education major)
Student teaching in physical education in grades 1-6 in public schools.
- 3622. STUDENT TEACHING: SECONDARY.** (6 cr; S-N optional; prereq SeEd 3150, 3155 or Elem 3100, physical education major)
Student teaching in physical education in grades 7-12 in public schools.
- 3624. STUDENT TEACHING: COACHING.** (3 cr; S-N only; prereq *)
May be elected by physical education majors; 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.

Description of Courses

- 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.
- 5120. ADVANCED BIOMECHANICS/KINESIOLOGY.** (4 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.
- 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.
- 5126. ADVANCED PSYCHOLOGICAL AND SOCIOLOGICAL DIMENSIONS OF PHYSICAL ACTIVITY.** (3 cr; prereq §)
Advanced insight into the substance, nature, and significance of these dimensions of physical activity; focus on current research, issues, and trends as well as potential practical contributions.
- 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.
- 5133. PRACTICUM: ASSESSMENT OF PSYCHOMOTOR SKILLS IN YOUNG CHILDREN.** (3 cr; S-N optional; prereq 3150 or §)
For the practitioner interested in collecting, treating, and analyzing assessment data.
- 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.
- 5140. BIOMECHANICS OF SPORT SAFETY.** (3 cr; prereq undergrad kinesiology)
Forces and torques developed in sports activities; tolerances of the human body; techniques for preventing injury; design of protective equipment.
- 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.

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- 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 students)
Establishment of guidelines for individual and group professional action; examination of pertinent social forces, educational philosophies, and general ethics.
- 5181. WORKSHOP: DYNAMICS OF THERAPEUTIC DANCE/MOVEMENT.** (1-3 cr [max 9 cr]; prereq 3181 or §)
Movement laboratory integrating theory and experience in therapeutic dance; individual movement behavior and its relationship to verbal communication and the ongoing process; includes fieldwork observation.
- 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 per qtr [max 3 cr], §Rec 5351, §Hlth 5351; prereq Δ)
Emphasis on improvement of instruction.
- 5387. DETECTION AND PREVENTION OF CORONARY HEART DISEASE.** (2 cr, §PubH 5387; prereq introductory anatomy or physiology, PubH 5386 or §PubH 5386, §)
Introduction to causes, detection, and prevention of major cardiovascular disease emphasizing risk factor identification and modification, role of exercise in prevention, and measurement and interpretation of exercise electrocardiograms.
- 5388. EXERCISE TESTING, CONDITIONING, AND CARDIAC REHABILITATION.** (4 cr, §PubH 5388; prereq 5387 or PubH 5387 and §)
Administration and interpretation of exercise tests, cardiopulmonary resuscitation, and exercise prescription; survey of exercise programs for apparently healthy adults and CHD patients; familiarization with principles for establishment of intervention and rehabilitative programs.
- 5389. PRACTICAL EXPERIENCE IN GRADED EXERCISE TESTING, PRESCRIPTION, AND DIRECTION.** (3-6 cr [max 6 cr], §PubH 5389; prereq 5388 or PubH 5388, §)
Supervised on-site training in testing, prescription, and direction of programs for adults.
- 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 or [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.
- 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.
- 5740. WORKSHOP: COACHING OF INDIVIDUAL, DUAL, OR TEAM SPORTS.** (1-12 cr [max 12 cr])
Instruction at the advanced level including analyses of skills, game strategies, specific techniques of coaching, and methods of training and conditioning.
- 5750. ATHLETICS IN CONTEMPORARY SOCIETY.** (3-9 cr; prereq sr or grad student)
Contemporary issues; background on organizational and management problems of interscholastic and intercollegiate athletics. Each offering will focus on a current problem.
- 5980. RESEARCH METHODOLOGY.** (3 cr, §Hlth 5980; prereq §)
Methods and design for research in health, physical education, and recreation.

Description of Courses

- 5981. PROBLEMS.** (Cr ar; prereq MEd candidate, §)
Focus on teaching of physical education.
- 5983. READINGS: PHYSICAL EDUCATION.** (1-3 cr; prereq sr honor or grad student, §)
Independent study under tutorial guidance.
- 5985. APPLICATION OF RESEARCH.** (3 cr)
Professional research for the practitioner; focus on interrelationships of the purpose, methods, findings, conclusions, and implications.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8110. ADMINISTRATION: GENERAL PRINCIPLES AND PROCEDURES**
- 8113. COLLEGE PHYSICAL EDUCATION ADMINISTRATION**
- 8126. SEMINAR: PSYCHOLOGICAL AND SOCIOLOGICAL DIMENSIONS OF PHYSICAL ACTIVITY**
- 8150. PROFESSIONAL PREPARATION OF PHYSICAL EDUCATION TEACHERS**
- 8310. SEMINAR: PHYSICAL EDUCATION**
- 8320. SEMINAR: BIOMECHANICS**
- 8325. SEMINAR: PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT**
- 8330. SEMINAR: MOTOR LEARNING AND HUMAN PERFORMANCE**
- 8381. LABORATORY RESEARCH TECHNIQUES**
- 8382. BIOMECHANICS: 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 for 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; prereq students in Recreation for Special Groups program only)
Supervised group observation and participation.
- 1510. RECREATION PROGRAMMING FOR SPECIAL GROUPS.** (3 cr; prereq students in Recreation for 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 interrelationship; orientation to the professional field.
- 1530. CAMP AQUATICS.** (2 cr)
Administration of 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.

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- 1700. FIELD EXPERIENCE.** (1-15 cr; S-N only; prereq students in Recreation for Special Groups program only)
Supervised experiences in selected agencies.
- 3150. LEADERSHIP IN OUTDOOR RECREATION.** (3 cr; prereq 1520 or Δ)
Identity and scope of outdoor recreation programs.
- 3530. RECREATION AND PARK AREAS AND FACILITIES.** (5 cr; prereq 1520 or $\$$)
Basic principles of planning community facilities; effective application of standards in planning, design, and construction.
- 3540. RECREATION PROGRAMMING.** (5 cr; prereq 1520 or $\$$)
Principles of program planning and leadership in all aspects of recreation.
- 3550. PARK AND RECREATION ADMINISTRATION.** (5 cr; prereq 3530, 3540, or $\$$)
Principles and practices in the delivery of park and recreation services.
- 3700. SENIOR INTERNSHIP.** (1-15 cr; S-N only; prereq sr, recreation major or minor; Δ)
Supervised experiences in selected agencies.
- 3701. SENIOR SEMINAR.** (3 cr; prereq 1525, ∇ 3700, sr, recreation major or minor, $\$$)
Guided individual and group conferences.
- 3800. WORKSHOP: SPECIAL TOPICS IN RECREATION PROGRAMMING** (1-12 cr [max 12 cr]; prereq Δ ; not open to MEd or grad students)
Background and current developments in recreation programming designed for program and allied service personnel. Each offering will focus on a specific service and/or clientele.
- 3900. DIRECTED STUDY.** (3 cr per qtr [max 9 cr]; S-N optional; prereq recreation majors only and Δ)
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 student)
Investigation of the historical, sociological, and educational bases of the recreative use of leisure time in contemporary society.
- 5160. CONSERVATION OF NATURAL RESOURCES.** (3 cr; prereq 1520 or 5100 or Δ)
Environmental considerations in relation to recreation and leisure services.
- 5170. CAMP ADMINISTRATION.** (3 cr; prereq 1540 or $\$$)
Management and operation of group camping facilities.
- 5180. INDUSTRIAL RECREATION.** (3 cr; prereq 1520 or 5100 or $\$$)
History, scope, and management of employee recreation services in industrial organizations.
- 5190. COMMERCIAL RECREATION.** (3 cr; prereq 5150 or $\$$)
Survey of scope and development of profit-making recreation agencies, facilities, and services.
- 5200. RECREATION IN COMMUNITY EDUCATION.** (3 cr; prereq 1520 or 5100 or Δ)
Recreation and leisure services in the community education process.
- 5210. INTRODUCTION TO THERAPEUTIC RECREATION.** (3 cr; prereq 1520 or ∇ 5100 or $\$$)
Relationship of recreation to special populations; milieu and interdisciplinary approaches in the delivery of services.
- 5220. THERAPEUTIC RECREATION SERVICES.** (5 cr; prereq 5120 or Δ)
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 to persons with mental retardation problems; approaches to programming in the institution and in the community.
- 5240. RECREATION FOR THE AGING.** (3 cr; prereq 3540 or 5100 or Δ)
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; prereq 3550 or Δ)
Methods and techniques of financing operations and capital improvements in public park and recreation agencies; legal basis, fiscal policy, federal and state aids, revenue sharing and budgeting procedures.
- 5300. FOUNDATIONS OF OUTDOOR EDUCATION.** (3 cr; prereq sr, 1520 or 5100 or $\$$)
Investigation of the philosophical, historical, and educational foundations of outdoor education.
- 5351. SEMINAR: TEACHING LEISURE EDUCATION IN COLLEGES AND UNIVERSITIES.**
(1 cr per qtr [max 3 cr], $\$$ PE 5351, $\$$ Hlth 5351; prereq Δ)
Emphasis on improvement of instruction.

Description of Courses

- 5550. COLLEGE UNIONS.** (3 cr; prereq 3550 and §)
Administration, organization, and programming in college unions.
- 5620. PRACTICUM: COLLEGE UNIONS.** (3-9 cr; prereq 12 cr in recreation)
Supervised experiences in program operation; administrative and supervisory duties.
- 5630. PRACTICUM: THERAPEUTIC RECREATION.** (3-9 cr; prereq 12 cr in recreation)
Supervised experiences in program operation; administrative and supervisory duties.
- 5640. PRACTICUM: PUBLIC RECREATION AND PARKS.** (3-9 cr; 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, §PE 5980; prereq MEd or grad student, or Δ)
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 MEd or grad student, or Δ)
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)
Study of the content included in units for the secondary school.
- 3300. INSTRUCTOR'S COURSE IN 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.
- 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. PRE-FALL 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 and 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 and 3155, major or minor in school health education)
Observation, participation, and teaching under supervision.

Physical Education, Recreation, and School Health Education

- 3603. STUDENT TEACHING: SENIOR HIGH SCHOOL.** (3-6 cr; prereq 3320, SeEd 3150 and 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]; S-N only; prereq upper division major or minor in school health education and §)
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 requirement 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, nurses, teachers, and other school personnel in protection and maintenance.
- 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 per qtr [max 3 cr], §PE 5351, §Rec 5351; prereq Δ)
Emphasis on improvement of instruction.
- 5400. TOPICS: EDUCATIONAL ASPECTS OF DRUG USE AND ABUSE.** (3 cr, §PubH 5032; prereq education srs, certified teachers, school nurses)
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 schools.
- 5402. DEATH EDUCATION IN CONTEMPORARY SOCIETY.** (3 cr, §PubH 5040, §Mort 5040; prereq education sr, certified teacher, health science major, mortuary science major, school or public health nurse or §)
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.
- 5403. HEALTH ASPECTS OF AGING.** (3 cr, §PubH 5024; prereq sr or grad student)
Social, cultural, psychological, and economic factors associated with health problems and care of the aging; development of personal insight into the aging process and/or preparation for professional work with the aging.
- 5602. THE DRIVER SIMULATOR.** (4 cr; prereq 5100)
Working with the simulator program to improve, expand, and reduce the cost of conventional driver education.

Description of Courses

- 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, SPE 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.
- 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)
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 per qtr [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.
- 5310. CAREER DEVELOPMENT AND COUNSELING OF WOMEN.** (3 cr)
Theory, research, facts, trends regarding the role and status of women in relation to work; counseling skills, strategies, interventions for facilitating female career development.
- 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; 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, underachievement, dropouts, values, and attitudes; relevant research methods.
- 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.
- 5900. INDEPENDENT STUDY: GUIDANCE AND COUNSELING.** (Cr ar; prereq §)
Independent study in 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**
- 8520.* SEMINAR: RESEARCH IN GROUP COUNSELING**
- 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**

Description of Courses

PSYCHOLOGY IN THE SCHOOL TRAINING PROGRAM (SchP)

- 5300. WORKSHOP: DEVELOPMENTAL EDUCATION.** (6 cr; S-N optional; prereq #)
Concepts and techniques of psychological and developmental education applied to assessed needs of specific groups of educators; emphasis on practical application of developmental psychological approaches to improve the effectiveness of educational programming in conceptual, moral, or ego development; positive self-identity; or interpersonal and affective growth. Not intended to meet certification requirements in school psychology.
- 5514. METHODS OF PSYCHOLOGICAL INTERVENTION IN THE CLASSROOM: GROUP.** (3 cr; S-N optional; prereq #)
A practical use of group techniques to broaden the accommodative power of the classroom in meeting developmental needs of a variety of students. Not intended to meet certification requirements in school psychology.
- 5515. METHODS OF PSYCHOLOGICAL INTERVENTION IN THE CLASSROOM: INDIVIDUAL.** (3 cr; S-N optional; prereq #)
Practical approaches to individualized programming; knowledge from behavioral and differential psychology applied to assessment of performance, sequencing of objectives, implementing alternative instructional programs, and increasing individual choices to broaden the accommodative power of the classroom in meeting the developmental needs of the students. Not intended to meet certification requirements in school psychology.
- 5550. SEMINAR: PSYCHOLOGICAL EDUCATION.** (3 cr per qtr [max 9 cr]; prereq ¶5650 and #)
Review of curriculum programs in psychological/affective education including achievement training, sensitivity groups, psychological and moral education. Not intended to meet certification requirements in school psychology.
- 5650. PRACTICUM: PSYCHOLOGICAL EDUCATION.** (1-3 cr per qtr [max 9 cr]; prereq 5550 or ¶5550 and #)
Practice in designing and implementing programs in psychological/affective education. Not intended to meet certification requirements in school psychology.
- 5910. DIRECTED READINGS: PSYCHOLOGICAL EDUCATION.** (1-6 cr [max 6 cr]; S-N optional; prereq #)
Examination of theoretical and research literature underlying deliberate psychological education and other classroom intervention; designed to facilitate psychological growth and effectiveness. Not intended to meet certification requirements in school psychology.

FOR GRADUATE STUDENTS ONLY

(Descriptions 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**
- 8512. NEW APPROACHES TO PSYCHOPATHOLOGY IN CHILDREN AND ADOLESCENTS**
- 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)

- 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.
- 5105. IMPLEMENTING COURT DECISIONS ON EDUCATION OF THE HANDICAPPED.** (2-4 cr)
Analysis of recent litigation and legislation; emphasis on implementation of right to education, right to treatment, labeling, due process, and related issues.
- 5107. MAINSTREAMING: ISSUES IN INDIVIDUALIZING INSTRUCTION.** (3-5 cr)
Mandate for, implications of, and problems in the implementation of systems models and practical classroom practices which facilitate the education of the handicapped within regular classroom settings.
- 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 EDUCATIONAL 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.

Description of Courses

- 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.
- 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.
- 5145. 5146. TEACHING SPEECH TO THE HEARING IMPAIRED I, II.** (3 cr each; prereq §)
Survey of speech methodologies employed in teaching auditorily 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 individuals and groups of auditorily 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 student 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.
- 5160. SUPERVISION AND ADMINISTRATION OF SPECIAL EDUCATION.** (3 cr, §EdAd 5103; prereq §)
Procedures in establishing and improving educational programs for exceptional children.
- 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; S-N optional; 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; S-N optional; 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; S-N optional; 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**
- 8301. SEMINAR: OPERANT RESEARCH IN SPECIAL EDUCATION**
- 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**

Description of Courses

- 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 Philosophical 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. (1-4 cr)
Based on small-group training theory and methods, designed to help the student develop an understanding of his or her own behavior, the behavior of other individuals, and group and organizational behavior.
- 3380. INTRODUCTION TO HUMAN RELATIONS. (3 cr; S-N only; prereq education jr or sr)
Based on small-group training theory and methods, designed to help the student develop an understanding of his or her 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.
- 5147. INTELLIGENCE. (3 cr, §5150)
Examination of theories of intelligence and its development; implications for educational practices and psychological research.
- 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.
- 5152. KNOWING, LEARNING, AND THINKING. (3 cr)
Principles of human information processing; issues in memory and thought; discussion of mental operations in comprehension and understanding; analysis of intellectual structures supporting problem solving in applied settings.
- 5153. INTRODUCTION TO THE PSYCHOLOGY OF INSTRUCTION. (3 cr)
Survey of psychological factors in design of instruction; performance criteria, strategy, and sequence in the contexts of research; development and implementation activities in instructional techniques, technologies, and delivery systems; psychological processes relevant to measures of effectiveness in teaching-learning environment.

Social, Psychological, and Philosophical Foundations of Education

- 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.
- 5172. STRUCTURING LEARNING: SOCIAL PSYCHOLOGICAL APPROACHES.** (3 cr)
How to use cooperation, competition, and individualization to affect learning climate and cognitive and affective outcomes of instruction.
- 5176. PSYCHOLOGY OF DRUG ABUSE.** (3 cr)
Psychological and sociological problems of drug abuse with special reference to schools, teachers, and students.
- 5182. LEARNING AND EDUCATIONAL PRACTICE: THE CHILD AND ADOLESCENT.** (3 cr)
Survey of psychological methods and principles; models of the learner; topics in development, creativity, intelligence, and motivation; implications for teaching and curriculum design in preschool, elementary, and secondary education; professional training with children and adolescents as clients.
- 5183. LEARNING AND EDUCATIONAL PRACTICE: ADULT LEARNER.** (3 cr)
Survey of psychological methods and principles in human learning; models of the adult learner; topics in motivation, creativity, achievement, intelligence; implications for teaching and curriculum design in higher education, continuing education, and professional training.
- 5305. WORKSHOP IN HUMAN RELATIONS.** (1-6 cr [max 6 cr], §CSPP or Educ 5305; S-N only)
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.
- 5330. COMPUTER PROGRAMMING.** (3 cr; prereq sr)
Computer as a tool for research in the behavioral sciences; computer systems, language and the development of specific programs that demonstrate computer characteristics; laboratory experience.
- 5520. EVALUATION COLLOQUIUM.** (1 cr per qtr [max 6 cr])
Informal seminar of faculty and students interested in the problems of evaluation.
- 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.
- 5899. WORKSHOP: IMPROVEMENT OF SCHOOL SUPPORT SERVICES.** (1-12 cr [max 12 cr]; prereq §)
Topics appropriate to activities and interests 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

Description of Courses

- 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
- 8525.* SEMINAR: SPECIAL TOPICS IN EDUCATIONAL EVALUATION
- 8530. SEMINAR: DEVELOPING COMPUTER APPLICATIONS
- 8544. KNOWLEDGE AND SKILL
- 8547. SEMINAR: COGNITIVE PROCESSES OF THE ADOLESCENT AND EDUCATIONAL IMPLICATIONS
- 8548. PSYCHOLOGICAL ANALYSIS OF VERBAL LEARNING AND READING
- 8553. ETHOLOGICAL ISSUES IN EDUCATION
- 8554. INSTRUCTIONAL PSYCHOLOGY
- 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
- 8573. SMALL-GROUP PROCEDURES USED FOR PERSONAL AND ORGANIZATIONAL CHANGE
- 8670. PRACTICUM IN GROUP LEADERSHIP
- 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 PSYCHOLOGY

SOCIAL AND PHILOSOPHICAL 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.
- 3210. **SOCIETIES OF THE FUTURE.** (4 cr, §5Sci 3981)
Introduction to the area of future studies; application of interdisciplinary analysis to the problems of specialization and generalization of human understanding; alternative images of the futures of formal and informal social systems.
- 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.

Social, Psychological, and Philosophical Foundations of Education

- 5110. INTERCULTURAL EDUCATION: SOCIAL SCIENCE AND SYSTEMS PERSPECTIVES.** (3 cr)
Application of social science and systems analysis 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. YOUTH IN MODERN SOCIETY.** (4 cr, §Soc 5952)
Youth in advanced societies and as a social entity; functions and roles in industrial society, family, education, politics and government, economy and work, welfare and religion; organizations, social movements, and subcultures; empirical research and cross-cultural perspectives.
- 5131. COMPARATIVE EDUCATION.** (3 cr)
European, Asiatic, and American systems and philosophies of education; possibilities of international education.
- 5141. CRITICAL ISSUES IN COMTEMPORARY EDUCATION.** (3 cr)
Introduces graduate students to ideas involved in current theory and practice.
- 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 development related to education; reference to the emerging system of public education. Recommended as background for 5170 but not a prerequisite.
- 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.
- 5172. ANTHROPOLOGY OF AMERICAN EDUCATION.** (3 cr; S-N optional; prereq 5171 or Anth 1002 or 1502 or 5145 or §5145 or §)
Application of anthropological principles to study of socialization, schooling, and cultural transmission in the U.S.; utility of anthropological concepts for the study of our own education systems and analysis of educational change.
- 5173. ANTHROPOLOGICAL CLASSROOM 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.
- 5174. METHOD IN ANTHROPOLOGY AND EDUCATION.** (3 cr; prereq 5171 or Anth 5145 or 25 cr in anthropology)
Practice in aspects of field methodology below the level of full field study; detailed reading; analysis of studies in anthropology and education for methodological content.
- 5175. INTRODUCTION TO SYSTEMS THEORY IN SOCIAL SCIENCE AND EDUCATION.** (3 cr)
Fundamental aspects of general systems theory; readings; basic modeling techniques.
- 5180. INTRODUCTION TO THE ECONOMICS OF EDUCATION.** (4 cr)
Economic impact of education on educational markets, prices and production relationships, distribution of income, and investment and cost-benefit analysis in education.
- 5182. COMPARATIVE PHILOSOPHIES OF EDUCATION.** (3 cr)
Examination of competing philosophies of education.
- 5190. SOCIOLOGY OF EDUCATION.** (4 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.** (4 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.

Description of Courses

- 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 3 decades hence.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

- 8170. SEMINAR: RESEARCH METHODS IN ANTHROPOLOGY AND EDUCATION**
- 8172. SEMINAR: TOPICS IN ANTHROPOLOGY AND EDUCATION**
- 8220. SEMINAR: SOCIAL AND EDUCATIONAL FUTURES**
- 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**
- 8290. ADVANCED SOCIOLOGY OF EDUCATION**
- 8991.° PROBLEMS: 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. HISTORY AND PHILOSOPHY OF VOCATIONAL AND COMMUNITY EDUCATION.** (3 cr)
Analysis and interpretation; alternative value positions involving social, economic, and related community variables.
- 3010. ORGANIZATION AND DIRECTION OF FFA ACTIVITIES.** (2 cr)
Development of FFA leadership; vocational agriculture/agribusiness and natural resources education, youth leadership organization; integration of classroom and supervised occupational experience.
- 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. DIRECTED 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.

Vocational and Technical Education

- 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 per qtr [max 5 cr])
Individualized study packages of 1 credit each on 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 student or §)
Role of nonschool agencies in rural and agricultural education; methods and techniques of formal and informal instruction in school and nonschool educational program.
- 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 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 medium for course presentation and a model for teaching methods.
- 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.

Description of Courses

- 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.
- 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 per qtr [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.
- 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.* RESEARCH IN AGRICULTURAL EDUCATION**
- 8010. CURRENT ISSUES IN AGRICULTURAL EDUCATION**
- 8020. SEMINAR: AGRICULTURAL EDUCATION**
- 8091. FIELD PROBLEMS**
- 8303. SEMINAR: GRADUATE STUDIES REVIEW**

BUSINESS EDUCATION (BsEd)

- 1501. BEGINNING TYPEWRITING.** (2 cr)
Emphasis on correct typewriting techniques; letter styles; manuscripts; simple tabulation; proofreading.
- 1502. INTERMEDIATE TYPEWRITING.** (2 cr; 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; prereq 1502 or proficiency exam)
Proficiency in typing complex manuscripts, footnotes, bibliographies, additional letter styles, complex tabulations.
- 1504. INTRODUCTION TO BUSINESS EDUCATION.** (3 cr)
Introduction to curriculum and methodologies at all educational levels.
- 1505. BEGINNING SHORTHAND.** (3 cr; prereq 1501 or equiv)
Gregg shorthand theory, speed building on familiar material, typewritten transcription; introduction of new matter dictation.
- 1506. INTERMEDIATE SHORTHAND.** (3 cr; prereq 1502, 1505 or proficiency exam)
Emphasis on building speed on new matter dictation and typewritten transcription.
- 1507. ADVANCED SHORTHAND.** (3 cr; 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)
Office organization, communications, systems and work flow, records management.
- 1509. OFFICE MACHINES.** (2 cr; prereq 1502 or equiv)
Calculating, duplicating, and transcribing machines.
- 3300. TEACHING TYPEWRITING.** (2 cr; prereq 1502 or ¶1502 or equiv, SeEd 3155 or ¶SeEd 3155)
Objectives, content, methods, materials, and evaluation in the teaching of typewriting.
- 3301. TEACHING SHORTHAND AND TRANSCRIPTION.** (2 cr; prereq SeEd 3155 or ¶SeEd 3155 and 1506 or ¶1506 or equiv)
Classroom methods in developing shorthand and transcription skills.
- 3302. TEACHING BASIC BUSINESS SUBJECTS.** (2 cr; prereq SeEd 3155 or ¶SeEd 3155)
Developments in content and method of teaching non-vocational business subjects.
- 3303. TEACHING ACCOUNTING AND DATA PROCESSING.** (2 cr; prereq jr, SeEd 3155 or ¶SeEd 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]; S-N optional; prereq ¶)
To permit undergraduate students maximum flexibility in pursuing projects or topics of study on an independent basis.
- 3602. PRE-FALL STUDENT TEACHING.** (3 cr; S-N optional; prereq ¶)
Introduction to student teaching for those completing the regular fall quarter student teaching experience in business education.
- 3611. STUDENT TEACHING IN BUSINESS SUBJECTS.** (4 cr, §3601; S-N optional; prereq SeEd 3155, §)
Required for all students majoring in business education.
- 3612. STUDENT TEACHING IN BUSINESS SUBJECTS.** (4 cr, §3601; S-N optional; prereq SeEd 3155 and § or ¶3611)
Required for all students majoring in business education.
- 3613. STUDENT TEACHING IN BUSINESS SUBJECTS.** (4 cr, §3601; S-N optional; prereq SeEd 3155 and § or ¶3612)
Required for all students majoring 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.

Description of Courses

- 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; developing and evaluation of the training program.
- 5106. ORGANIZATION AND SUPERVISION OF BUSINESS EDUCATION.** (3 cr; prereq §)
Examination of evaluative criteria for business education departments, teaching selection and supervision, and organization of business education in the U.S.
- 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.
- 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.** (1-18 cr; S-N optional; prereq §)
Observation and practice in business offices; weekly seminars on application to teaching and guidance of school and post-high school students. Each 1 credit offering requires 85 hours of work; may not apply for credit toward an advanced degree.
- 5115. RESEARCH PROCEDURES IN BUSINESS EDUCATION.** (3 cr; 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.
- 5117. TRENDS AND ISSUES IN BUSINESS EDUCATION.** (3 cr [max 6 cr]; prereq postbaccalaureate student or §)
Current status and practices; alternative program options in business education.
- 5125. POSTSECONDARY BUSINESS AND DISTRIBUTIVE EDUCATION.** (3 cr, §DE 5115)
Determining needs, curriculum, facilities, admission practices, placement and follow-up of students, teacher qualifications, interorganizational relations in junior college and area technical school programs.
- 5130. BUSINESS AND DISTRIBUTIVE PROGRAMS FOR ADULTS.** (3 cr, §DE 5120)
Selection and training of evening school instructors; planning and promoting evening school business and distributive education classes.
- 5340. BUSINESS AND DISTRIBUTIVE EDUCATION STUDENT ORGANIZATIONS.** (3 cr, §DE 5340)
Organization, administration, and operation of local, state, and national business and distributive education vocational student organizations.
- 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 to 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.
- 3302. METHODS: DISTRIBUTIVE EDUCATION.** (4 cr; prereq §)
- 3303. METHODS: DISTRIBUTIVE EDUCATION.** (4 cr; prereq 3302, §)
- 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. PRE-FALL STUDENT TEACHING.** (3 cr; S-N only; prereq §)
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. CURRICULUM 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, §BsEd 5125)
Determining needs, curriculum, facilities, admission practices, placement and follow-up of students, teacher qualifications, 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.
- 5120. BUSINESS AND DISTRIBUTIVE PROGRAMS FOR ADULTS.** (3 cr, §BsEd 5130)
Selection and training of evening school instructors; planning and promoting evening school business and distributive education classes.
- 5125. ISSUES AND TRENDS IN DISTRIBUTIVE EDUCATION.** (3 cr; prereq sr or grad student 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.

Description of Courses

- 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. BUSINESS AND DISTRIBUTIVE EDUCATION STUDENT ORGANIZATIONS.** (3 cr, §BsEd 5340)
Organization, administration, and operation of local, state, and national business and distributive education vocational student organizations.
- 5400. PROGRAM DEVELOPMENTS IN DISTRIBUTIVE EDUCATION.** (1-12 cr [max 12 cr]; prereq §)
Problems, practices, methodology, and relationships; 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 evaluation problems and projects applicable to local school situations.
- 5900. DIRECTED STUDY: DISTRIBUTIVE EDUCATION.** (1-6 cr [max 6 cr]; S-N optional; prereq Δ)
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**

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.
- 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 ¶SeEd 3150 and/or ¶SeEd 3155)
Objectives, assessment, and strategies related to affective learning.

Vocational and Technical Education

- 3601. CLINICAL EXPERIENCE: TEACHING CONSUMER-HOMEMAKING.** (9 cr; S-N only; prereq ¶3611, ¶3620, Δ)
Classroom teaching in selected Minnesota school.
- 3602. CLINICAL EXPERIENCE: TEACHING FAMILY LIFE.** (9 cr; S-N only; prereq ¶3612, ¶3620, Δ)
Classroom teaching in selected Minnesota school.
- 3603. CLINICAL EXPERIENCE: TEACHING HOME ECONOMICS OCCUPATIONS.** (9 cr; S-N only; prereq ¶3613, ¶3620, Δ)
Classroom teaching in selected Minnesota school.
- 3605. FIELD EXPERIENCE FOR EXTENSION HOME ECONOMISTS.** (6 cr; S-N only; 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; S-N only; prereq ¶3601, ¶3620, Δ)
Individualized instruction conducted in selected programs in the field and on campus.
- 3612. FIELDWORK: FAMILY LIFE EDUCATION.** (3 cr; S-N only; prereq ¶3602, ¶3620, Δ)
Individualized instruction conducted in selected programs in the field and on campus.
- 3613. FIELDWORK: HOME ECONOMICS OCCUPATIONAL EDUCATION.** (3 cr; S-N only; prereq ¶3603, ¶3620, Δ)
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, Δ)
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.
- 5111. CURRICULUM IN HOME ECONOMICS OCCUPATIONAL EDUCATION.** (2 cr; prereq DE 5110 or ¶DE 5105)
Application in secondary and postsecondary home economics education; certification course for home economics teacher-coordinators.
- 5300. HOME ECONOMICS CURRICULUM.** (3 cr; prereq 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; prereq 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; prereq §)
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; prereq 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; prereq 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; prereq 3315 or §)
Planning a community program; teaching procedures; special problems.
- 5325. TRENDS IN HOME ECONOMICS EDUCATION.** (3 cr; prereq 5300 or 5305)
Current status; purposes, programs, content emphasis, research, problems and issues in the field.
- 5331. HOME ECONOMICS OCCUPATIONAL EDUCATION.** (3 cr per qtr [max 12 cr]; prereq 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.

Description of Courses

- 5336. HOME ECONOMICS OCCUPATIONAL EXPERIENCE.** (1-9 cr, \$3330; prereq jr, sr, home economics education major only; ‡; may not apply toward a grad degree)
Observation and experience in the chosen occupational cluster; weekly seminars with application to guidance and teaching of students.
- 5337. HOME ECONOMICS OCCUPATIONAL SEMINAR.** (3-9 cr [max 9 cr]; prereq ‡)
Current practices and career opportunities in business and industry combining planned experiences in work environments and a related seminar; maximum of 3 credits may be used in a degree program.
- 5400. WORKSHOP: HOME PLANNING AND FURNISHING.** (3 or 4 cr [max 12 cr]; prereq 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; prereq grad student)
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]; prereq 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; prereq grad student 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]; prereq Δ)
Procedures in teaching adults; planning the program; use of new materials and techniques; group and individual problems.
- 5430. WORKSHOP: CONTEMPORARY PROBLEMS IN HOME ECONOMICS EDUCATION.** (3 or 4 cr [max 12 cr]; prereq 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.
- 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 learning 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

8631. PRACTICUM: HOME ECONOMICS TEACHER EDUCATION

8900.* PROBLEMS: HOME ECONOMICS EDUCATION

INDUSTRIAL EDUCATION (Ind)

1300. **INTRODUCTION TO INDUSTRIAL EDUCATION TEACHING.** (2 cr; for freshmen and those contemplating the major)
Objectives, programs, and teaching career options of industrial education.
- ✓ 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.
1302. **SUPERVISED VOCATIONAL-INDUSTRIAL TEACHING.** (3 cr; prereq #)
Supervised teaching on the job for beginning teachers.
1490. **ELEMENTARY HANDCRAFTS.** (3 cr)
For majors in elementary, art, special, and recreational education.
1492. **CRAFTWORK.** (3 cr)
Projects in media suitable for industrial arts, plastics, art metal, lapidary, and leatherwork.
1600. **DRAFTING.** (3 cr, \$1500)
Mechanical drafting utilizing current practices of industry: projection, sketching, dimensioning, sections, auxiliaries, fasteners, working drawings, reproduction processes, basic design problems.
1602. **DRAWING AND DESIGN.** (3 cr, \$1506; prereq 1600 or #)
Laboratory: introduction to procedures and application systems; aspects of social, economic, production, and aesthetics in engineering in new designs.
1604. **INDUSTRIAL MATERIALS AND MEASUREMENT.** (3 cr)
Instruction and laboratory experiences in application of materials and measurement concepts.
1606. **INTRODUCTION TO INDUSTRIAL PROCESSES.** (3 cr; prereq 1602)
Instruction and laboratory experiences in basic technical process skills.
1610. **CONSTRUCTION TECHNOLOGY I.** (3 cr; prereq 1600, 1602, 1604, 1606, Dsgn 1551)
Analysis of managed personnel production system of construction; synthesis of housing construction practices and city and regional planning practices.
1612. **CONSTRUCTION TECHNOLOGY II.** (3 cr; prereq 1610)
Basic construction methods and techniques; applied activities oriented to laboratory experiences; planning, organization, and control of resources to produce products on a site.
1620. **GRAPHIC COMMUNICATIONS I.** (3 cr; prereq 1600, Math 1111)
Introduction to and laboratory experience in solution of graphic communications problems relating to hot metal processes.
1622. **GRAPHIC COMMUNICATIONS II.** (3 cr; prereq 1620)
Introduction to and laboratory experiences in solution of graphic communications problems, cold metal processes.
1630. **MANUFACTURING I, PROCESSES.** (3 cr; prereq 1604, 1606)
Introductory instruction and laboratory experiences in basic manufacturing processes; machining; sheet metal forming, welding, foundry.
1632. **MANUFACTURING II, PRODUCTION.** (3 cr; prereq 1630)
Advanced instruction and laboratory experiences in manufacturing enterprise; exploration and interpretation of careers in manufacturing.
1640. **INTRODUCTION TO POWER AND ENERGY.** (3 cr; prereq 1604, Phys 1014 and 1015 or GC 1163, GC 1451, Math 1111 or 1131)
Introductory laboratory experiences in application of electronic logic, servomechanisms, fluidic/pneumatic power, hydraulic power, and rotating machinery in industrial use.
1642. **POWER AND ENERGY SYSTEMS.** (3 cr; prereq 1640)
Laboratory and classroom experiences in application and design of interfaced logic systems, servomechanisms, fluidic/pneumatic and hydraulic power, and rotating machinery systems in industrial use.
1650. **TRANSPORTATION I.** (3 cr; prereq 1604, 1606)
Air, sea, and land transportation services, organization, economic relationship; individualized study of fuels and lubricants, use of technical manuals, specification charts, measurement techniques, power calculations; laboratory experience using test equipment, mock-ups, experiments.
1652. **TRANSPORTATION II.** (3 cr; prereq 1650)
Concepts in fuels, specification, measurement, concentrating on automotive and recreational vehicle service industry; laboratory experiences in power unit servicing, basic mechanics, repair techniques, diagnostic procedures to be provided by AVT centers.

Description of Courses

- 1800. CAREER PLANNING PRACTICUM I.** (1 cr; prereq Δ)
Peer group professional growth assessment and advising; human relations processes.
- 1801. CAREER PLANNING PRACTICUM II.** (1 cr; prereq 1800, Δ)
Peer group professional growth assessment and advising; human relations processes.
- 1802. CAREER PLANNING PRACTICUM III.** (1 cr; prereq 1801, Δ)
Peer group professional growth assessment and advising; human relations processes.
- 1803. CAREER PLANNING PRACTICUM IV.** (1 cr; prereq 1802, Δ)
Peer group professional growth assessment and advising; human relations processes.
- 3110. CONSTRUCTION: INTERMEDIATE.** (3 or 6 or 9 cr; prereq 1612, $\$$)
Individualized technical skill development in areas of house framing, concrete work, domestic wiring, plumbing, surveying, painting, paper hanging, and basic construction codes.
- 3111. CONSTRUCTION: ADVANCED.** (3 or 6 or 9 cr; prereq 3110, $\$$)
Individualized advanced skill development in areas of forming, block and brick, commercial plumbing, industrial circuitry, landscaping, finishing, and advanced construction codes.
- 3112. CONSTRUCTION: SPECIALIZATION.** (3 or 6 or 9 cr; prereq 3111, $\$$)
Students contract with AVTI instructor and industrial education coordinator for specialized work in areas of cabinet making, plumbing and electrical design, interior design, and code inspection.
- 3120. GRAPHIC COMMUNICATIONS: INTERMEDIATE.** (3 or 6 or 9 cr; prereq 1622, $\$$)
Individualized technical skill development in areas of offset printing, technical illustrating, machine and architectural drafting, photography.
- 3121. GRAPHIC COMMUNICATIONS: ADVANCED.** (3 or 6 or 9 cr; prereq 3120, $\$$)
Individualized advanced skill development in areas of color separation, web press operation, drafting design, color renditions, air brush.
- 3122. GRAPHIC COMMUNICATIONS: SPECIALIZATION.** (3 or 6 or 9 cr; prereq 3121, $\$$)
Students contract with AVTI instructor and industrial education coordinator for specialized work in areas of graphic design, printing management, computer drafting, production planning.
- 3130. MANUFACTURING: INTERMEDIATE.** (3 or 6 or 9 cr; prereq 1632, $\$$)
Individualized technical skill development in areas of welding, lathe operation, milling machine operation, sheet metal construction.
- 3131. MANUFACTURING: ADVANCED.** (3 or 6 or 9 cr; prereq 3130, $\$$)
Individualized advanced skill development in areas of numerical control and machine setup inspection, electric discharge machining, TIG welding.
- 3132. MANUFACTURING: SPECIALIZATION.** (3 or 6 or 9 cr; prereq 3131, $\$$)
Students contract with AVTI instructor and industrial education coordinator for specialized work in areas of tool design and making, materials testing, quality control, powder metal.
- 3140. POWER AND ENERGY: INTERMEDIATE.** (3 or 6 or 9 cr; prereq 1642, $\$$)
Individualized technical skill development in areas of digital, hydraulic, and pneumatic control systems, and radio and TV repair.
- 3141. POWER AND ENERGY: ADVANCED.** (3 or 6 or 9 cr; prereq 3140, $\$$)
Individualized advanced skill development in areas of digital, hydraulic, and pneumatic system design, electronic maintenance and repair, and alternative energy sources.
- 3142. POWER AND ENERGY: SPECIALIZATION.** (3 or 6 or 9 cr; prereq 3141, $\$$)
Students contract with AVTI instructor and industrial education coordinator for specialized work in areas of production system, electronics and power plant design.
- 3150. TRANSPORTATION: INTERMEDIATE.** (3 or 6 or 9 cr; prereq 1652, $\$$)
Individualized technical skill development in areas of small gas and marine engine repair, automotive tuneup, cooling systems, brakes, and autobody repair.
- 3151. TRANSPORTATION: ADVANCED.** (3 or 6 or 9 cr; prereq 3150, $\$$)
Individualized advanced skill development in areas of diesel engine repair, auto engine overhaul, front end repair, automatic transmission, aircraft engine maintenance, chassis straightening.
- 3152. TRANSPORTATION: SPECIALIZATION.** (3 or 6 or 9 cr; prereq 3151, $\$$)
Students contract with AVTI instructor and industrial education coordinator for specialized work in areas of engine modification, chassis and airframe design, experimental vehicle testing.

Vocational and Technical Education

- 3160. INDUSTRIAL EDUCATION INSTRUCTIONAL MANAGEMENT.** (3 cr; prereq minimum of 36 cr from occupational block 5301, 5330, 5360, 5303)
Application of technical subject matter and instructional methodology in management of an industrial education laboratory and its environment.
- 3700, 3702, 3704, 3706. STUDENT TEACHING.** (3 cr each; S-N only; for 3700, 3702, 3704: 9 cr required; prereq 1300 and 3360 or 1300 and 5360 and Δ ...for 3706: elective course; prereq Δ)
- 3701, 3703, 3705, 3707. STUDENT TEACHING SEMINAR.** (1-3 cr; S-N only; prereq \parallel 3700, \parallel 3702, \parallel 3704, \parallel 3706)
- 3750. INDUSTRIAL PRACTICES AND PROCESSES.** (3 cr; prereq 3330)
An organized series of field trips to representative industrial plants preceded by classroom study and investigation.
- 3801. CAREER PLANNING PRACTICUM V.** (1 cr; prereq 3800, Δ)
Peer group professional growth assessment and advising; human relations processes.
- 3802. CAREER PLANNING PRACTICUM VI.** (1 cr; prereq 3801, Δ)
Peer group professional growth assessment and advising; human relations processes.
- 3803. CAREER PLANNING PRACTICUM VII.** (1 cr; prereq 3802, Δ)
Peer group professional growth assessment and advising; human relations processes.
- 3804. CAREER PLANNING PRACTICUM VIII.** (1 cr; prereq 3803, Δ)
Peer group professional growth assessment and advising; human relations processes.
- 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 per qtr [max 15 cr]; prereq $\#$)
Structured/supervised employment in the communications industry. Credit allowed will be derived from the ratio of 100 clock hours of supervised work experience to each credit given the student. Total credit earned in 5100, 5101, 5102, and 5103 may not exceed 15.
- 5101. PRODUCTION/MANUFACTURING OCCUPATIONAL EXPERIENCE.** (1-5 cr per qtr [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 given the student. Total credit earned in 5100, 5101, 5102, and 5103 may not exceed 15.
- 5102. POWER/ENERGY OCCUPATIONAL EXPERIENCE.** (1-5 cr per qtr [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 given the student. Total credit earned in 5100, 5101, 5102, and 5103 may not exceed 15.
- 5103. CONSTRUCTION OCCUPATIONAL EXPERIENCE.** (1-5 cr per qtr [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 given 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.

Description of Courses

- 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.
- 5325. FOUNDATIONS OF INDUSTRIAL EDUCATION.** (3 cr)
History, objectives, development and current practices of the field.
- ✓ **5330. INDUSTRIAL COURSE CONSTRUCTION.** (3 cr)
Principles and techniques; experience in planning, organizing, and building a teaching guide.
- 5344. FACILITIES AND MANAGEMENT.** (3 cr; prereq 1300 or 5330 or §)
Planning, evaluation, and management of industrial education shop and laboratory facilities.
- 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)

- 5100. SPECIAL TOPICS IN INSTRUCTION.** (1-6 cr [max 9 cr]; prereq §)
Topics will vary with each offering but will deal with planning, providing, and/or evaluating instruction.
- 5101. SPECIAL TOPICS IN CURRICULUM.** (1-6 cr [max 9 cr]; prereq §)
Topics will vary with each offering but will deal with the development and evaluation of curricula and/or curriculum materials.
- 5102. SPECIAL TOPICS IN ADMINISTRATION.** (1-6 cr [max 9 cr]; prereq §)
Topics will vary with each offering but will deal with leadership and management of vocational education programs.
- 5200. EVALUATION OF LOCAL VOCATIONAL EDUCATION PROGRAMS.** (3 cr)
Procedures and experience in the use of instruments for conducting program evaluations for teachers, administrators, and state department personnel.

Vocational and Technical Education

- ✓ **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.
- 5500. INTRODUCTION TO VOCATIONAL EDUCATION ADMINISTRATION.** (3 cr)
Basic concepts of structure, financing, program planning and evaluation, law and liability, personnel policies, and the management of vocational education programs.

FOR GRADUATE STUDENTS ONLY

(Description in the *Graduate School Bulletin*)

8100. VOCATIONAL EDUCATION TUTORIAL

SECTION V. FACULTY

CHILD PSYCHOLOGY

190 Child Development

William R. Charlesworth
W. Andrew Collins
Willard W. Hartup
Daniel P. Keating
Michael P. Maratsos
John C. Masters
Shirley G. Moore
Marion Perlmutter
Anne D. Pick
Herbert L. Pick, Jr.
Philip H. Salapatek
Sandra Scarr-Salapatek
L. Alan Sroufe
June L. Tapp
Thomas R. Trabasso
Albert Yonas

CURRICULUM AND INSTRUCTION

148 Peik Hall

Adult Education

206 Burton Hall

Harlan G. Copeland
Rosemarie L. Park
Reynold A. Willie

Art Education

135 Wulling Hall

Michael D. Day
George K. Olson
Thomas C. Slettehaugh
Anna Smits

Elementary Education

250 Burton Hall

Naomi C. Chase
John J. Cogan
Robert Dykstra
Arthur K. Ellis
Harlan S. Hansen
Kenneth R. Howey
Alan H. Humphreys
Robert L. Jackson
Roger T. Johnson
Ronald T. Lambert
John C. Manning
Robert F. McNergney
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
Howard Y. Williams

Music Education

104 Scott Hall

Robert L. Borg
Reginald T. Buckner
Arnold F. Caswell
Judith A. Jellison
Stephen W. Schultz
Edgar M. Turrentine
Lloyd Ultan

Secondary Academic Fields

148 Peik Hall

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

General Curriculum

Andrew Ahlgren
Eugene M. Anderson
Richard D. Kimpston
Marlene Mitchell
Howard Y. Williams

Instructional Systems

Richard W. Davis
Neville P. Pearson
Robert D. Tennyson

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

Second Languages and Cultures

Helen L. Jorstad
Dale L. Lange

Social Studies Education

William E. Gardner
Allen D. Glenn
James A. Mackey
Edith West

Teacher Education

206 Burton Hall

Charles R. Bruning
Kenneth R. Howey
Gordon M. A. Mork
Reynold A. Willie
Arnold S. Woestehoff

EDUCATIONAL ADMINISTRATION

218 Health Service
St. Paul Campus

Gary F. Alkire
William M. Ammentorp
Vernon L. Hendrix
Clifford P. Hooker
Thomas L. Jackson
Robert J. Keller
Ronald T. Lambert
Gerald 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
Richard F. Weatherman

PHYSICAL EDUCATION, RECREATION, AND SCHOOL HEALTH EDUCATION

111 Cooke Hall

Physical Education

224 Cooke Hall

John F. Alexander
Nancy E. Cato
Belmar S. Gunderson
Eloise M. Jaeger
Nadine M. Jette
Robert W. Johnson
March Krotee
John A. Kundla
Mary B. Lampe
James D. LaPoint
G. Robert Mowerson
Jeralyn J. Plack
Robert C. Serfass
Jacqueline M. Shick
Lela June Stoner
Mary L. Young

Recreation and Park Administration

203 Cooke Hall

Charles A. Boudreau
Frederick M. Chapman
Elizabeth Griffin
Leo H. McAvoy
John H. Schultz
Caroline R. Weiss

School Health Education

101 Norris Hall

Robert Cobb
Lora L. Lindgren

PSYCHOEDUCATIONAL STUDIES

249 Burton Hall

Counseling and Student Personnel Psychology

139 Burton Hall

Alan R. Anderson
William H. Edson
Charles J. Glotzbach
Theda Hagenah
Lorraine S. Hansen
Thomas J. Hummel
Clyde A. Parker
Alton L. Raygor
Warren Shaffer
Bruce Sillers
W. Wesley Tennyson
Donald R. Zander

Psychology in the Schools

N-548 Elliott Hall

Byron R. Egeland
V. Lois Erickson
Marian D. Hall
Norman A. Sprinthall
Richard A. Weinberg
James E. Ysseldyke

Special Education

101 Pattee Hall

Bruce E. Balow
Robert H. Bruininks
Virginia L. Bruininks
Stanley L. Deno
Dewey G. Force, Jr.
Robert W. McCauley
Donald F. Moores
Maynard C. Reynolds
Rosalyn A. Rubin
John E. Rynders
H. Uwe Stuecher
James E. Turnure
Grace J. Warfield
Richard F. Weatherman
Frank B. Wilderson
Frank H. Wood

SOCIAL, PSYCHOLOGICAL, AND PHILOSOPHICAL FOUNDATIONS OF EDUCATION

206 Burton Hall

Douglas H. Anderson
Ayers L. Bagley
William M. Bart
Robert H. Beck

Russell W. Burris
Shirley M. Clark
Raymond O. Collier, Jr.
Mary E. Corcoran
Mark L. Davison
Marion L. Dobbert
David L. Giese
Arthur M. Harkins
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
S. Jay Samuels
John E. Stecklein
James S. Terwilliger
John C. Weidman
Wayne W. Welch

VOCATIONAL AND 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 C. Meyer

Home Economics Education

109 McNeal Hall

St. Paul Campus

Marjorie M. Brown
Helen T. Henrie
Joan R. McFadden
Sue C. Reitan
Ardell Wantoch
Emma B. Whiteford

Industrial Education

145 Peik Hall

David C. Bjorkquist
Donald E. Irvin
William A. Kavanaugh
Stephen J. Miletich
Jerome Moss, Jr.
David J. Pucel
Brandon B. Smith
Tim L. Wentling

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.	373-2268
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	Michael Day 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 Development	373-9854
Child Psychology	John C. Masters 104 Child Development	373-9867
Coaching Certification (men and women)	James LaPoint 221A Cooke Hall	373-4221
Communication Disorders	Richard R. Martin 215 Shevlin Hall	373-4116
Community Education	Harlan G. Copeland 206 Burton Hall	376-3501
Counseling and Student Personnel Psychology	L. Sunny Hansen	373-4471
Curriculum and Instruction	Robert Dykstra 130 Peik Hall	373-3300
Dean's Office	104 Burton Hall	373-9880
Distributive Education	Richard D. Ashmun 270 Peik Hall	373-9724
Drug Education	Robert S. Cobb 101 Norris Hall	373-3403
Economic Education	William E. Becker 1169 Business Administration Building West Bank	373-4469
Education Student Board	227 Burton Hall	373-5155
Educational Administration	Gary F. Alkire 213 Health Service Building St. Paul Campus	373-5568
Educational Research and Development Council	Gerald G. Mansergh 223 Health Service Building St. Paul Campus	373-4860
Elementary Education	250 Burton Hall	373-3974

English Education (Speech-Communication, Theatre Arts)	Gene L. Piché 130 Peik Hall	373-5198
Field Experiences (Student Teaching)	Education Career Development Office 1425 University Avenue S.E.	373-2245
Financial Aid	Student Financial Aid 107 Armory	373-4021
Foreign Languages (see Second Languages and Cultures)		
General Curriculum	Richard D. Kimpston 226 Burton Hall	373-5157
Graduation Requirements (Balance Sheet Clerk)	Window 2 Morrill Hall	373-7758
Higher Education	Mary E. Corcoran	
Home Economics Education	Joan R. McFadden 195 McNeal Hall St. Paul Campus	373-1530
Human Relations	Chester W. Oden 206 Burton Hall	376-5027
Industrial Education	James Loebis 125 Peik Hall	376-7490
Instructional Systems Laboratory	Robert D. Tennyson 117 Burton Hall	373-5158
Kindergarten Education	Harlan S. Hansen 238 Burton Hall	373-2285
Library Science	Joan Leigh 419 Walter Library	373-3100
Mathematics Education	James E. Stochl 1407 University Avenue S.E.	373-4140
Minnesota Research Coordination Unit for Vocational Education	Brandon B. Smith 145 Peik Hall	373-3843
Music Education	Edgar Turrentine 204 Scott Hall	373-3452
Nursery School	Shirley G. Moore 180 Child Development	373-9854
Physical Education	Lela June Stoner 222A Cooke Hall	373-3219
Placement	Education Career Development Office 1425 University Avenue S.E.	373-2266
Planning and Development Office	Theodore E. Kellogg 103 Burton Hall	373-3577
Psychoeducational Center	Maynard Reynolds 249 Burton Hall	373-3483
Psychoeducational Studies	Maynard Reynolds 249 Burton Hall	373-3483
Psychological Foundations of Education	330 Burton Hall	373-5213
Readmission Procedures	Education Career Development Office 1425 University Avenue S.E.	373-2257

Recreation and Park Administration	John Schultz 203A Cooke Hall	373-4269
Registration Information	Education Career Development Office 1425 University Avenue S.E.	373-2268
Remedial Reading and Reading Supervisor Programs	Robert L. Schreiner 214 Burton Hall	373-5834
Research, Development, and Demonstration Center, Special Education Programs	Donald Moores 13 Pattee Hall	373-4955
School and Community Health Education	Robert S. Cobb 101 Norris Hall	373-3403
School Psychology	Richard Weinberg N550 Elliott Hall	373-3286
Science Education	Clarence H. Boeck 370 Peik Hall	373-9764
Second Languages and Cultures Education	Dale L. Lange 224 Peik Hall	373-7992
Secondary Education (see academic fields)		
Social and Philosophical Foundations of Education	203 Burton Hall	373-9899
Social, Psychological, and Philosophical Foundations of Education	Clyde A. Parker 206 Burton Hall	373-0210
Social Studies Education	James Mackey 152 Peik Hall	373-9721
Southeast Alternatives Experi- mental School Project (SEA) (see Teacher Center)		
Special Education	Robert Bruininks 101 Pattee Hall	373-3291
Student Progress Committee	Education Career 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 undergraduate divisions of the University and those of the Graduate School and Continuing Education and Extension. 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.

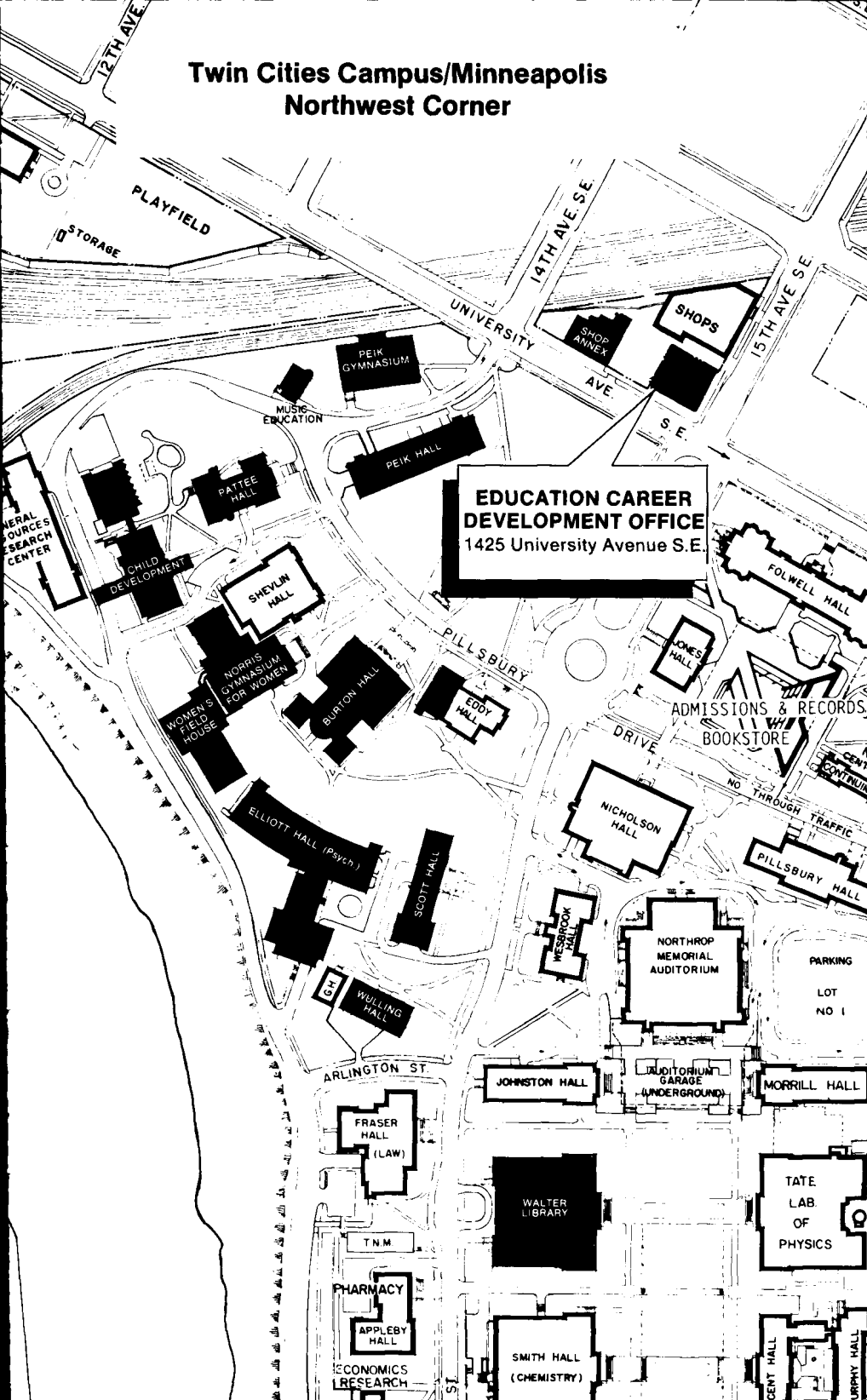
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Twin Cities Campus/Minneapolis Northwest Corner



**EDUCATION CAREER
DEVELOPMENT OFFICE**
1425 University Avenue S.E.

- 12TH AVE
- PLAYFIELD
- STORAGE
- UNIVERSITY
- 14TH AVE S.E.
- 15TH AVE S.E.
- SHOPS
- SHOP ANNEX
- PEIK GYMNASIUM
- MUSIC EDUCATION
- PEIK HALL
- GENERAL SOURCES SEARCH CENTER
- CHILD DEVELOPMENT
- PATTEE HALL
- SNEYLIN HALL
- NORRIS GYMNASIUM FOR WOMEN
- WOMEN'S FIELD HOUSE
- BURTON HALL
- EDDY HALL
- PILLSBURY
- ADMISSIONS & RECORDS
- BOOKSTORE
- FOLWELL HALL
- JONES HALL
- NICHOLSON HALL
- PELLSBUURY HALL
- ELLIOTT HALL (Psych)
- SCOTT HALL
- MESSROCK HALL
- NORTHROP MEMORIAL AUDITORIUM
- PARKING LOT NO 1
- WOLLING 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)
- LIBRARY HALL

UNIVERSITY of
MINNESOTA
BULLETIN 1976
AUGUST 23 1976
1977

College of Education
Continuing Education Classes
Late Afternoon, Saturday Morning, and Extension



UNIVERSITY OF MINNESOTA

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William H. Edson, Director of Education Career Development Office

Theodore E. Kellogg, Director of Education Planning and Development Office

**College of Education
Continuing Education Classes**

Late Afternoon, Saturday Morning, and Extension

UNIVERSITY OF MINNESOTA

College of Education Continuing Education Classes

I. GENERAL INFORMATION

The College of Education offers a wide variety of classes to teachers at times convenient to them. Some are offered in the day school; others are offered through Continuing Education and Extension.

This bulletin is primarily a class schedule with information arranged in two main sections: (a) Late Afternoon and Saturday Morning Classes and (b) Extension Classes. Because registration procedures differ for classes in each section, teachers are cautioned to read the bulletin carefully.

Teachers are urged to consult the *College of Education Bulletin* and the *Graduate School Bulletin* for admission requirements and complete descriptions of courses and programs, and the quarterly *Class Schedule* for course meeting times and sites and specific course offerings.

All prospective and currently enrolled students should also refer to the *General Information Bulletin*. Some students may wish to refer to bulletins of other collegiate units as well, such as the Colleges of Agriculture, Biological Sciences, Business Administration, Home Economics, and Liberal Arts, the General College, and the Institute of Technology. These bulletins are available at the Morrill Hall information booth or by writing to the Office of Admissions and Records, University of Minnesota, Minneapolis, Minnesota 55455.

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 the Graduate School. Applicants must pay a credentials examination fee as follows:

	<i>University Graduates</i>	<i>Non-University Graduates</i>
College of Education		
—undergraduate programs	\$ 0	\$10
—M.Ed. program	10	10
Graduate School		
—M.A., Ed.D., and Ph.D. programs	5	15
Extension Classes	0	0
Adult Special Students	0	0

Teachers planning a program of study leading to a degree must file an application for admission at one of the addresses given below and include with their application transcripts of all previous academic work as well as the credentials examination fee.

Teachers who wish to work toward the master of education degree apply for admission to the College of Education. Graduates of the College of Education may secure the admission application at Window 2, Morrill Hall; all others may obtain this form from the Admissions Office, 6 Morrill Hall, University of Minnesota, Minneapolis, Minnesota 55455. See the *College of Education Bulletin* for a

description of this program. Telephone requests for information about the College of Education should be made to the Education Career Development Office, (612) 373-2268.

Teachers who wish to pursue work leading to the master of arts, doctor of education, or doctor of philosophy degree or the specialist in education apply for admission to the Graduate School at the Graduate School Office, 310 Johnston Hall, University of Minnesota, Minneapolis, Minnesota 55455. See the *Graduate School Bulletin* for descriptions of these programs. Telephone requests for information about the Graduate School should be made to its admissions office, (612) 373-2973.

Teachers who wish to take course work but who have 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 must complete the adult special application form available from the Admissions Office, 6 Morrill Hall, and return it to that office as early as possible before registration. Those who have been admitted as an adult special student and wish to proceed in a degree program should apply for admission to the specific program early in their first quarter of adult special registration.

Only those credits earned in the first quarter of adult special registration may be presented for transfer to the Graduate School. 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.

Registration—Teachers-in-service are expected to register during the advance registration period (under alphabetical control for CLA classes) or during the week before classes begin. Early registration is advised for classes with enrollment limits. The Education Career Development Office will remain open until 6 p.m. on Monday, September 20, for registration of teachers-in-service.

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 Records Office 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 M.Ed. or 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 Records Office, Window 2, Morrill Hall.

Quarterly Tuition and Fees—The fee for part-time registration in the College of Education is \$20 per credit for residents of the state and \$58.50 per credit for nonresidents. If 6 or more credits are taken, a student services fee of \$51.50 is required.

The fee for part-time registration in the Graduate School for 6 credits (or two courses) or less or for thesis only is \$143 for residents and \$391 for nonresidents. Graduate students taking more than 6 credits pay \$286 if they are residents and \$781 if nonresidents. The student services fee of \$51.50 is required of all students taking 6 credits or more 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 fees as students registered for credit.

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. Students may select the 12 credits they wish to transfer.

Students in master of education programs in the College of Education should consult their adviser to determine the number of credits earned in Continuing Education and Extension which may be transferred to their program.

Registration—Teachers may register for courses offered through Continuing Education and Extension in 101 Wesbrook Hall; at the MacPhail Center, 1128 LaSalle Avenue, Minneapolis, Minnesota 55403; or by mail. In-person fall registration at Wesbrook Hall will be accepted on September 9 and 10 and September 13 through 17. Registration hours are from 12 noon to 8 p.m. except on Fridays when they are from 12 noon to 4:30 p.m. For complete information about registration procedures, including mail registration, consult the 1976-77 *Extension Classes Bulletin*. A copy of this bulletin may be obtained by calling (612) 376-3000 or by writing to Extension Classes, 101 Wesbrook Hall, University of Minnesota, Minneapolis, Minnesota 55455.

Tuition and Fees—The following tuition schedule is in effect for courses offered through Continuing Education and Extension:

1xxx- and 3xxx-level courses	\$15.50 per credit
5xxx-level courses	\$17.00 per credit
8xxx-level courses	\$23.00 per credit

Special fees may be charged for use of a laboratory, extra materials, or audiovisual equipment.

Students who concurrently register 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, consult the *Extension Classes Bulletin* or contact the Department of Extension Classes (612) 373-3195.

Teacher Placement Service

The College of Education provides a 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 students to placement service for a 1-year period ending October 1. All graduating seniors (except majors in music therapy and recreation and park administration) are required to register with the Education Career Development Office, or to secure an official exemption from that office.

Statement on Human Rights

The Board of Regents has committed itself and the University of Minnesota to the policy that there shall be no discrimination on the basis of race, creed, color, sex, age, or national origin. In adhering to this policy, the University abides by the requirements of Titles VI and VII of the Civil Rights Act of 1964, Revised Order No. 4, Executive Orders 11246 and 11375, Sections 799A and 845 of the Public Health Service Act, and other federal regulations and pertinent acts of Congress.

It is also the policy of the University of Minnesota not to discriminate on the basis of sex in its educational programs, admissions, activities, or employment policies as required by Title IX of the Education Amendments of 1972.

Inquiries regarding compliance may be directed to Lillian H. Williams, Director, Office of Equal Opportunity and Affirmative Action, 419 Morrill Hall, Minneapolis, Minnesota 55455, (612) 373-7969, or to the Director of the Office of Civil Rights, Department of Health, Education and Welfare, Washington, D.C. 20201.

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.	373-2268
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	Michael Day 135 Wulling Hall	373-4050
Bureau of Field Studies and Surveys	Charles H. Sederberg 300 Health Service 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 154 Child Development	373-9867
Coaching Certification	James LaPoint 221a Cooke Hall	373-4221
Communication Disorders	Richard R. Martin 215 Shevlin Hall	373-4116
Community Education	Harlan G. Copeland 206 Burton Hall	376-3501
Counseling and Student Personnel Psychology	Lorraine Hansen 139a Burton Hall	373-4471
Curriculum and Instruction	Robert Dykstra 130 Peik Hall	373-3300
Dean's Office	104 Burton Hall	373-9880
Distributive Education	Richard D. Ashmun 270 Peik Hall	373-9724
Drug Education	Robert S. Cobb 101 Norris Hall	373-3403
Economic Education	William E. Becker 1169 Business Administration Building West Bank	373-4469
Educational Administration	Gary F. Alkire 213 Health Service St. Paul Campus	373-5568
Educational Research and Development Council	Gerald G. Mansergh 223 Health Service St. Paul Campus	373-4860
Education Student Board	227 Burton Hall	373-5155
Elementary Education	250 Burton Hall	373-3974
English Education (Speech- Communication, Theatre Arts)	Gene L. Piché 130 Peik Hall	373-5198

Field Experiences (Student Teaching)	Education Career Development Office 1425 University Avenue S.E.	373-2245
Financial Aid	Student Financial Aid 107 Armory	373-4021
Foreign Languages (see Second Languages and Cultures)		
General Curriculum	Richard D. Kimpston 226 Burton Hall	373-5157
Graduation Requirements (Balance Sheet Clerk)	Window 2 Morrill Hall	373-7758
Higher Education	Mary Corcoran	
Home Economics Education	Joan McFadden 107 McNeal Hall St. Paul Campus	373-1530
Human Relations	Chester W. Oden 206 Burton Hall	376-5027
Industrial Education	James Loebis 125 Peik Hall	373-7490
Instructional Systems Laboratory	Robert D. Tennyson 117 Burton Hall	373-5158
Kindergarten Education	Harlan S. Hansen 238 Burton Hall	373-2285
Library Science	Joan Leigh 419 Walter Library	373-3100
Mathematics Education	James E. Stochl 1407 University Avenue S.E.	373-4140
Minnesota Research Coordination Unit for Vocational Education	Brandon B. Smith 145 Peik Hall	373-3843
Music Education	Edgar Turrentine 204 Scott Hall	373-3452
Nursery School	Shirley G. Moore 180 Child Development	373-9854
Physical Education	Lela June Stoner 222 Cooke Hall	373-3219
Placement	Education Career Development Office 1425 University Avenue S.E.	373-2266
Planning and Development Office	Theodore E. Kellogg 103 Burton Hall	373-3577
Psychoeducational Studies	Maynard Reynolds 249 Burton Hall	373-3483
Psychological Foundations of Education	330 Burton Hall	373-5213
Readmission Procedures	Education Career Development Office 1425 University Avenue S.E.	373-2257
Recreation and Park Administration	John Schultz 203 Cooke Hall	373-4269
Registration Information	Education Career Development Office 1425 University Avenue S.E.	373-2257
Remedial Reading and Reading Supervisor Certification	Robert L. Schreiner 214 Burton Hall	373-5834

Research, Development, and Demonstration Center, Special Education Programs	Donald Moores 13 Pattee Hall	373-4955
School and Community Health Education	Robert Cobb 101 Norris Hall	373-3403
School Psychology	Richard Weinberg N550 Elliott Hall	373-3286
Science Education	Clarence H. Boeck 370 Peik Hall	373-9764
Second Languages and Cultures Education	Dale L. Lange 224 Peik Hall	373-7992
Secondary Education (see academic fields)		
Social and Philosophical Founda- tions of Education	203 Burton Hall	373-9899
Social, Psychological, and Philosophical Foundations of Education	Clyde A. Parker 206 Burton Hall	373-0210
Social Studies Education	James Mackey 152 Peik Hall	373-9721
Special Education	Robert Bruininks 101 Pattee Hall	373-3291
Student Progress Committee	Education Career 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 239 Burton Hall	376-7553
Vocational Education	Gordon I. Swanson 130 Classroom-Office Building St. Paul Campus	373-5183

Postbaccalaureate Programs in Education

This list identifies 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	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		
Community Education	no	Education (Adult) or Educational Administration or Recreation and Park Administration			
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
Educational Psychology	no	Educational Psychology	Educational Psychology		
Elementary Education	yes	Elementary Education	Education		
English Education	yes	Education or Secondary Education	Education		
Foreign Languages		See Second Languages			
General Curriculum	no	Education or Secondary Education	Education		General Curriculum
Higher Education	no	Education	Education		
History and Philosophy of Education		See Social and Philosophical 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	
Instructional Systems	no	Education	Education		
Library	no	Library School			
Mathematics Education	yes	Mathematics Education	Education		Mathematics Education
Music Education	yes	Music Education	Education		
Physical Education	yes	Physical Education or Education	Physical Education or Education	Physical Education	
Psychological Foundations	no	Educational Psychology	Educational Psychology		
Recreation and Park Administration	yes	Recreation and Park Administration or Education	Physical Education or Education		
School Health Education	yes	Physical Education or Education	Physical Education or Education		
School Psychology	no	Educational Psychology	Educational Psychology		School Psychology
Science Education	yes	Education or Secondary Education	Education		
Second Languages and Cultures Education	yes	Education or Secondary Education	Education		
Secondary Education	See fields	Education or Secondary Education	Education		
Social and Philosophical Foundations of Education	no	Social and Philosophical Foundations of Education	Education		
Social Studies	yes	Education or Secondary Education	Education		
Special Education	yes	Educational Psychology	Educational Psychology		Special Education
Teacher Education	no	Education	Education		
Vocational Education	See fields		Vocational Education	Vocational Education	

II. CLASS SCHEDULE

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.

Key to 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.
- † All courses preceding the dagger must be completed before credit will be granted for any quarter of the sequence.
- ¶ 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* is given to students with their registration materials.

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.

CHILD PSYCHOLOGY (CPsy)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

- 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, CD 218. Perlmutter

WINTER QUARTER 1977

- 5319. CLINICAL PROCEDURES WITH CHILDREN AND YOUTH. (4 cr; prereq 12 cr psychology, educational psychology, sociology or child psychology) 9:00-11:30 S
- 8343. ADVANCED COGNITIVE DEVELOPMENT. (3 cr; prereq 12 cr child psychology or psychology) 3:45-5:00 MW

SPRING QUARTER 1977

- 5313. PSYCHOLOGY OF ATYPICAL CHILDREN. (4 cr, §3313; prereq 1301 or equiv) 9:00-11:30 S
- 8341. ADVANCED PERCEPTUAL DEVELOPMENT. (3 cr; prereq Psy 5031, #) 3:30-5:00 MW
- 8605. DEVELOPMENTAL PSYCHOPATHOLOGY. (3 cr; prereq 8333, #) 3:30-5:00 TTh

EXTENSION CLASSES

FALL QUARTER 1976

5303. **ADOLESCENT PSYCHOLOGY.** (4 cr, §3303; prereq 5 cr introductory psychology; §68) 6:20-8:50 M, Bu 120, Grotevant
5311. **BEHAVIORAL AND EMOTIONAL PROBLEMS.** (4 cr, §3311; prereq 1301 or equiv; limited to 30 students; §68) 7:00-9:30 W, Kellogg HS, Little Canada, Kriss
5313. **PSYCHOLOGY OF ATYPICAL CHILDREN.** (4 cr, §3313; prereq 1301 or equiv; §68) 6:20-8:50 W, CD 218, Brown
5319. **CLINICAL PROCEDURES WITH CHILDREN AND YOUTH.** (4 cr; prereq 12 cr in psychology, child psychology, educ psychology, or sociology; limited to 55 students; §68) 6:20-8:50 T, Pt 215, Gross
5331. **PROCESSES OF SOCIALIZATION OF CHILDREN.** (4 cr, §3331; prereq 1301 or equiv; §68) 6:20-8:50 Th, Wu 230, Mohr
5345. **LANGUAGE DEVELOPMENT.** (4 cr; prereq 1301; limited to 35 students; §68) 7:00-9:30 M, Richfield HS, Bushnell

WINTER QUARTER 1977

5311. **BEHAVIORAL AND EMOTIONAL PROBLEMS.** (4 cr, §3311; prereq 1301 or equiv; §68) 6:20-8:50 T, Bu 120, Ireton
5315. **INTRODUCTION TO MENTAL RETARDATION.** (4 cr, §SpEd 5120; prereq 1301 or equiv; §68) 6:20-8:50 Th, Pt 214, Warfield

SPRING QUARTER 1977

5303. **ADOLESCENT PSYCHOLOGY.** (4 cr, §3303; prereq 5 cr introductory psychology; limited to 30 students; §68) 7:00-9:30 M, Richfield HS, Keniston
5311. **BEHAVIORAL AND EMOTIONAL PROBLEMS.** (4 cr, §3311; prereq 1301 or equiv; §68) 6:20-8:50 Th, WuH 230, Reed
5315. **INTRODUCTION TO MENTAL RETARDATION.** (4 cr, §SpEd 5120; prereq 1301 or equiv; §68) 6:20-8:50 Th, Pt 214, Warfield
5331. **PROCESSES OF SOCIALIZATION OF CHILDREN.** (4 cr, §3331; prereq 1301 or equiv; limited to 30 students; §68) 6:20-8:50 W, Richfield HS 144, Collins
5343. **COGNITIVE DEVELOPMENT.** (4 cr; prereq 1301; limited to 35 students; §68) 7:00-9:30 T, Sandburg HS, Golden Valley, Hopmann

CURRICULUM AND INSTRUCTION

Adult, Higher, and Teacher Education (Educ)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5103. **ADULT EDUCATION WORKSHOP: Community Education.** (1-12 cr [max 12], 3 cr this offering; prereq practicing adult educator, §) 4:00-6:30 Th, NH 107, Copeland
5104. **SURVEY OF ADULT EDUCATION.** (3 cr; prereq sr or §) 7:00-9:30 T, Bu 123, Copeland
5180. **ANALYSIS OF THE TEACHING PROCESS.** (3 cr; prereq tchg exper or §) IX-X T, Jones 2, E Anderson
5184. **SUPERVISION OF CLINICAL EXPERIENCES.** (3 cr; prereq §) III-IV S, Bu 120, Mork, Woestehoff
5201. **ORIENTATION TO THE ADULT BASIC EDUCATION STUDENT.** (3 cr) IX-X T, Jones 1, Park
5205. **FIELD EXPERIENCE IN ADULT EDUCATION.** (4-8 cr [max 8]; prereq §) Copeland, Park, Willie

5401. ADULT LEARNING AND DEVELOPMENT THROUGH THE LIFE SPAN. (3 cr) IX-X M, Bu 125, Willie
8230. SEMINAR: DISSERTATION RESEARCH IN HIGHER EDUCATION. (1 cr per qtr; prereq #) 7-9 M, Bu 211, Corcoran, Kellogg
8250. HIGHER EDUCATION IN THE UNITED STATES. (3 cr; prereq 18 cr education or 1 yr grad study in any field) II-III S, Bu 125, Corcoran

WINTER QUARTER 1977

5103. ADULT EDUCATION WORKSHOP. (1-12 cr [max 12], 3 cr each section; prereq practicing adult educator, #) Section 1—VIII-IX Th (Adult GED/High School Education); Section 2—4-6 Th (Education for Older Adults)
5104. SURVEY OF ADULT EDUCATION. (3 cr; prereq sr or #) III-IV TTh
5186. ALTERNATIVE SCHOOL DESIGNS: IMPLICATIONS FOR TEACHER EDUCATION. (3 cr) IX-X M
5202. THEORIES AND TECHNIQUES OF DIAGNOSIS AND PRESCRIPTION FOR THE ABE TEACHER. (3 cr; prereq 5201, ¶5205) IX-X T
5205. FIELD EXPERIENCE IN ADULT EDUCATION. (4-8 cr [max 8]; prereq #)
5501. CONTINUING EDUCATION AND THE PROFESSIONS. (3 cr) IX-X M
8188. ALTERNATIVE PROGRAMS IN TEACHER EDUCATION. (3 cr) IX-X M
8229. SEMINAR: BASIC ISSUES IN HIGHER EDUCATION. (1-4 cr; prereq #) IX-X Th
8230. SEMINAR: DISSERTATION RESEARCH IN HIGHER EDUCATION. (1 cr per qtr. prereq #) 7-9 M
8251. CURRICULUM TRENDS IN AMERICAN COLLEGES. (3 cr; prereq 8250, 18 cr education or 1 yr grad study in any field) II-III S
8285. PROFESSIONAL EDUCATION OF TEACHERS. (3 cr; prereq 15 cr education incl 5184, 8250 or HEd 5182 or CSPP 8140 or #) III-IV S

SPRING QUARTER 1977

5103. ADULT EDUCATION WORKSHOP: Advanced Diagnosis and Prescription in Basic Education for Adults. (1-12 cr [max 12], 3 cr this offering; prereq practicing adult educator, #) VIII-IX Th
5104. SURVEY OF ADULT EDUCATION. (3 cr; prereq sr or #) IX-X T
5182. LABORATORY APPROACHES IN TEACHER EDUCATION. (3 cr) IX-X M
5184. SUPERVISION OF CLINICAL EXPERIENCES. (3 cr; prereq #) IX-X Th
5203. METHODS AND MATERIALS IN ADULT BASIC EDUCATION. (3 cr; prereq 5201, 5202, ¶5205) IX-X T
5205. FIELD EXPERIENCE IN ADULT EDUCATION. (4-8 cr [max 8]; prereq #)
5301. DESIGNING THE ADULT EDUCATION PROGRAM. (3 cr; prereq #) 7:00-9:30 W
5401. ADULT LEARNING AND DEVELOPMENT THROUGH THE LIFE SPAN. (3 cr) IX-X M
8229. SEMINAR: BASIC ISSUES IN HIGHER EDUCATION. (1-4 cr; prereq #) IX-X M
8230. SEMINAR: DISSERTATION RESEARCH IN HIGHER EDUCATION. (1 cr per qtr; prereq #) 7-9 M
8250. HIGHER EDUCATION IN THE UNITED STATES. (3 cr; prereq 18 cr education or 1 yr grad study in any field) IX-X Th
8251. CURRICULUM TRENDS IN AMERICAN COLLEGES. (3 cr; prereq 8250, 18 cr education or 1 yr grad study in any field) IX-X T
8252. EFFECTIVE COLLEGE TEACHING. (3 cr; prereq 8250, 1 yr of grad study in any field or 18 cr education) III-IV S
8286. PROFESSIONAL EDUCATION OF TEACHERS. (3 cr; prereq 8285 or #) III-IV S

Art Education (ArEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

3009. WEAVING WITHOUT A LOOM. (4 cr) VIII-IX MWF, WuH 240/340, Smits
5303. CURRICULUM BUILDING IN ART EDUCATION: PROGRAMS FOR EXCEPTIONAL CHILDREN. (3 cr) IX-X Th, WuH 110, Olson
5900. PROFESSIONAL PROBLEMS. (3 cr; prereq MEd student) Day, Olson
8300. RESEARCH IN ART EDUCATION. (3 cr) IX-X W, WuH 110, Day
8306. SEMINAR: ART EDUCATION. (1 cr) IX-X T, WuH 240, Day

WINTER QUARTER 1977

3009. WEAVING WITHOUT A LOOM. (4 cr) VIII-IX MWF
5302. CURRICULUM BUILDING IN ART EDUCATION: INNOVATIONS. (4 cr) IX-X T
5386. IMPROVING ART PROGRAMS IN THE SCHOOLS. (4 cr; prereq tchg exper or #) IX-X W
5389. APPLICATION OF AESTHETIC THEORY IN EDUCATION. (3 cr) IX-X Th
5900. PROFESSIONAL PROBLEMS. (3 cr; prereq MEd student)
8306. SEMINAR: ART EDUCATION. (1 cr) IX-X M

SPRING QUARTER 1977

3009. WEAVING WITHOUT A LOOM. (4 cr) VIII-IX MWF
5316. INTERCULTURAL EDUCATION THROUGH ART. (3 cr) IX-X Th
5389. APPLICATION OF AESTHETIC THEORY IN EDUCATION. (3 cr) IX-X T
5900. PROFESSIONAL PROBLEMS. (3 cr; prereq MEd student)
8300. RESEARCH IN ART EDUCATION. (3 cr) IX-X W
8306. SEMINAR: ART EDUCATION. (1 cr) XI-XII T

EXTENSION CLASSES

FALL QUARTER 1976

3009. WEAVING WITHOUT A LOOM. (4 cr; limited to 24 students; \$62) 6:20-8:50 T, WuH 340, Smits
3010. INTRODUCTION TO WEAVING. (3 cr; limited to 16 students; \$51.50) 9:00-11:30 S, WuH 340, Smits
3030. PUPPETRY. (3 cr; limited to 30 students; \$46.50) 6:20-8:50 Th, WuH 220, Olson
5001. ART MEDIA TECHNIQUES. (1-12 cr [max 12]; limited to 30 students; \$53) This offering for 3 cr will focus on art appreciation. 6:20-8:50 Th, WuH 220, Day

WINTER QUARTER 1977

3009. WEAVING WITHOUT A LOOM. (4 cr; limited to 24 students; \$62) 6:20-8:50 T, WuH 340, Smits

SPRING QUARTER 1977

3001. SURVEY OF ART ACTIVITIES. (4 cr; limited to 30 students; not open to art education majors; \$62) 6:20-8:50 Th, WuH 220, Olson
3009. WEAVING WITHOUT A LOOM. (4 cr; limited to 24 students; \$62) 6:20-8:50 T, WuH 340, Smits
3010. INTRODUCTION TO WEAVING. (3 cr; limited to 16 students; \$51.50) 6:20-8:50 Th, WuH 340, Smits
5001. ART MEDIA TECHNIQUES. (1-12 cr [max 12]; limited to 30 students; \$53) This offering for 3 cr will focus on children's artistic development. 6:20-8:50 Th, WuH 240, Day

Elementary Education (Elem)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5100. ELEMENTARY SCHOOL CURRICULUM. (3 cr; prereq 3101) IX-X M, Bu 120
5107. DIAGNOSIS AND TREATMENT OF LEARNING DIFFICULTIES. (3 cr) IV-V S, Bu 123
5108. SUPERVISION AND IMPROVEMENT OF INSTRUCTION. (3 cr; prereq 9 cr education) IX-X Th, Bu 123, Lambert
5109. SUPERVISORY STRATEGIES IN PLANNING, OBSERVING, CONFERENCING. (3 cr; prereq #) 7-9 T, PeikH 275, McNergney
5300. LITERATURE FOR THE ELEMENTARY SCHOOL. (3 cr) IX-X T, Bu 123, Odland
5316. TEACHING AND SUPERVISION OF ENGLISH IN THE ELEMENTARY SCHOOLS. (3 cr; prereq 3316 or elem tchg exper) IX-X Th, 1 hr ar, Bu 120, Chase
5317. MATERIALS LABORATORY FOR TEACHING ENGLISH IN ELEMENTARY SCHOOLS. (3 cr; prereq 3316 or elem tchg exper) I-II S, 1 hr ar, Bu 123
5320. PRACTICUM: TEACHING SECOND LANGUAGES AND CULTURES IN ELEMENTARY SCHOOLS. (3 cr; prereq 5319 or #5319, #)
5331. TEACHING AND SUPERVISION OF READING IN THE ELEMENTARY SCHOOL. (3 cr; prereq 9 cr education) IX-X Th, Sheridan JHS, Pearson
5334. READING DIFFICULTIES. (3 cr; prereq 5331 or SeEd 5344) IX-X M, Pt 102, Schreiner
5337. BEGINNING READING INSTRUCTION. (3 cr; prereq 3331, #) IX-X M, Pt 215, Pearson
5346. TEACHING SCIENCE IN THE ELEMENTARY SCHOOL. (3 cr; prereq elem tchg exper or #) 4-7 T, PeikH 385, Humphreys
5361. TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. (3 cr; prereq 3101 or equiv) IX-X T, Pt 214, Cogan
5363. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL SOCIAL STUDIES. (Cr ar [max 9]; prereq elem tchg exper, #) IX-X Th, Pt 214, Ellis
5376. CURRENT TRENDS IN EARLY CHILDHOOD EDUCATION. (3 cr; prereq tchg exper in kindergarten or primary or #) IX-XI T, Sheridan JHS, Hansen
8317. RESEARCH IN SKILL DEVELOPMENT IN SPELLING, HANDWRITING, AND LISTENING. (3 cr; prereq 5316) IX-X M, 1 hr ar, Dykstra
8346. RESEARCH FOUNDATIONS OF ELEMENTARY SCHOOL SCIENCE TEACHING. (3 cr; prereq 5346 or #) IX-X W, PeikH 355, Johnson

WINTER QUARTER 1977

5100. ELEMENTARY SCHOOL CURRICULUM. (3 cr; prereq 3101) IX-X T
5107. DIAGNOSIS AND TREATMENT OF LEARNING DIFFICULTIES. (3 cr) IX-X T
5300. LITERATURE FOR THE ELEMENTARY SCHOOL. (3 cr) I-II S
5305. SURVEY OF SPECIAL COLLECTIONS IN CHILDREN'S LITERATURE. (3 cr; prereq 5300 or #) IX-X Th
5317. MATERIALS LABORATORY FOR TEACHING ENGLISH IN ELEMENTARY SCHOOLS. (3 cr; prereq 3316 or elem tchg exper) IX-X T
5319. TEACHING SECOND LANGUAGES AND CULTURES IN ELEMENTARY SCHOOLS. (3 cr; prereq Δ) III-IV S
5331. TEACHING AND SUPERVISION OF READING IN THE ELEMENTARY SCHOOL. (3 cr; prereq 9 cr education) IX-X M
5334. READING DIFFICULTIES. (3 cr; prereq 5331 or SeEd 5344) IX-X M
5338. TEACHING READING IN THE INTERMEDIATE GRADES. (3 cr; prereq 3331, #) IX-X W
5349. ELEMENTARY SCHOOL SCIENCE: CURRICULUM AND SUPERVISION. (3 cr; prereq 3346 or 5346) IX-X T
5350. ELEMENTARY SCHOOL SCIENCE: MATERIALS AND RESOURCES. (3 cr; prereq 5349) 4-7 Th

5362. MATERIALS LABORATORY FOR ELEMENTARY SCHOOL SOCIAL STUDIES TEACHERS. (3 cr; prereq 3361 or 5361 or §) IX-X W
5363. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL SOCIAL STUDIES. (Cr ar [max 9]; prereq elem tchg exper, §) IX-X M
8992. RESEARCH IN EDUCATIONAL DIAGNOSIS. (3 cr) IX-X W

SPRING QUARTER 1977

5100. ELEMENTARY SCHOOL CURRICULUM. (3 cr; prereq 3101) IX-X T
5107. DIAGNOSIS AND TREATMENT OF LEARNING DIFFICULTIES. (3 cr) IX-X T
5108. SUPERVISION AND IMPROVEMENT OF INSTRUCTION. (3 cr; prereq 9 cr education) IX-X W
5120. PLANNING AND EVALUATION OF EDUCATIONAL ALTERNATIVES. (3 cr) IX-X Th
5300. LITERATURE FOR THE ELEMENTARY SCHOOL. (3 cr) IX-X W
5317. MATERIALS LABORATORY FOR TEACHING ENGLISH IN ELEMENTARY SCHOOLS. (3 cr; prereq 3316 or elem tchg exper) IX-X T
5334. READING DIFFICULTIES. (3 cr; prereq 5331 or SeEd 5344) IX-X M
5337. BEGINNING READING INSTRUCTION. (3 cr; prereq 3331, §) IX-X W
5350. ELEMENTARY SCHOOL SCIENCE: MATERIALS AND RESOURCES. (3 cr; prereq 5349) 4-7 M
5363. WORKSHOP: CURRICULUM IMPLEMENTATION IN ELEMENTARY SCHOOL SOCIAL STUDIES. (Cr ar [max 9]; prereq elem tchg exper, §) I-III S
5377. EARLY CHILDHOOD EDUCATION: MATERIALS AND RESOURCES. (3 cr; prereq 3377 or 5376, tchg exper) IX-XI T
8300. RESEARCH IN SPECIAL COLLECTIONS OF CHILDREN'S LITERATURE. (1-3 cr [max 6]) IX-X T

Mathematics Education (MthE)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5101. WORKSHOP: ELEMENTARY SCHOOL MATHEMATICS. (1-12 cr [max 12]; prereq §; not open to math education majors) IX-XI W, PeikH 375, Jackson
5311. TEACHING AND SUPERVISION OF MATHEMATICS IN THE ELEMENTARY SCHOOL. (3 cr; prereq Elem 3391 or §) IX-XI M, PeikH 375, Jackson
5312. TEACHING AND SUPERVISION OF MATHEMATICS IN THE SECONDARY SCHOOL. (3 cr; prereq math tchg exper or §) IX-XI M, PeikH 315, Johnson
5355. MATHEMATICS FOR SLOW LEARNING CHILDREN. (3 cr; prereq 5311 or Elem 3391 or §) IX-XI Th, PeikH 375, Post
8590. SEMINAR: MATHEMATICS EDUCATION. (Cr ar [max 8]; prereq §) IX-X T, PeikH 375, Johnson

WINTER QUARTER 1977

5101. WORKSHOP: ELEMENTARY SCHOOL MATHEMATICS. (1-12 cr [max 12]; prereq §; not open to math education majors) III-V S
5321. MATERIALS LABORATORY FOR ELEMENTARY SCHOOL MATHEMATICS INSTRUCTION. (3 cr; prereq 5311 or Elem 3391 or §) IX-XI W
5322. MATERIALS LABORATORY FOR 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 T

5366. **COMPUTER-ASSISTED MATHEMATICS INSTRUCTION.** (3 cr; lab fee required; prereq 5311 or 5312 or SeEd 3365 or #) IX-XI T
8500. **THEORY AND CLASSICAL RESEARCH IN MATHEMATICS EDUCATION.** (3 cr; prereq 5311 or 5312 or #) IX-XI Th

SPRING QUARTER 1977

5101. **WORKSHOP: ELEMENTARY SCHOOL MATHEMATICS.** (1-12 cr [max 12]; prereq #; not open to math education majors) IX-XI Th
5332. **NEW CONTENT AND METHODS IN SECONDARY SCHOOL MATHEMATICS INSTRUCTION.** (3 cr; prereq 5312 or #) IX-XI W
5355. **MATHEMATICS FOR SLOW LEARNING CHILDREN.** (3 cr; prereq 5311 or Elem 3391 or #) IX-XI M
8590. **SEMINAR: MATHEMATICS EDUCATION.** (Cr ar [max 8]; prereq #) IX-X T

Music Education (MuEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5111. **BIBLIOGRAPHY.** (3 cr) IX-X Th, ScH 103, Turrentine
5211. **PHILOSOPHIES OF MUSIC EDUCATION.** (3 cr) IX-X M, ScH 103, Borg
8281. **SEMINAR: HISTORICAL, PHILOSOPHICAL, AND PSYCHOLOGICAL ISSUES.** (2 cr, 8281-8282-8283†; prereq MA in music or music education or #) IX-X Th, ScH 103, Turrentine

WINTER QUARTER 1977

5313. **CONTEMPORARY YOUTH MUSIC IN EDUCATION.** (3 cr; prereq music education major or #) IX-X M
5582. **SELECTION OF INSTRUMENTAL MATERIAL II.** (3 cr) IX-X W
8282. **SEMINAR: HISTORICAL, PHILOSOPHICAL, AND PSYCHOLOGICAL ISSUES.** (2 cr, 8281-8282-8283†; prereq MA in music or music education or #) IX-X T

SPRING QUARTER 1977

5115. **EVALUATION AND ACCOUNTABILITY IN MUSIC EDUCATION.** (3 cr; prereq #) IX-X W
5217. **HISTORICAL FOUNDATIONS OF MUSIC EDUCATION.** (3 cr; prereq #) IX-X Th
5515. **ADVANCED WOODWIND TECHNIQUES.** (3 cr; prereq 1515 or #) IX-X M
8283. **SEMINAR: HISTORICAL, PHILOSOPHICAL, AND PSYCHOLOGICAL ISSUES.** (2 cr, 8281-8282-8283†; prereq MA in music or music education or #) IX-X T

EXTENSION CLASSES

FALL QUARTER 1976

5750. **WORKSHOP: MUSIC EDUCATION.** (1-12 cr [max 12]; limited to 25 students; \$34)
This offering for 2 cr will focus on music for early childhood. 7-9 T, MacP, Cortright

SPRING QUARTER 1977

5750. **WORKSHOP: MUSIC EDUCATION.** (1-12 cr [max 12]; limited to 25 students; \$34)
This offering for 2 cr will focus on music for early childhood. 7-9 T, MacP, Cortright

Secondary Education (SeEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5000. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL SYSTEMS. (1 cr, \$5102; lab fee required) IX-X M, EdH An 64, Davis
5001. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL MEDIA. (1 cr, \$5102; lab fee required) IX-X M, EdH An 64, N Pearson
5002. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL EQUIPMENT RESOURCES. (1 cr, \$5102; lab fee required) IX-X M, EdH An 64, Davis
5003. EDUCATIONAL TECHNOLOGY: COMPUTERS IN THE CLASSROOM. (1 cr, \$5102; lab fee required) IX-X M, EdH An 64, Davis
5004. EDUCATIONAL TECHNOLOGY: CLASSROOM VIDEO. (1 cr, \$5102; lab fee required) IX-X M, EdH An 64
5103. INSTRUCTIONAL TECHNOLOGY WORKSHOP. (1-3 cr) IX-X M, EdH An 62
5113. INTRODUCTION TO CURRICULUM DEVELOPMENT. (3 cr; prereq 3155 or equiv) IX-X M, NH 122, Kimpston
5129. TRENDS AND ISSUES IN SECONDARY CURRICULUM. (3 cr; prereq 5113 or equiv) IX-X T, NH 122, Stockton
5151. SCHOOL-BASED PROJECTS IN SOCIAL STUDIES EDUCATION. (1-12 cr [max 12]) Glenn, Mackey
5152. TECHNIQUES OF INSTRUCTION IN SOCIAL STUDIES. (3 cr; prereq 5150) IX-X T, PeikH 165, Mackey
5153. NEW PERSPECTIVES IN THE SOCIAL STUDIES: Simulations, Games. (1-3 cr [max 12]) IX-X W, PeikH 165, Glenn
5175. SECONDARY REMEDIAL READING INSTRUCTION. (3 cr; prereq 5344 or Elem 5331 or #) IX-X W, PeikH 225, Graves
5185. SCHOOL AND PROFESSIONAL BASED EXPERIENCES IN SECOND LANGUAGES AND CULTURES. (1-12 cr [max 12]; prereq MEd students only) Jorstad
5191. WORKSHOP: TEACHING OF SECOND LANGUAGES AND CULTURES: Teaching French. (1-10 cr [max 10]) I-II S, 1 hr ar, PeikH 215, Zask
5194. ENGLISH LANGUAGE ARTS CURRICULA IN THE SECONDARY SCHOOL. (3 cr; prereq 3326) IX-X Th, PeikH 225, Brunetti
5201. SYSTEMS APPROACH TO DESIGN OF INSTRUCTION. (3 cr; prereq 5000; lab fee required) IX-X M, EdH An 54, Tennyson
5203. RESOURCE MANAGEMENT IN INSTRUCTIONAL PROGRAMS. (3 cr; prereq 5000 or #; lab fee required) IX-X W, EdH An 64, Davis
5207. APPLICATIONS OF TELEVISION IN EDUCATION. (2 cr; prereq 5004; lab fee required) IX-X T, PeikH 335
5211. PREPARATION OF MEDIA MATERIALS: AUDIO. (1 cr; prereq 5201, 5209; lab fee required) IX-X Th, EdH An 64, N Pearson
5215. PREPARATION OF MEDIA MATERIALS: VIDEO. (2 cr; prereq 5201, 5207; lab fee required) XI-XII T, PeikH 335
5322. TEACHING COMPOSITION AND COMMUNICATION IN JUNIOR AND SENIOR HIGH SCHOOLS. (3 cr) IX-X T, PeikH 225, Piché
5340. TEACHING SPEECH AND FORENSICS IN SECONDARY SCHOOL. (3 cr; prereq Spch 1101 or 1102, 1106 or #) IX-X Th, CD 105, Caruson
5344. TEACHING READING IN CONTENT AREAS. (3 cr; prereq 9 cr education) IX-X M, PeikH 225, Graves
5385. PLANNING AND ASSESSING SECOND LANGUAGE INSTRUCTION. (4 cr) III-V S, PeikH 215, Jorstad
5395. SCHOOL-BASED PROJECTS IN SCIENCE EDUCATION. (1-12 cr [max 12]; prereq MEd student in science education)

5659. SCHOOL-RELATED PROJECTS IN THE LANGUAGE ARTS. (1-12 cr [max 12]; prereq MEd student in English education)
8322. SEMINAR: SECONDARY CURRICULUM AND INSTRUCTION. (2 cr [max 4]; prereq 5114) IX-X W, PeikH 250, Kimpston, Stockton
8387. SEMINAR: SECOND LANGUAGE EDUCATION. (1-3 cr; prereq #) IX-X F, PeikH 215, Jorstad

WINTER QUARTER 1977

5000. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL SYSTEMS. (1 cr, \$5102; lab fee required) IX-X M
5001. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL MEDIA. (1 cr, \$5102; lab fee required) IX-X M
5002. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL EQUIPMENT RESOURCES. (1 cr, \$5102; lab fee required) IX-X M
5003. EDUCATIONAL TECHNOLOGY: COMPUTERS IN THE CLASSROOM. (1 cr, \$5102; lab fee required) IX-X M
5004. EDUCATIONAL TECHNOLOGY: CLASSROOM VIDEO. (1 cr, \$5102; lab fee required) IX-X M
5113. INTRODUCTION TO CURRICULUM DEVELOPMENT. (3 cr; prereq 3155 or equiv) IX-X M
5122. STRATEGIES FOR TEACHING CULTURE IN THE SECOND LANGUAGE CLASSROOM. (4 cr; prereq language major or minor) IX-X TTh
5150. ADVANCED METHODS OF TEACHING THE SOCIAL STUDIES. (3 cr) IX-X Th
5151. SCHOOL-BASED PROJECTS IN SOCIAL STUDIES EDUCATION. (1-12 cr [max 12])
5153. NEW PERSPECTIVES IN THE SOCIAL STUDIES: Improving the Teaching of History. (1-3 cr [max 12]) IX-X T
5170. MODELS AND PROCEDURES FOR CURRICULUM PLANNING. (3 cr; prereq 5113 or Elem 5100) IX-X T
5172. SUPERVISION OF SECONDARY INSTRUCTION. (3 cr; prereq 5113) 7-9 T
5184. EXAMINATION AND ASSESSMENT OF MATERIALS IN SECOND LANGUAGES AND CULTURES. (2 cr; prereq 3334 or 5385)
5185. SCHOOL AND PROFESSIONAL BASED EXPERIENCES IN SECOND LANGUAGES AND CULTURES. (1-12 cr [max 12]; prereq MEd students only)
5191. WORKSHOP: TEACHING OF SECOND LANGUAGES AND CULTURES. (1-10 cr [max 10]) 6:00-7:30 T, 8:30-10:00 S
5205. APPLICATIONS OF COMPUTERS IN EDUCATION. (2 cr; prereq 5003; lab fee required) IX-X W
5209. APPLICATIONS OF AUDIO AND VISUALS IN EDUCATION. (2 cr, \$5105; lab fee required) IX-X T
5214. PREPARATION OF MEDIA MATERIALS: NONPROJECTED. (2 cr; prereq 5201, 5209; lab fee required) IX-X Th
5326. TEACHING FILM. (3 cr; lab fee required) 4:15-6:30 Th
5395. SCHOOL-BASED PROJECTS IN SCIENCE EDUCATION. (1-12 cr [max 12]; prereq MEd student in science education)
5659. SCHOOL-RELATED PROJECTS IN THE LANGUAGE ARTS. (1-12 cr [max 12]; prereq MEd student in English education)
8322. SEMINAR: SECONDARY CURRICULUM AND INSTRUCTION. (2 cr [max 4]; prereq 5114) IX-X W
8387. SEMINAR: SECOND LANGUAGE EDUCATION. (1-3 cr; prereq #) IX-X F
8887. RESEARCH FOUNDATIONS OF SECONDARY SCHOOL SCIENCE TEACHING. (3 cr) I-II S
8892. INTRODUCTION TO RESEARCH IN ENGLISH EDUCATION AND READING. (4 cr) IX-X MW

SPRING QUARTER 1977

5000. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL SYSTEMS. (1 cr, \$5102; lab fee required) IX-X M
5001. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL MEDIA. (1 cr, \$5102; lab fee required) IX-X M
5002. EDUCATIONAL TECHNOLOGY: INSTRUCTIONAL EQUIPMENT RESOURCES. (1 cr, \$5102; lab fee required) IX-X M
5003. EDUCATIONAL TECHNOLOGY: COMPUTERS IN THE CLASSROOM. (1 cr, \$5102; lab fee required) IX-X M
5004. EDUCATIONAL TECHNOLOGY: CLASSROOM VIDEO. (1 cr, \$5102; lab fee required) IX-X M
5113. INTRODUCTION TO CURRICULUM DEVELOPMENT. (3 cr; prereq 3155 or equiv) IX-X M
5114. PRINCIPLES OF CURRICULUM DESIGN: INTERDISCIPLINARY APPROACHES. (3 cr) IX-X T
5122. STRATEGIES FOR TEACHING CULTURE IN THE SECOND LANGUAGE CLASSROOM. (4 cr; prereq language major or minor) IX-X TTh
5131. INSTRUCTIONAL SIMULATIONS AND LEARNING GAMES: DEVELOPMENT AND CLASSROOM USE. (3 cr) IX-XI Th
5151. SCHOOL-BASED PROJECTS IN SOCIAL STUDIES EDUCATION. (1-12 cr [max 12])
5153. NEW PERSPECTIVES IN THE SOCIAL STUDIES: Teaching the Behavioral Sciences. (1-3 cr [max 12]) IX-X T
5155. MATERIALS LABORATORY FOR SOCIAL STUDIES TEACHERS. (3 cr; prereq 5150, 5152) IX-X Th
5156. PRACTICUM IN SOCIAL STUDIES INSTRUCTIONAL TECHNIQUES. (1 cr; prereq 5150, 5152)
5173. DESIGN OF CURRICULUM/INSTRUCTIONAL MATERIALS. (1-12 cr) IX-X W
5174. SEMINAR: PRACTICAL RESEARCH IN CURRICULUM AND INSTRUCTION. (1-4 cr; prereq #) IX-X MTh
5184. EXAMINATION AND ASSESSMENT OF MATERIALS IN SECOND LANGUAGES AND CULTURES. (2 cr; prereq 3334 or 5385)
5212. PREPARATION OF MEDIA MATERIALS: COMPUTER. (2 cr; prereq 5201, 5205; lab fee required) IX-X W
5213. PREPARATION OF MEDIA MATERIALS: PROJECTED. (2 cr; prereq 5201, 5209; lab fee required) IX-X T
5321. TEACHING LITERATURE IN SECONDARY SCHOOLS. (3 cr; prereq 3155 or jr-sr high school tchg exper) IX-X Th
5324. CURRICULUM PROBLEMS AND ISSUES IN TEACHING THEATRE ARTS IN SECONDARY SCHOOLS. (3 cr; prereq upper division or grad) IX-X W
5344. TEACHING READING IN CONTENT AREAS. (3 cr; prereq 9 cr education) IX-X W
5382. TESTING AND EVALUATION IN SECOND LANGUAGE TEACHING AND LEARNING. (3 cr; prereq PsyF 5120) IV-V S
5390. CURRENT DEVELOPMENTS IN SECONDARY SCHOOL SCIENCE TEACHING. (3 cr; prereq 3356, 3357, 3358 or 3352 or equiv undergrad courses or science tchg exper) I-II S
5395. SCHOOL-BASED PROJECTS IN SCIENCE EDUCATION. (1-12 cr [max 12]; prereq MEd student in science education)
5659. SCHOOL-RELATED PROJECTS IN THE LANGUAGE ARTS. (1-12 cr [max 12]; prereq MEd student in English education)
8104. CURRICULUM DEVELOPMENT IN THE SOCIAL STUDIES. (3 cr; prereq 5150, 5152) IX-X W
8188. INFORMATION SOURCES AND RESEARCH IN SECOND LANGUAGE LEARNING AND TEACHING. (5 cr; prereq 5385, 5189 or #) 6:00-7:30 T, I-III S
8387. SEMINAR: SECOND LANGUAGE EDUCATION. (1-3 cr; prereq #) IX-X F
8416. INSTRUCTIONAL SYSTEMS SEMINAR. (1-4 cr; prereq #) IX-X Th

EXTENSION CLASSES

WINTER QUARTER 1977

5396. METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE. (4 cr; prereq Ling 5001 or #; §68) 6:20-8:50 T, FolH 406

SPRING QUARTER 1977

5112. FAMILY LIFE EDUCATION. (3 cr; §51) 6:20-8:50 M, Bu 123, Hey

EDUCATIONAL ADMINISTRATION (EdAd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5101. PUBLIC SCHOOL ADMINISTRATION. (3 cr; prereq sr, 9 cr education; not open to educational administration majors) 3:55-5:40 M, ClaOff 27, Jackson

5103. SUPERVISION AND ADMINISTRATION OF SPECIAL EDUCATION. (3 cr, §SpEd 5160; prereq #) 3:55-5:40 Th, ClaOff B30, Wolf

8202. POLITICS OF EDUCATION. (3 cr) 3:55-5:40 T, ClaOff B36, Jackson

8203. THE COMMUNITY SCHOOL. (3 cr) 3:55-5:40 W, ClaOff 27, Popper

8210. ECONOMICS OF EDUCATION. (3 cr) 6:20-8:50 W, ClaOff B25, Jacobs

8212. SCHOOL BUDGETING. (3 cr; prereq 8220) 3:55-5:40 T, ClaOff B30, Sederberg

8215. THE ELEMENTARY SCHOOL PRINCIPALSHIP. (3 cr; prereq 8201, 8202 or #) 3:55-5:40 M, ClaOff B26, Alkire

8218. SEMINAR: THE SOCIAL ORGANIZATION OF SCHOOLS. (3 cr; prereq educational administration major or #) 3:55-5:40 M, CofH 299, Popper

8224. LEGAL IMPLICATIONS OF ACTS BY SCHOOL BOARDS, ADMINISTRATORS, AND TEACHERS. (3 cr) 3:55-5:40 Th, ClaOff B36, Hooker

8226. EDUCATIONAL FACILITIES PLANNING. (3 cr) 3:55-5:40 W, ClaOff 31, Alkire

8242. ADMINISTRATIVE ORGANIZATION AND STAFFING OF SCHOOL SYSTEMS. (3 cr; prereq #) 3:55-5:40 Th, ClaOff B42, Mansergh

8253. ADMINISTRATION IN HIGHER EDUCATION. (3 cr; prereq Educ 8250) 3:55-5:40 T, ClaOff B42, Ammentorp

8264. THE SECONDARY SCHOOL PRINCIPALSHIP. (3 cr) Section 1—7:55-9:45 S, ClaOff 31, Nickerson; Section 2—3:55-5:40 M, ClaOff 31, Nickerson

8274. THE TWO-YEAR COLLEGE. (3 cr) 3:55-5:40 W, ClaOff B30, Morgan

8278. RECENT RESEARCH IN TWO-YEAR COLLEGE ADMINISTRATION. (1-3 cr [max 3]; prereq #) 3:55-5:40 M, HS 209, Hendrix, Morgan

8341. ANALYSIS OF EDUCATION POLICY SYSTEMS. (3 cr; prereq 8340) 3:55-5:40 Th, ClaOff 31, Ammentorp

WINTER QUARTER 1977

5167. JUNIOR HIGH SCHOOL. (3 cr; prereq 9 cr education) 6:20-8:50 T

5180. SEMINAR: ADMINISTRATION OF SPECIAL EDUCATION. (3 cr, §SpEd 8560, 8561) IX-X T

8202. POLITICS OF EDUCATION. (3 cr) IX-X T

8213. FINANCIAL RESOURCE MANAGEMENT. (3 cr; prereq 8212 or #) IX-X Th

8216. RECENT RESEARCH IN ELEMENTARY SCHOOL ADMINISTRATION. (3 cr; prereq 8215) IX-X M

8219. SEMINAR: APPLIED HUMANISM IN ADMINISTRATIVE BEHAVIOR: THE CLASSICAL PERSPECTIVE. (3 cr, §Clas 8219; prereq 8218 or #) 2-4 S

8223. QUANTITATIVE TECHNIQUES FOR DECISION MAKING. (3 cr; prereq 8220 or #) IX-X TTh

8225. EDUCATIONAL POLICY AND THE LAW. (3 cr) IX-X M
 8227. PUBLIC SCHOOL PERSONNEL PROGRAMS. (3 cr) IX-X Th
 8234. SEMINAR: EDUCATIONAL FINANCE. (3 cr; prereq 8210 or §) IX-X M
 8238. SEMINAR: THEORY AND RESEARCH. (3 cr; prereq 8218, 8235, educational administration major or §) IX-X M
 8247. SEMINAR: SCHOOL DISTRICT POLITICS. (3 cr; prereq 8202) IX-X W
 8265. ADMINISTERING THE HIGH SCHOOL PROGRAM. (3 cr) IX-X T
 8275. TWO-YEAR COLLEGE ADMINISTRATION. (3 cr; prereq 8274 or §) IX-X T
 8278. RECENT RESEARCH IN TWO-YEAR COLLEGE ADMINISTRATION. (1-3 cr [max 3]; prereq §) 3:55-5:40 M
 8290. FINANCING HIGHER EDUCATION. (3 cr; prereq §) IX-X W
 8340. POLICY SYSTEMS IN EDUCATION. (3 cr; prereq 8220, Δ) IX-X Th

SPRING QUARTER 1977

5101. PUBLIC SCHOOL ADMINISTRATION. (3 cr; prereq sr, 9 cr education; not open to educational administration majors) 3:55-5:40 M
 5140. ADMINISTRATION OF EARLY EDUCATION PROGRAMS. (3 cr; prereq §) IX-X W
 5181. SEMINAR: ADMINISTRATION OF SPECIAL EDUCATION. (3 cr, §SpEd 8560, 8561) IX-X T
 8201. FORMAL ORGANIZATIONS IN EDUCATION. (3 cr) IX-X M
 8202. POLITICS OF EDUCATION. (3 cr) 6:20-8:50 Th
 8210. ECONOMICS OF EDUCATION. (3 cr) IX-X T
 8212. SCHOOL BUDGETING. (3 cr; prereq 8220) IX-X W
 8214. SCHOOL MANAGEMENT INFORMATION SYSTEMS. (3 cr, §8222; prereq 8220, 8212) IX-X Th
 8215. THE ELEMENTARY SCHOOL PRINCIPALSHIP. (3 cr; prereq 8201, 8202 or §) IX-X M
 8217. SEMINAR: ELEMENTARY SCHOOL ADMINISTRATION. (3 cr; prereq 8216 or §) IX-X Th
 8235. SEMINAR: APPLIED HUMANISM IN ADMINISTRATIVE BEHAVIOR: THE MODERN PERSPECTIVE. (3 cr; prereq 8218, educational administration major or §) IX-X W
 8236. SEMINAR: EDUCATIONAL FACILITIES PLANNING. (3 cr; prereq 8226 or §) IX-X W
 8237. SEMINAR: EDUCATIONAL LAW. (1-3 cr; prereq 8224 or 8225) IX-X T
 8238. SEMINAR: THEORY AND RESEARCH. (3 cr; prereq 8218, 8235, educational administration major or §) IX-X M
 8248. SEMINAR: METROPOLITAN SCHOOL GOVERNANCE. (3 cr; prereq 8202) IX-X W
 8253. ADMINISTRATION IN HIGHER EDUCATION. (3 cr; prereq Educ 8250) IX-X W
 8264. THE SECONDARY SCHOOL PRINCIPALSHIP. (3 cr) IX-X T
 8276. SEMINAR: ADMINISTRATION OF CURRICULUM IN THE TWO-YEAR COLLEGE. (3 cr; prereq 8274) IX-X Th
 8278. RECENT RESEARCH IN TWO-YEAR COLLEGE ADMINISTRATION. (1-3 cr [max 3]; prereq §) 3:55-5:40 M
 8341. ANALYSIS OF EDUCATION POLICY SYSTEMS. (3 cr; prereq 8340) IX-X Th

EXTENSION CLASSES

FALL QUARTER 1976

5128. WORKSHOP: EDUCATIONAL ADMINISTRATION. (1-6 cr; S-X optional; prereq practicing educational administrator or §; 551) This offering for 3 cr will focus on survey research. 6:20-8:50 W, ClaOff 27, Anderson, Berdie
 8201. FORMAL ORGANIZATIONS IN EDUCATION. (3 cr; §69) 6:20-8:50 T, ClaOff 27, Popper

WINTER QUARTER 1977

8224. LEGAL IMPLICATIONS OF ACTS BY SCHOOL BOARDS, ADMINISTRATORS, AND TEACHERS. (3 cr; \$69) 6:20-8:50 W, Bu 125, Mawdsley

SPRING QUARTER 1977

5128. WORKSHOP: EDUCATIONAL ADMINISTRATION. (1-6 cr; S-N optional; prereq practicing educational administrator or #; \$51) This offering for 3 cr will focus on teacher evaluation. 6:20-8:50 W, ClaOff 27, Nickerson

8218. SEMINAR: THE SOCIAL ORGANIZATION OF SCHOOLS. (3 cr; prereq educational administration major or #; \$69) 6:20-8:50 T, 299 CofH, Popper

PHYSICAL EDUCATION, RECREATION, AND SCHOOL HEALTH EDUCATION

Physical Education (PE)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5100. TEACHING PHYSICAL EDUCATION FOR THE HANDICAPPED. (3 cr; prereq #) 7-9 T, CookeH 214, Cato

5120. ADVANCED BIOMECHANICS/KINESIOLOGY. (4 cr; prereq undergrad kinesiology or #) I-IV S, CookeH 214, Stoner

5122. APPLIED PHYSIOLOGY. (3 cr; prereq PubH 3386 or Phsl 3051 or equiv) 7-9 M, CookeH 214, Serfass

5130. MOTOR LEARNING AND HUMAN PERFORMANCE. (3 cr; prereq 3113 or #) 7-9 W, CookeH 214, Johnson

5150. TEACHING ELEMENTARY SCHOOL PHYSICAL EDUCATION. (3 cr; prereq tchg certification or #) IX-X W, CookeH 214, Plack

5980. RESEARCH METHODOLOGY. (3 cr, \$Hlth 5980; prereq #) 4:15-5:30 TTh, CookeH 214, Shick

5981. PROBLEMS. (Cr ar; prereq MEd candidate, #)

8110. ADMINISTRATION: GENERAL PRINCIPLES AND PROCEDURES. (3 cr) IX-X M, CookeH 214, Jaeger

WINTER QUARTER 1977

5101. PHYSICAL EDUCATION ACTIVITIES FOR THE HANDICAPPED. (3 cr; prereq 5100 or SpEd 5101) IX-X Th

5125. ADVANCED PHILOSOPHY OF PHYSICAL EDUCATION AND SPORT. (3 cr; prereq 3125 or #) IX-X M

5134. PERCEPTUAL-MOTOR DEVELOPMENT IN CHILDHOOD. (3 cr; prereq 3113 or #) IX-X T

5160. EVALUATION IN PHYSICAL EDUCATION. (3 cr; prereq 3150 or equiv) 7-9 W

5170. FOUNDATIONS OF PHYSICAL EDUCATION. (3 cr; prereq grad or MEd student) 7-9 Th

5981. PROBLEMS. (Cr ar; prereq MEd candidate, #)

8381. LABORATORY RESEARCH TECHNIQUES. (1-3 cr; prereq 5980 or #5980) 7-9 M

8980. RESEARCH PROBLEMS. (1 cr; S-N only; prereq 5980, PsyF 5110 or #) IX-X W

SPRING QUARTER 1977

5123. ANALYSIS OF MOVEMENT IN GYMNASTICS. (3 cr; prereq 3111, 3174 or 3322 or #) 7-9 W

5126. ADVANCED PSYCHOLOGICAL AND SOCIOLOGICAL DIMENSIONS OF PHYSICAL ACTIVITY. (3 cr; prereq #) 7-9 M

5133. PRACTICUM: ASSESSMENT OF PSYCHOMOTOR SKILLS IN YOUNG CHILDREN. (3 cr; S-N optional; prereq 3150 or #) IX-X W
5981. PROBLEMS. (Cr ar; prereq MED candidate, #)
5985. APPLICATION OF RESEARCH. (3 cr) 7-9 T
8150. PROFESSIONAL PREPARATION OF PHYSICAL EDUCATION TEACHERS. (3 cr; prereq 5151 or equiv) IX-X T
8320. SEMINAR: BIOMECHANICS. (3-9 cr; prereq 5120) IX-X M
8980. RESEARCH PROBLEMS. (1 cr; S-N only; prereq 5980, PsyF 5110 or #) IX-X Th

EXTENSION CLASSES

FALL QUARTER 1976

5181. WORKSHOP: DYNAMICS OF THERAPEUTIC DANCE/MOVEMENT. (1-3 cr [max 9]; prereq 3181 or #; each section limited to 12 students; \$27) This offering for 1 cr. Special Term—October 28, 29, and 30. Section 1—1-4 ThFS, NorrisH 68, Santangelo; Section 2—6-9 ThFS, NorrisH 68, Santangelo
5700. WORKSHOP: DANCE IN EDUCATION. (Cr ar [max 12]; \$51) This offering for 3 cr will focus on creative dance for children. 6-9 T, NorrisH 68, Jette

WINTER QUARTER 1977

5181. WORKSHOP: DYNAMICS OF THERAPEUTIC DANCE/MOVEMENT. (1-3 cr [max 9]; prereq 3181 or #; each section limited to 12 students; \$27) This offering for 1 cr. Special Term—January 27, 28, and 29. Section 3—1-4 ThFS, NorrisH 68, Santangelo; Section 4—6-9 ThFS, NorrisH 68, Santangelo

SPRING QUARTER 1977

5181. WORKSHOP: DYNAMICS OF THERAPEUTIC DANCE/MOVEMENT. (1-3 cr [max 9]; prereq 3181 or #; each section limited to 12 students; \$27) This offering for 1 cr. Special Term—April 14, 15, and 16. Section 5—1-4 ThFS, NorrisH 68, Santangelo; Section 6—6-9 ThFS, NorrisH 68, Santangelo
5620. PRACTICUM: PREVENTION AND CARE OF ATHLETIC INJURIES. (3 cr; prereq Anat 1027 or equiv; limited to 35 students; \$56) 7:00-9:30 T, BFAB 125, Marshall
5700. WORKSHOP: DANCE IN EDUCATION. (Cr ar [max 12]; \$51) This offering for 3 cr will focus on teaching of modern dance. 6-9 M, NorrisH 68. Rice

Recreation and Park Administration (Rec)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5300. FOUNDATIONS OF OUTDOOR EDUCATION. (3 cr; prereq sr, 1520 or 5100 or #) IX-X W, CookeH 206, Griffin
5900. WORKSHOP: CONTEMPORARY ISSUES IN LEISURE SERVICES: Voluntary and Youth Agencies. (1-12 cr [max 12]; prereq Δ) VIII-X Th, CookeH 215, Schultz
5981. PROBLEMS. (Cr ar; prereq MED candidate, #) Chapman, Weiss
5983. READINGS: RECREATION. (1-3 cr; prereq MED, grad or Δ) Chapman, Schultz, Weiss

WINTER QUARTER 1977

5250. FINANCING PUBLIC RECREATION AND PARKS. (3 cr; prereq 3550 or Δ) IX-X TTh
5900. WORKSHOP: CONTEMPORARY ISSUES IN LEISURE SERVICES: Winter Environmental Education. (1-12 cr [max 12]; prereq Δ) Feb 25: 6 pm, Feb 27: 5 pm
5981. PROBLEMS. (Cr ar; prereq MED candidate, #)
5983. READINGS: RECREATION. (1-3 cr; prereq MED or grad student or Δ)

SPRING QUARTER 1977

5230. RECREATION AND MENTAL RETARDATION. (3 cr; prereq 5210, 5220 or #) IX-X M
5900. WORKSHOP: CONTEMPORARY ISSUES IN LEISURE SERVICES: Organizational and Individual Legal Liability. (1-12 cr [max 12]; prereq Δ) VIII-X W
5981. PROBLEMS. (Cr ar; prereq MEd candidate, #)
5983. READINGS: RECREATION. (1-3 cr; prereq MEd or grad student or Δ)

EXTENSION CLASSES

FALL QUARTER 1976

5300. FOUNDATIONS OF OUTDOOR EDUCATION. (3 cr; prereq sr, 1520 or 5100 or #; limited to 30 students; §51) 7:30-9:20 W, CookeH 214, Griffin

SPRING QUARTER 1977

5900. WORKSHOP: CONTEMPORARY ISSUES IN LEISURE SERVICES. (1-12 cr [max 12]; limited to 25 students; §56) This offering for 3 cr will focus on programming in outdoor education. 5:30-8:00 W, Nature Center, Hyland Lake Park Reserve, 8737 E Bush Lake Road, Bloomington, Griffin

School Health Education (Hlth)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5150. FAMILY LIFE AND SEX EDUCATION IN THE SECONDARY SCHOOLS. (3 cr; prereq FSoS 5001 or #) 4:15-6:00 M, 1 hr ar, NorrisH 3, Cobb
5403. HEALTH ASPECTS OF AGING. (3 cr, §PubH 5024; prereq sr or grad student) VIII-X T, HSUnitA 2-520, Anderson, Weiss
5685. SCHOOL-BASED PROJECTS IN SCHOOL HEALTH EDUCATION. (1-12 cr [max 12]; prereq #) Lindgren
5980. INTRODUCTION TO RESEARCH. (3 cr, §PE 5980; prereq #) 4:15-5:30 TTh, CookeH 214, Shick

WINTER QUARTER 1977

5402. DEATH EDUCATION IN CONTEMPORARY SOCIETY. (3 cr, §PubH 5040, §Mort 5040; prereq education sr or certified teacher or health science major or school or public health nurse or mortuary science major or #) IX-X M
5685. SCHOOL-BASED PROJECTS IN SCHOOL HEALTH EDUCATION. (1-12 cr [max 12]; prereq #)
5980. INTRODUCTION TO RESEARCH. (3 cr, §PE 5980; prereq #) 4:15-5:30 TTh
8980. RESEARCH PROBLEMS. (1 cr; S-N only; prereq PE 5980, PsyF 5110 or #) IX-X W

SPRING QUARTER 1977

5140. ADMINISTRATION OF THE SCHOOL HEALTH PROGRAM. (3 cr) IX-X M, 1 hr ar
5350. FAMILY LIFE AND SEX EDUCATION IN THE ELEMENTARY SCHOOLS. (3 cr) IX-X W
5685. SCHOOL-BASED PROJECTS IN SCHOOL HEALTH EDUCATION. (1-12 cr [max 12]; prereq #)
8980. RESEARCH PROBLEMS. (1 cr; S-N only; prereq PE 5980, PsyF 5110 or #) IX-X Th

EXTENSION CLASSES

FALL QUARTER 1976

5100. DRIVER EDUCATION I. (4 cr; limited to 32 students; \$80) 7-10 W, Richfield HS 116, Lewis

WINTER QUARTER 1977

5101. DRIVER EDUCATION II. (4 cr; prereq 5100; limited to 32 students; \$80) 7-10 W, Richfield HS 116, Lewis

SPRING QUARTER 1977

5130. SAFETY EDUCATION. (4 cr; prereq sr; limited to 32 students; \$68) 7-10 T, NorrisH 201, Thissen

5602. THE DRIVER SIMULATOR. (4 cr; prereq 5100; limited to 32 students; \$68) 7-10 W, Richfield HS 116, Lewis

PSYCHOEDUCATIONAL STUDIES

Counseling and Student Personnel Psychology (CSPP)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5101. FOUNDATIONS OF CAREER DEVELOPMENT. (3 cr) 4:15-6:30 W, Bu 125, Hansen

5130. INTRODUCTION TO GUIDANCE. (3 cr) 4:15-7:00 T, Bu 125, Tennyson

8541. COLLEGE STUDENT PERSONNEL WORK: HOUSING. (2 cr; prereq 8140) VIII-IX T, MorH 12, Zander

8602. COUNSELING PRACTICUM I. (3 cr, 8602, 8603, 8604†; prereq ¶8302, §) VIII-IX MW, Bu 123, Anderson

8640. PRACTICE IN STUDENT PERSONNEL WORK. (1-3 cr [max 9]; prereq 8304, 8604, 8140, 5540 or §) VIII-IX TTh, MorH 16, Snoke

WINTER QUARTER 1977

5331. CAREER DEVELOPMENT: PRINCIPLES AND PRACTICE I. (3 cr) IX-X T

8542. COLLEGE STUDENT PERSONNEL WORK: STUDENT ACTIVITIES. (2 cr; prereq 8140) VIII-IX T

8603. COUNSELING PRACTICUM II. (3 cr, 8602, 8603, 8604†; prereq ¶8303, 8602, §) VIII-IX T

8640. PRACTICE IN STUDENT PERSONNEL WORK. (1-3 cr [max 9]; prereq 8304, 8604, 8140, 5540 or §) VIII-IX TTh

SPRING QUARTER 1977

5110. COUNSELING PROCEDURES. (3 cr) 3:30-6:00 Th

5130. INTRODUCTION TO GUIDANCE. (3 cr) 4:15-7:00 T

5332. CAREER DEVELOPMENT: PRINCIPLES AND PRACTICE II. (3 cr) 4:15-6:30 W

5505. CROSS-CULTURAL COUNSELING. (3 cr; prereq §) IX-XI M

5620. PRACTICUM IN GROUP COUNSELING. (1-6 cr [max 6]; prereq counseling certification, §) VIII-IX MWF

8543. COLLEGE STUDENT PERSONNEL WORK: DISCIPLINE AND ADMINISTRATION. (2 cr; prereq 8140) VIII-IX T
8640. PRACTICE IN STUDENT PERSONNEL WORK. (1-3 cr [max 9]; prereq 8304, 8604, 8140, 5540 or §) VIII-IX TTh

EXTENSION CLASSES

FALL QUARTER 1976

5110. COUNSELING PROCEDURES. (3 cr; limited to 35 students; §51) 7:00-9:30 T, Bu 125, Shaffer
5130. INTRODUCTION TO GUIDANCE. (3 cr; §51) 6:00-8:30 W, Bu 120, Tennyson
5300. WORKSHOP: COUNSELING PSYCHOLOGY. (1-6 cr per qtr [max 12]; prereq §; limited to 35 students; §51) 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 1977

5110. COUNSELING PROCEDURES. (3 cr; limited to 35 students; §51) 7:00-9:30 M, Bu 125, Shaffer
5300. WORKSHOP: COUNSELING PSYCHOLOGY. (1-6 cr per qtr [max 12]; prereq §; limited to 35 students; §51) This offering for 3 credits will focus on objective personality tests. 6:00-8:30 M, VA Hospital, Braatz, Warnken

SPRING QUARTER 1977

5110. COUNSELING PROCEDURES. (3 cr; limited to 30 students; §51) 7:00-9:30 M, Richfield HS, Shaffer
5300. WORKSHOP: COUNSELING PSYCHOLOGY. (1-6 cr per qtr [max 12]; prereq §; limited to 35 students; §51) This offering for 3 credits will focus on projective techniques. 6:00-8:30 M, VA Hospital, Lumry, Braatz

School Psychology (SchP)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5515. METHODS OF PSYCHOLOGICAL INTERVENTION IN THE CLASSROOM: INDIVIDUAL. (3 cr; S-N optional; prereq §) Erickson
8100. INTRODUCTION TO SCHOOL PSYCHOLOGICAL SERVICES. (3 cr) IX-X MW, EltH N508, Ysseldyke
8512. NEW APPROACHES TO PSYCHOPATHOLOGY IN CHILDREN AND ADOLESCENTS. (3 cr) IX-X MW, EltH N506, Hall

WINTER QUARTER 1977

5650. PRACTICUM: PSYCHOLOGICAL EDUCATION. (1-3 cr [max 9]; prereq 5550 or §5550, §) IX-X T
8514. THEORIES AND METHODS OF INTERVENTION: GROUPS. (3 cr; prereq 8312, PsyF 5170 or Psy 5201) IX-X MW

SPRING QUARTER 1977

8513. THEORIES AND METHODS OF INTERVENTION: INDIVIDUALS. (3 cr; prereq 8310, 8311, 8312, 8600 or §8600) IX-X MW

EXTENSION CLASSES

WINTER QUARTER 1977

5550. SEMINAR: PSYCHOLOGICAL EDUCATION. (3 cr [max 9]; prereq ¶5650 and §; \$51)
6:00-8:30 W, EltH N508, Erickson

SPRING QUARTER 1977

5550. SEMINAR: PSYCHOLOGICAL EDUCATION. (3 cr [max 9]; prereq ¶5650 and §; \$51)
6:00-8:30 W, EltH N508, Erickson

Special Education (SpEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5100. CHILDHOOD LANGUAGE DEVELOPMENT: CLASSROOM IMPLICATIONS. (3 cr)
VIII-IX W, Pt 214

5101. EDUCATION OF EXCEPTIONAL CHILDREN. (3 cr) IX-X MW, Pt 111, Force, others

5105. IMPLEMENTING COURT DECISIONS ON EDUCATION OF THE HANDICAPPED.
(2-4 cr) IX-X M, Pt 214, Balow

5110. DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITY I. (3 cr; prereq §) 4-8 T,
Pt 102, V Bruininks

5124. BIOMEDICAL ASPECTS OF DEVELOPMENTAL DISABILITIES. (Cr ar [max 4];
prereq §) 6-9 M, Pt 111, Rynders

5140. PSYCHOSOCIAL AND EDUCATIONAL ASPECTS OF DEAFNESS. (3 cr) 4-7 Th, Pt 215,
Moore

5160. SUPERVISION AND ADMINISTRATION OF SPECIAL EDUCATION. (3 cr. §EdAd
5103; prereq §) 3:55-5:40 Th, ClaOff B30, Wolf

5180. EDUCATION OF THE DISADVANTAGED. (3 cr; prereq 12 cr psychology, educational
psychology or sociology) IX-X W, Pt 215

5601. PRACTICUM: SPECIAL EDUCATION. (Cr ar; S-N optional; prereq §) VIII-IX TTh, Pt
111, Rynders

WINTER QUARTER 1977

5100. CHILDHOOD LANGUAGE DEVELOPMENT: CLASSROOM IMPLICATIONS. (3 cr)
VIII-IX W

5107. MAINSTREAMING: ISSUES IN INDIVIDUALIZING INSTRUCTION. (3-5 cr) IX-X W

5110. DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITY I. (3 cr; prereq §) 4-8 Th

5111. DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITY II. (3 cr; prereq 5110,
¶5611, §) 4-8 T

5123. METHODS AND MATERIALS FOR SEVERELY RETARDED PRESCHOOL
AND SCHOOL AGE PUPILS. (4 cr; prereq 5101 or equiv) VIII-IX TTh

5141. METHODS OF TEACHING SCHOOL SUBJECTS TO THE HEARING IMPAIRED. (3 cr;
prereq §) 4-7 Th

5143. TEACHING LANGUAGE TO THE HEARING IMPAIRED I. (3 cr; prereq 5140) IX-X W

5145. TEACHING SPEECH TO THE HEARING IMPAIRED I. (3 cr; prereq §) 4-7 M

5150. EDUCATION OF EMOTIONALLY DISTURBED AND SOCIALLY MALADJUSTED
CHILDREN. (3 cr; prereq grad student or §) IX-X TTh

5190. OUTSTANDING ABILITIES AND THE EDUCATIONAL PROCESS. (3 cr) IX-X T

5301. CONTINGENCY MANAGEMENT IN SPECIAL EDUCATION SYSTEMS. (3 cr) IX-X W
and one special session, Sat, Jan 8, 9 am-3 pm

5601. PRACTICUM: SPECIAL EDUCATION. (Cr ar; S-N optional; prereq §) IX W

8560. SEMINAR: ADMINISTRATION OF SPECIAL EDUCATION. (3 cr per qtr. §EdAd 5180,
5181) IX-X T

SPRING QUARTER 1977

5101. EDUCATION OF EXCEPTIONAL CHILDREN. (3 cr) IX-X MW
5104. SOCIAL AND VOCATIONAL DEVELOPMENT OF HANDICAPPED STUDENTS. (Cr ar [max 4]; prereq #) IX-X Th
5111. DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITY II. (3 cr; prereq 5110, #5611 and #) 4-8 Th
5112. EDUCATION OF LEARNING DISABLED CHILDREN. (3 cr) IX-X T
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 M
5155. PSYCHOEDUCATIONAL INTERVENTIONS: PSYCHOTIC CHILDREN. (3 cr; prereq 12 cr psychology, child psychology or special education) IX-X MW
5180. EDUCATION OF THE DISADVANTAGED. (3 cr; prereq 12 cr psychology, educational psychology or sociology) IX-X W
5301. CONTINGENCY MANAGEMENT IN SPECIAL EDUCATION SYSTEMS. (3 cr) 4-7 M
5601. PRACTICUM: SPECIAL EDUCATION. (Cr ar; S-N optional; prereq #) IX W
8561. SEMINAR: ADMINISTRATION OF SPECIAL EDUCATION. (3 cr per qtr, \$EdAd 5180, 5181) IX-X T

EXTENSION CLASSES

FALL QUARTER 1976

5100. CHILDHOOD LANGUAGE DEVELOPMENT: CLASSROOM IMPLICATIONS. (3 cr; limited to 40 students; \$51) 7:00-9:30 T, Pt 111
5101. EDUCATION OF EXCEPTIONAL CHILDREN. (3 cr; limited to 50 students; \$51) 7:00-9:30 Th, Kellogg HS, Little Canada, Force
5112. EDUCATION OF LEARNING DISABLED CHILDREN. (3 cr; limited to 35 students; \$51) 6:00-8:30 M, Little Canada, Balow

WINTER QUARTER 1977

5105. IMPLEMENTING COURT DECISIONS ON EDUCATION OF THE HANDICAPPED. (2-4 cr; limited to 35 students; \$34, \$51, or \$68) 6:00-8:30 M, Pt 102, Balow
5112. EDUCATION OF LEARNING DISABLED CHILDREN. (3 cr; limited to 35 students; \$51) 7:00-9:30 T, Richfield HS 251, Hibbs
5120. INTRODUCTION TO MENTAL RETARDATION. (4 cr, \$CPsy 5315; prereq 5101; \$68) 6:20-8:50 Th, Pt 214, Warfield
5180. EDUCATION OF THE DISADVANTAGED. (3 cr; prereq 12 cr in psychology, educational psychology, or sociology; limited to 50 students; \$51) 7:00-9:30 W, St Paul Technical-Vocational Institute

SPRING QUARTER 1977

5100. CHILDHOOD LANGUAGE DEVELOPMENT: CLASSROOM IMPLICATIONS. (3 cr; limited to 40 students; \$51) 7:00-9:30 M, Pt 102
5101. EDUCATION OF EXCEPTIONAL CHILDREN. (3 cr; limited to 35 students; \$51) 7:00-9:30 T, Sandburg JHS, Golden Valley, Wood
5120. INTRODUCTION TO MENTAL RETARDATION. (4 cr, \$CPsy 5315; prereq 5101; \$68) 6:20-8:50 Th, Pt 214, Warfield
5155. PSYCHOEDUCATIONAL INTERVENTIONS: PSYCHOTIC CHILDREN. (3 cr; prereq 12 cr in psychology, child psychology, or special education; limited to 35 students; \$51) 7:00-9:30 W, Pt 102, Stuecher

SOCIAL, PSYCHOLOGICAL, AND PHILOSOPHICAL FOUNDATIONS OF EDUCATION

Psychological Foundations (PsyF)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM. (3 cr) 4:15-5:30 MW, CD 216, Stecklein
5148. PSYCHOLOGY AND PEDAGOGY OF READING. (3 cr) 5-7 W, Bu 123, Samuels
5162. PERSONALITY AND SOCIAL DEVELOPMENT. (3 cr; prereq 5 cr introductory psychology) 6:20-8:50 Th, Bu 120, Rest
5170. SOCIAL PSYCHOLOGY OF EDUCATION. (4 cr) 4:15-7:15 T, Jones 10, D Johnson
5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305, §Educ 5305; S-N only) Section 1—4:30-9:30 M, Arch 45, Oden; Section 2—4:30-9:30 T, Arch 60, Oden
8571. PSYCHOLOGY OF CONFLICT RESOLUTION. (4 cr; prereq 5170 or equiv) 4:15-7:15 Th, Jones 2, D Johnson

WINTER QUARTER 1977

5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM. (3 cr) IX-X MW
5172. STRUCTURING LEARNING: SOCIAL PSYCHOLOGICAL APPROACHES. (3 cr) 8 am-6 pm, three consecutive S to be ar
5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305, §Educ 5305; S-N only) Section 1—4:30-9:30 M; Section 2—4:30-9:30 T
5900. DIRECTED STUDY. (Cr ar; prereq *) 3:15-4:30 MW
8573. SMALL GROUP PROCEDURES USED FOR PERSONAL AND ORGANIZATIONAL CHANGE. (4 cr; prereq 5170 or equiv) 4:15-7:15 T

SPRING QUARTER 1977

5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM. (3 cr) IX-X MW
5162. PERSONALITY AND SOCIAL DEVELOPMENT. (3 cr; prereq 5 cr introductory psychology) 6:30-8:50 M
5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305, §Educ 5305; S-N only) Section 1—4:30-9:30 M; Section 2—4:30-9:30 T
8120. METHODS IN EDUCATIONAL RESEARCH. (3 cr; prereq MA students only winter qtr. PhD students only spring qtr) VIII-IX TTh
8130. COMPUTER APPLICATION TO STATISTICAL ANALYSES. (3 cr; prereq 8112 or equiv; lab fee required) VIII MWF

EXTENSION CLASSES

FALL QUARTER 1976

5120. EDUCATIONAL MEASUREMENT IN THE CLASSROOM. (3 cr; §51) 6:20-8:50 Th, Bu 120, Terwilliger
5148. PSYCHOLOGY AND PEDAGOGY OF READING. (3 cr; limited to 15 students; §51) 5-7 W, Pt 214, Samuels
5162. PERSONALITY AND SOCIAL DEVELOPMENT. (3 cr; prereq 5 cr introductory psychology; §51) 6:20-8:50 Th, Pt 214, Rest
5170. SOCIAL PSYCHOLOGY OF EDUCATION. (4 cr; §68) 4:15-7:15 T, Jones 11, D Johnson
5172. STRUCTURING LEARNING: SOCIAL PSYCHOLOGICAL APPROACHES. (3 cr; §51) Special Term—Oct 1, 6, 13, and 20, 4-10 pm, and Oct 2, 8 am-6 pm, FolH 308, D Johnson

5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305, §Educ 5305; S-N only; each section limited to 30 students; §117) Section 1—4:30-9:30 M, Arch 30; Section 2—4:30-9:30 M, Arch 55; Section 3—4:30-9:30 T, Arch 15; Section 4—4:30-9:30 T, Arch 30

WINTER QUARTER 1977

5110. INTRODUCTORY STATISTICAL METHODS. (3 cr; §51) 6:20-8:50 W, Bu 120, Stecklein

5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305, §Educ 5305; S-N only; each section limited to 30 students; §117) Section 5—4:30-9:30 M, Arch 30; Section 6—4:30-9:30 M, Arch 45; Section 7—4:30-9:30 T, Arch 30; Section 8—4:30-9:30 T, Arch 45

SPRING QUARTER 1977

5110. INTRODUCTORY STATISTICAL METHODS. (3 cr; §51) 6:20-8:50 Th, Arch 5, Terwilliger

5172. STRUCTURING LEARNING: SOCIAL PSYCHOLOGICAL APPROACHES. (3 cr. §51) Dates and times to be ar, D Johnson

5305. WORKSHOP IN HUMAN RELATIONS. (1-6 cr [max 6], §CSPP 5305, §Educ 5305; S-N only; each section limited to 30 students; §117) Section 9—4:30-9:30 M, Arch 45; Section 10—4:30-9:30 M, Arch 30; Section 11—4:30-9:30 T, Arch 45; Section 12—4:30-9:40 T, Arch 30

Social and Philosophical Foundations of Education (HEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5141. CRITICAL ISSUES IN CONTEMPORARY EDUCATION. (3 cr) IX-X W, Bu 120, Beck

5190. SOCIOLOGY OF EDUCATION. (4 cr, §Soc 5953) IX-X T, CD 105, Weidman

5209. EDUCATION IN FUTURE SOCIAL SYSTEMS. (3 cr, §5212) IX-X M, Arch 15, Harkins

WINTER QUARTER 1977

5131. COMPARATIVE EDUCATION. (3 cr) IX-X W

5155. HISTORY OF WESTERN EDUCATIONAL THOUGHT. (3 cr) IX-X T

5171. ANTHROPOLOGY AND EDUCATION. (3 cr, §Anth 5371) IX-X W

5180. INTRODUCTION TO ECONOMICS OF EDUCATION. (4 cr) 4:15-6:30 W

5192. SOCIOLOGY OF HIGHER EDUCATION. (4 cr, §Soc 5958; prereq introductory statistics or §) IX-X Th

5210. SOCIAL FORECASTING AND EDUCATIONAL FUTURES. (3 cr) IX-X M

SPRING QUARTER 1977

5101. HISTORICAL FOUNDATIONS OF MODERN EDUCATION. (3 cr) IX-X T

5182. COMPARATIVE PHILOSOPHIES OF EDUCATION. (3 cr) IX-X W

5211. SOCIAL DESIGN AND EDUCATIONAL FUTURES. (3 cr) IX-X M

VOCATIONAL-TECHNICAL EDUCATION

Agricultural Education (AgEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5021. EDUCATION THROUGH EXTENSION METHODS. (3 cr; prereq grad student or §; lab fee required) 3:55-6:25 Th, ClaOff 143, Norenberg

5026. ADMINISTRATION OF EXTENSION SERVICES. (3 cr; prereq #) 3:55-6:25 T, ClaOff 143, Borich
8010. CURRENT ISSUES IN AGRICULTURAL EDUCATION. (Cr ar; prereq #) 3:55-5:40 M, ClaOff 143, M Peterson

WINTER QUARTER 1977

5023. EXTENSION METHODS FOR AGRICULTURAL PRODUCTION IN DEVELOPING COUNTRIES. (2 cr) VIII-IX M
5025. EXTENSION PROGRAM DEVELOPMENT. (3 cr) 4:00-6:30 Th
8001. RESEARCH IN AGRICULTURAL EDUCATION. (Cr ar; prereq 15 cr education) IX-X W
8020. SEMINAR: AGRICULTURAL EDUCATION. (Cr ar) IX-X T

SPRING QUARTER 1977

5021. EDUCATION THROUGH EXTENSION METHODS. (3 cr; prereq grad student or #; lab fee required) 3:55-6:25 Th
5129. CURRICULUM PLANNING. (3 cr; prereq 5128 or #5128, non-agricultural education major and/or #) VIII MWF
8303. SEMINAR: GRADUATE STUDIES REVIEW. (1-3 cr) IX-X M

Business Education (BsEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5114. OFFICE OCCUPATIONAL EXPERIENCE. (1-18 cr; S-N optional; prereq #) 7-9 M and ar, PeikH 255
5115. RESEARCH PROCEDURES IN BUSINESS EDUCATION. (3 cr; prereq #) 4:15-6:30 Th, PeikH 245, McLean
5116. SCHOOL-BASED PROJECTS IN BUSINESS EDUCATION. (1-12 cr [max 12]; prereq #) Hopkins, Lambrecht, McLean
5340. BUSINESS AND DISTRIBUTIVE EDUCATION STUDENT ORGANIZATIONS. (3 cr, §DE 5340) 4:00-6:30 T, PeikH 245

WINTER QUARTER 1977

5108. CURRICULUM CONSTRUCTION IN BUSINESS EDUCATION. (3 cr) 5:00-7:15 W
5114. OFFICE OCCUPATIONAL EXPERIENCE. (1-18 cr; S-N optional; prereq #) 7-9 M and ar
5116. SCHOOL-BASED PROJECTS IN BUSINESS EDUCATION. (1-12 cr [max 12]; prereq #)
5130. BUSINESS AND DISTRIBUTIVE PROGRAMS FOR ADULTS. (3 cr, §DE 5120) 4:00-6:30 Th

SPRING QUARTER 1977

5104. OFFICE COORDINATION TECHNIQUES. (3 cr, §DE 5105; lab fee required) 4:15-6:30 M
5107. MATERIALS AND METHODS IN OFFICE EDUCATION. (3 cr; lab fee required) II-III S
5114. OFFICE OCCUPATIONAL EXPERIENCE. (1-18 cr; S-N optional; prereq #) 7-9 M and ar
5116. SCHOOL-BASED PROJECTS IN BUSINESS EDUCATION. (1-12 cr [max 12]; prereq #)
5125. POSTSECONDARY BUSINESS AND DISTRIBUTIVE EDUCATION. (3 cr, §DE 5115) 4:00-6:30 Th

Distributive Education (DE)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5110. CURRICULUM IN COOPERATIVE VOCATIONAL EDUCATION. (2 cr) 4:00-5:30 W, PeikH 245, Ashmun, Whiteford
5111. CURRICULUM IN COOPERATIVE DISTRIBUTIVE EDUCATION. (2 cr; prereq 5110 or ¶5110) 5:45-6:30 W, PeikH 245, Ashmun
5340. BUSINESS AND DISTRIBUTIVE EDUCATION STUDENT ORGANIZATIONS. (3 cr, §BsEd 5340) 4:00-6:30 T, PeikH 245
5600. SCHOOL-BASED PROJECTS IN DISTRIBUTIVE EDUCATION. (1-12 cr [max 12]; prereq Δ) Ashmun, Klaurens

WINTER QUARTER 1977

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, §BsEd 5130) 4:00-6:30 Th
5125. ISSUES AND TRENDS IN DISTRIBUTIVE EDUCATION. (3 cr; prereq sr or grad student, §) 4:00-6:30 M
5600. SCHOOL-BASED PROJECTS IN DISTRIBUTIVE EDUCATION. (1-12 cr [max 12]; prereq Δ)

SPRING QUARTER 1977

5100. ORGANIZATION AND ADMINISTRATION OF DISTRIBUTIVE EDUCATION. (3 cr) 4:00-6:30 T
5115. POSTSECONDARY BUSINESS AND DISTRIBUTIVE EDUCATION. (3 cr, §BsEd 5125) 4:00-6:30 Th
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
5600. SCHOOL-BASED PROJECTS IN DISTRIBUTIVE EDUCATION. (1-12 cr [max 12]; prereq Δ)

Home Economics Education (HEEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5111. CURRICULUM IN HOME ECONOMICS OCCUPATIONAL EDUCATION. (2 cr; prereq DE 5110 or ¶DE 5110) 5:45-6:30 W, Pt 102, Whiteford
5331. HOME ECONOMICS OCCUPATIONAL EDUCATION. (3 cr [max 12]; prereq sr or tchg exper or §) 3:55-5:40 M and ar, McNH 197, Whiteford
5500. PROSEMINAR: HOME ECONOMICS EDUCATION. (2 cr; required of new grad students) 3:55-5:40 T, McNH 194, Brown

WINTER QUARTER 1977

5106. COORDINATION TECHNIQUES IN HOME ECONOMICS OCCUPATIONAL EDUCATION. (2 cr; prereq DE 5105 or ¶DE 5105) 5:45-6:30 W
5300. HOME ECONOMICS CURRICULUM. (3 cr; prereq 3530, §) IX-X W

5331. HOME ECONOMICS OCCUPATIONAL EDUCATION. (3 cr [max 12]; prereq sr or tchg exper or #) 3:55-5:40 M and ar

5430. WORKSHOP: CONTEMPORARY PROBLEMS IN HOME ECONOMICS EDUCATION. (3 or 4 cr [max 12]; prereq Δ) IX-X T

SPRING QUARTER 1977

5301. MATERIALS AND METHODS IN HOME ECONOMICS OCCUPATIONAL EDUCATION. (2 cr; prereq DE 5300 or †DE 5300) 5:45-6:30 M

5315. EVALUATION: THEORETICAL AND TECHNICAL ASPECTS. (3 cr; prereq 3530, #) IX-X T

5325. TRENDS IN HOME ECONOMICS EDUCATION. (3 cr; prereq 5300 or 5305) IX-X M

Industrial Education (Ind)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5301. TESTS IN INDUSTRIAL SUBJECTS. (3 cr; prereq SeEd 3155) IX-X M, CD 105, Wentling

5303. INSTRUCTIONAL AIDS. (3 cr; prereq 3360 or 5360) IX-X T, PeikH 41A, Irvin

5320. VOCATIONAL GUIDANCE. (3 cr; prereq SeEd 3155) IX-X W, EltH N119

WINTER QUARTER 1977

5301. TESTS IN INDUSTRIAL SUBJECTS. (3 cr; prereq SeEd 3155) IX-X M

5312. SUPERVISION OF INDUSTRIAL EDUCATION. (3 cr; prereq 3330 or 5314) IX-X Th

8310. RESEARCH. (3 cr; prereq #) IX-X W

SPRING QUARTER 1977

5303. INSTRUCTIONAL AIDS. (3 cr; prereq 3360 or 5360) IX-X T

5305. CRITICAL ISSUES IN INDUSTRIAL EDUCATION. (3 cr) IX-X Th

5320. VOCATIONAL GUIDANCE. (3 cr; prereq SeEd 3155) IX-X W

5330. INDUSTRIAL COURSE CONSTRUCTION. (3 cr) IX-X T

Vocational Education (VoEd)

LATE AFTERNOON AND SATURDAY MORNING CLASSES

FALL QUARTER 1976

5300. PHILOSOPHY AND PRACTICE OF VOCATIONAL EDUCATION. (3 cr) 3:55-5:40 Th, ClaOff 130C, M Peterson

WINTER QUARTER 1977

5400. EDUCATION FOR WORK. (3 cr; prereq 5300 or #) IX-X T

5500. INTRODUCTION TO VOCATIONAL EDUCATION ADMINISTRATION. (3 cr) IX-X W

SPRING QUARTER 1977

5300. PHILOSOPHY AND PRACTICE OF VOCATIONAL EDUCATION. (3 cr) IX-X W

CALENDAR FOR 1976-77 ACADEMIC YEAR

FALL QUARTER

August

- 16 Graduate School application deadline for fall quarter.**

September

- 6 Labor Day, holiday.
- 16 Last day to pay fall quarter fees for students registered through September 10.
- 24 Last day to register and pay fees for undergraduate students, including adult special students, except teachers in service.
- 27 Fall quarter classes begin.

October

- 1 Last day to register and pay fees for graduate students and teachers in service.
- 9 Homecoming.

November

- 8 Last day to pay graduation fees for fall quarter.
- 25 Thanksgiving Day, holiday. Classes excused.
- 26 University holiday. Classes excused.
- 29 Graduate School application deadline for winter quarter.**

December

- 7 Last day of instruction.
- 8 Study Day.
- 9-15 Final examinations.
- 15 Commencement. End of fall quarter.
- 24 Christmas, holiday observed. Classes excused.
- 27 University holiday. Classes excused.
- 30 Last day to pay winter quarter fees for all undergraduate students, including adult special students, except teachers in service.
- 31 New Year's, holiday observed. Classes excused.

WINTER QUARTER

January

- 3 Winter quarter classes begin.
- 7 Last day to register and pay fees for graduate students and teachers in service.

February

- 7 Last day to pay graduation fees for winter quarter.
- 21 Presidents' Day, holiday. Classes excused.
- 25 Graduate School application deadline for spring quarter.**

March

- 11 Last day of instruction.
- 12 Study Day.
- 14-19 Final examinations.
- 19 End of winter quarter.
- 25 Last day to pay spring quarter fees for all undergraduate students, including adult special students, except teachers in service.

SPRING QUARTER

March

- 28 Spring quarter classes begin.

April

- 1 Last day to register and pay fees for graduate students and teachers in service.
- 20 Last day to pay graduation fees for spring quarter.

May

- 16 Graduate School application deadline for first term of Summer Session.**
- 30 Memorial Day, holiday. Classes excused.

June

- 3 Last day of instruction.
- 4 Study Day.
- 6-11 Final examinations.
- 10 Last day to pay graduation fees for first term of Summer Session.
- 11 Graduate School commencement. End of spring quarter.

SUMMER SESSION 1977

FIRST TERM

June

- 13 Last day to register and pay fees for first term.
- 14 First term classes begin.
- 15 Graduate School application deadline for second term of Summer Session.**

July

- 4 Independence Day, holiday. Classes excused.
- 15 End of first term. Last day to pay graduation fees for second term.

SECOND TERM

July

- 18 Last day to register and pay fees for second term.
- 19 Second term classes begin.

August

- 19 End of second term.

**Applications accepted through next business day if date falls on Saturday, Sunday, or University holiday.

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* at 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 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 an adult special 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.

- 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 (M.Ed.) Degree Students

Follow the same procedure as adult special students but secure approval from your assigned adviser.

Master of Arts (M.A.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.) Degree Students

- Obtain *application for admission* forms in 310 Johnston Hall.
- If registered during the previous quarter, obtain *registration* materials in your departmental office; all others obtain *registration* materials in 316 Johnston Hall.
- Secure adviser's approval.
- Return completed forms to 310 Johnston Hall.
- 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 9 through 17, except Friday, September 10, until 4:30 p.m.