This is the Academic Departments section of the 1996-1999 University of Minnesota College of Education and Human Development Bulletin.
CURRICULUM AND INSTRUCTION

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DEGREES OFFERED—B.S., M.Ed.; M.A. and Ph.D. degrees are offered by the Graduate School.

FACULTY:

Eugene Anderson, Ed.D., University of Illinois
Teacher education, self-esteem, peer coaching

Patricia Avery, Ph.D., Emory University
Social studies education, history of American education, political education

Richard W. Beach, Ph.D., University of Illinois
English education, teacher education

Sandra Balli, Ph.D., University of Missouri—Columbia
Technology education, field-based teacher education

JoAnne Buggey, Ph.D., University of Washington
Elementary education, social studies education

John Cogan, Ph.D., The Ohio State University
Elementary education, social studies education

Margaret DiBlasio, Ph.D., The Ohio State University
Art education

Fred Finley, Ph.D., Michigan State University
Science education

Kerry J. Freedman-Norberg, Ph.D.,
University of Wisconsin—Madison
Curriculum studies, art education

William E. Gardner, Ph.D., University of Minnesota
Teacher education, social studies education

Felipe Golez, Ph.D., University of New Mexico
Elementary education, sociocultural issues in schools

Michael F. Graves, Ph.D., Stanford University
English education

Patricia Heller, Ph.D., University of Michigan
Elementary education, science education

Simon R. Hooper, Ph.D., The Pennsylvania State University
Instructional systems and technology

Roger T. Johnson, Ed.D., University of California–Berkeley
Elementary education, science education, cooperative learning

Helen L. Jorstad, Ph.D., University of Minnesota
Second languages and cultures, bilingual education

Judith Lambrecht, Ph.D., University of Wisconsin
Computer technology, research, accounting methods, office education

Frances Lawrenz, Ph.D., University of Minnesota
Elementary education, science education

John Manning, Ed.D., Boston University
Elementary education, literacy education

Dianne Monson, Ph.D., University of Minnesota
Elementary education, children's literature

Darcia F. Narváez, Ph.D., University of Minnesota
Elementary education, moral discourse

Robert E. Orton III, Ph.D., Stanford University
Mathematics education, moral and ethical education

R. Michael Paige, Ph.D., Stanford University
Second languages and cultures, comparative and international development education

Margaret Phinney, Ph.D., University of Massachusetts
Elementary education, language arts education

Thomas R. Post, Ph.D., Indiana University
Elementary education, mathematics education

Dianne J. Tedick, Ph.D., The Ohio State University
Second languages and cultures, second language assessment

James E. Stochl, Ph.D., University of Minnesota
Elementary education, mathematics education
The Department of Curriculum and Instruction prepares teachers and educational leaders by offering a B.S. degree in foundations of education: elementary, as well as M.Ed., M.A., and Ph.D. degrees, with specializations in one or more of the following: art education, curriculum studies, early childhood education, elementary education, English education, instructional systems and technology, mathematics education, science education, second languages and cultures education, and social studies education. The M.Ed. program, which requires completion of an undergraduate degree before admission, is tailored to meet the needs of initial licensure candidates, in-service teachers, and other professionals. The department supports the local education community through a variety of outreach programs that address current local and global issues. Its faculty is actively involved in research on a wide array of curriculum topics and is committed to providing the teaching community with the theoretical and practical knowledge necessary to the professional development of educators today.

UNDERGRADUATE PROGRAMS

FOUNDATIONS OF EDUCATION: ELEMENTARY—CEHD admits upper division (typically junior status) students to an undergraduate program that serves as preparation for the M.Ed./initial licensure program in elementary education. The curriculum includes an extensive core of liberal education courses central to elementary school teaching. The major coursework provides a foundation for working with children in a school setting and emphasizes the multicultural nature of an urban environment. Students who successfully complete this program receive a B.S. degree with a major in foundations of education. Students may move into the initial licensure program in elementary education if they meet the minimum entrance criteria for the M.Ed. degree. Licensure requirements can be completed with a designated cohort in about three additional quarters of coursework and clinical experience. This program also prepares graduates to move into nonlicensure settings or other settings in which a strong liberal education is useful. For more information, contact SPS (110 Wulling Hall, 612/625-6501).

MATHEMATICS—Undergraduates admitted to mathematics programs in the University's Institute of Technology or College of Liberal Arts may apply for admission to CEHD. If approved, they begin taking education courses while completing their initial college's degree requirements. After completing the Institute of Technology or College of Liberal Arts bachelor's degree with a major in mathematics, applicants enroll as M.Ed. students in CEHD and complete the remaining requirements for teacher licensure.

PREKINDERGARTEN TEACHER LICENSURE—Students seeking careers in early childhood education can meet state licensure requirements by completing the prekindergarten teacher licensure program. This is not a degree program. It consists of both didactic and practicum training in child development and early childhood education. Juniors or seniors majoring in child psychology may apply to this program. It may be completed in conjunction with a student's undergraduate or graduate program or under adult special status. Students in other majors must complete the M.Ed./initial licensure program. For more information, contact Lynn Galle, Program Coordinator, University of Minnesota, 134c Child Development Building, 51 East River Road, Minneapolis, MN 55455 (612/624-5283).

Early Childhood Education (12-15 credits)
CI 5250—Current Trends in Early Childhood Education (4)
CI 5252—Contemporary Programs for Young Children (3)
CI 5253—Cognitive and Creative Learning in Early Childhood Education (3)
CI 5281—Student Teaching in the Nursery School (3-6) (Credit requirement based on student's previous prekindergarten teaching experience)

Child Psychology (15 credits)
CPsy 1301—Introductory Child Psychology (4)
or CPsy 5301—Advanced Child Development (4)
4 credits in CPsy 3330—Directed Experiences (1-4)
CPsy 3331—Introduction to Social Development (4)
or 5331—Processes of Socialization of Children (4)
(if undergraduate)
CPsy 5336—Development and Interpersonal Relations (4)
CPsy 5343—Introduction to Cognitive Development (4)
or CPsy 5345—Language Development (4)
or CPsy 5349—Children’s Learning and Intellectual Skills (4)

Guided Electives (minimum 3 credits)
CPsy 5302—Infancy (4)
EPsy 5625—Education of Infants and Preschool Children With Developmental Disabilities (3)
Students must also meet, or have met as part of their undergraduate program, the following Minnesota Department of Children, Families, and Learning requirements:

- EPSy 5139—Interpersonal and Personality Effects on Learning (4)
- PubH 5023—Basic Concepts in Personal and Community Health (4)
- One physical education activity course

**ADVANCED STUDY**

**M.ED. DEGREE PROGRAM FOR INITIAL LICENSURE**

The M.Ed. degree is practitioner-oriented, emphasizing application rather than research. Unlike the M.A., which is granted through the University’s Graduate School, the M.Ed. is granted through CEHD. The 12- to 18-month initial licensure program integrates educational theory with classroom practice. Typically, students participate in 20 weeks of practicum and 10 weeks of student teaching (individual programs have varying requirements for practicum and student teaching).

An important advantage of the initial licensure program is its cohort nature. Students in each emphasis area begin classes together and continue through their course of study as a group, building a valuable sense of community. Throughout their student teaching, prospective teachers work closely with experienced teachers, observing firsthand the daily rewards and challenges of the profession.

Admission requires a bachelor's degree with a major related to the specialty area(s) of the M.Ed. program. After successfully completing program requirements, students are recommended for state licensure. After completing additional credits (6-12, depending on the area), students are awarded an M.Ed. in teaching. Students have seven years to complete their degree, beginning with the first coursework used in the program, and must maintain a 2.80 overall GPA.

**EARLY CHILDHOOD EDUCATION AND PRE-K LICENSURE—**

The early childhood education M.Ed. in which pre-K licensure is granted is a joint program of the Department of Curriculum and Instruction and the Institute of Child Development. Of the 58 credits in the program, 51 are taken for licensure and 7 are taken to complete the M.Ed.

M.Ed./initial licensure applicants are admitted to the early childhood education program based on the following:

- A bachelor's degree with a 2.50 overall GPA
- A summary of work or volunteer experience with young children, including those of diverse cultures and special populations, preferably in a group setting
- Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
- A goal statement addressing why the applicant wants to become a licensed teacher

- Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

**Foundation Courses (23)**

- CI 5250—Current Trends in Early Childhood Education (4)
- CPsy 5334—Children, Youth, and Society (4)
- CPsy 5343—Cognitive Development (4)
- EPSy 5139—Building a Learning Community (4)
- EPSy 5849—Assessment of the Preschool Child (3)
- Kin 5530—Biological and Physical Foundations of Education (2)

**Public Health Requirement**

PubH 5023*—Basic Concepts in Personal and Community Health (4)

* Does not count toward M.Ed.

**Major Courses (18)**

- CI 5252—Contemporary Programs for Young Children (3)
- CI 5253—Cognitive and Creative Learning in Early Childhood Education (3)
- CPsy 5302—Infancy (4)
- or EPSy 5625—Education of Infants and Preschool Children With Developmental Disabilities (3)
- CPsy 5330—Directed Experiences With Children (4)
- CPsy 5336—Developmental and Interpersonal Relations (4)

**Additional Courses (7)**

Students should apply for degree before completion.

- CI 5187—Practicum: Improvement of Teaching in Elementary or Prekindergarten Schools (4)
- CI 5251—Early Childhood Education: Materials and Resources (3)

**Student Teaching**

CI 5281—Student Teaching in the Nursery School (3-6)

Completion of the American Red Cross standard first aid and personal safety training is strongly recommended.

**M.ED. DEGREE PROGRAM WITH A MAJOR IN TEACHING (FOR INITIAL LICENSURE)—**

The department offers an M.Ed. with a major in teaching that leads to licensure. The following emphasis areas are available.

- Art education
- Elementary education
- Mathematics education
- Science education
- Second languages and cultures education
- Social studies education
- UPLIFT (University Paraprofessional Licensure Initiative for Teaching)
EMPHASIS AREAS

ART EDUCATION

The art education program includes 20 weeks of practicum and 10 weeks of student teaching that build on principles and methods learned in University courses. After successfully completing initial licensure requirements, students are recommended for state licensure to teach visual arts to students in grades K-12.

M.Ed./initial licensure applicants are admitted to the art education emphasis based on the following.

- Fully developed knowledge of visual art, including 45 credits in studio art, art history, and art criticism; coursework in drawing, painting, and sculpture; proficiency in a wide range of media and material skills, with experience in six or more studio arts; and a broad knowledge of art history and criticism, including Western and non-Western traditions
- An arts-related bachelor's degree with a 2.80 overall GPA and a 3.00 GPA in major coursework
- A summary of work or volunteer experience with elementary or secondary students, including those of diverse cultures and special populations, preferably in a school setting
- Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
- A goal statement addressing why the applicant wants to become a licensed teacher
- Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Note: A portfolio may be requested, depending on the recency of studio coursework.

Students begin classes in June and continue through August of the following year.

Foundation Courses
CI 5300—Technology for Teaching and Learning (2)
CI 5150—Secondary School Teaching (3)
EdPA 5090—School and Society (3)
EPsy 5119—Learning and Cognitive Foundations of Education (4)
EPsy 5139—Building a Learning Community (4)
EPsy 5229—Classroom Assessment Methods (2)
Kin 5330—Biological and Physical Foundations of Education (2)
PubH 5023*—Basic Concepts in Personal and Community Health (4)

* Does not count toward M.Ed.

Major Courses
CI 5008—Theory and Practice of Teaching Art in Elementary Schools (2)
CI 5049—Art Media Techniques: Computers and Art Education (3)
CI 5065—Improving Art Programs in the Schools (4)
CI 5069—Curriculum Innovations in Art Education (4)
CI 5078—Application of Aesthetic Theory in Education (3)
CI 5080—Internship: Art Education (2)
CI 5085—Practicum: Art Education (2)
CI 5086—Student Teaching in Art Education (12)

Additional Courses

Courses taken after licensure to complete the M.Ed. include CI 5090—Professional Problems in Art Education (3) and 6 credits selected in consultation with an adviser.

ELEMENTARY EDUCATION

The elementary education program includes 24 weeks of practicum and 10 weeks of student teaching that build on principles and methods learned in University courses. After successfully completing initial licensure requirements, students are recommended for state licensure to teach grades 1-6. An endorsement to teach kindergarten may be added to this license.

M.Ed./initial licensure applicants are admitted to the elementary education emphasis based on the following.

- Completion of prerequisites and liberal education requirements before beginning the program, including Engl 3851—The English Language (4)
- Math 3105 and Math 3106—Introduction to Elementary Mathematics (4 credits each)
- Music 1001—Fundamentals of Music (4)
- Psy 1001—Introduction to Psychology (5) (grade of C or better required)

An additional college-level mathematics course (e.g., college algebra, trigonometry, precalculus, calculus) (4)

- Computer experience
- A bachelor's degree with a 2.80 overall GPA
- A summary of work or volunteer experience with elementary-age students, including those of diverse cultures and special populations, preferably in a school setting
- Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
- A goal statement addressing why the applicant wants to become a licensed teacher
- Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)
- Evidence of current American Red Cross standard first aid and personal safety training (required for licensure)

Suggested Program of Study

Students may either begin full-time during summer session or full-time during fall quarter. The summer session program schedule is below; the fall quarter program fol-
allows a similar schedule, with methodology courses beginning in the fall rather than during the summer. For more information, contact an adviser at (612) 625-6501.

**Summer Session I**

All prerequisite courses must be completed. At least one of the following foundation courses should be taken.

- CI 5300*—Technology for Teaching and Learning (2)
- EPsy 5139—Building a Learning Community (4)
- Kin 5530—Biological and Physical Foundations of Education (2)
- PubH 5023*—Basic Concepts in Personal and Community Health (4)

* Does not count toward M.Ed.

**Summer Session II**

CI 5110—Introduction to Elementary School Teaching (3)
EPsy 5119—Learning and Cognitive Foundations of Education (4)

**Fall Quarter**

CI 5008—Theory and Practice of Teaching Art in the Elementary School (4)
or MuEd 3011—Teaching Music in the Elementary School (4) and Kin 3327*—Teaching Physical Education in the Elementary School (3)
CI 5183—Practicum: Applying Instructional Methods (2)
CI 5400—Survey of Children’s Literature (3)
CI 5410—Teaching Reading in the Elementary School (3)
CI 5425—Teaching Language Arts in the Elementary School (3)

**Winter Quarter**

CI 5008—Theory and Practice of Teaching Art in the Elementary School (4)
or MuEd 3011—Teaching Music in the Elementary School (4) and Kin 3327*—Teaching Physical Education in the Elementary School (3)
CI 5183—Practicum: Applying Instructional Methods (2)
CI 5500—Teaching Science in the Elementary School (3)
CI 5506—Teaching Health in the Elementary School (1)
CI 5700—Teaching Social Studies in the Elementary School (3)
CI 5821—Teaching Mathematics in the Elementary School (3)

**Spring Quarter**

CI 5180—Clinical Experience in Elementary School Teaching (12)
EPsy 5229—Classroom Assessment Methods (2)

**Additional Courses**

Students should apply for degree before completion.

- CI 5187—Practicum: Improvement of Teaching in Elementary or Prekindergarten Schools (4)
- 3 credits selected in consultation with an adviser

**Kindergarten Endorsement Program**

Students who wish to be licensed for kindergarten teaching are required to complete the following courses with 2.50 GPA in addition to the M.Ed./initial licensure elementary education program.

- CI 3280—Student Teaching in the Kindergarten (6)
- CI 5250—Current Trends in Early Childhood Education (4)
- CPsy 1301—Introductory Child Psychology (4)

**ENGLISH EDUCATION**

After successfully completing initial licensure requirements, students are recommended for state licensure to teach language arts in secondary schools.

M.Ed./initial licensure applicants are admitted to the English education emphasis based on the following.

- Engl 3851—The English Language (4)
- 12 credits of English literature: 4 credits in a survey course, 4 credits in Shakespeare, 4 credits of elective coursework
- 12 credits of American literature: 4 credits in a survey course, 8 credits in other American literature courses, including study of women and minority writers
- 8 credits in advanced composition and creative writing: Comp 3011, 3012, or 3027 and one course from EngW 1101, 1102, 1103, 3102, 3103, 5101, 5102, 5105, 5106, 5201, 5202, 5202, 5501 (5xxx courses require permission from Creative Writing Program)
- Electives—8 credits in 3xxx and 5xxx courses chosen from English literature, humanities, or selected mass communication/media courses (i.e., CI 5472, Jour 3006, 3008, 3754, 5615, 5721), including 4 credits covering non-Western authors
- A bachelor’s degree with a 2.80 overall GPA and a 3.00 GPA in major coursework
- A brief description of work or volunteer experience with secondary-age students, including those of diverse cultures and special populations, preferably in a school setting
- Two references who can address questions about the applicant’s education-related experience, work style, and personal attributes
- A goal statement addressing why the applicant wants to become a licensed teacher
- Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Students begin classes in June and continue through August of the following year.
Foundation Courses
CI 5300—Technology for Teaching and Learning (2)
EdPA 5090—School and Society (3)
EPsy 5119—Learning and Cognitive Foundations of Education (4)
EPsy 5139—Building a Learning Community (4)
EPsy 5229—Classroom Assessment Methods (2)
Kin 5530—Biological and Physical Foundations of Education (2)
PubH 5023*—Basic Concepts in Personal and Community Health (4)

*S suggested program of study
Fall Quarter—
CI 5150—Secondary School Teaching (3)
CI 5450—Teaching Reading in the Content Areas (4)
CI 5460—Teaching Writing in Secondary Schools and Colleges (4)

Winter Quarter—
CI 5440—Teaching Literature in Secondary Schools (4)
CI 5491—Current Developments in English Education (3)

Spring Quarter—
CI 5485—Directed Experiences in Teaching English (12)

Additional Courses
To complete the M.Ed. with an emphasis in English education, students must complete 12 credits, including CI 5470. The remaining six credits are taken from CI 5441, 5451, 5461, or 5472. Students should apply for degree before completion.

Mathematics Education
The mathematics education program includes extensive practicum experience and 10 weeks of student teaching that build on principles and methods learned in University courses. After successfully completing initial licensure requirements, students are recommended for state licensure to teach mathematics in secondary schools.

Students are admitted to the mathematics education program based on the following:
• Appropriate mathematics content courses, including a calculus sequence and courses in real analysis, abstract algebra, geometry, probability, and computer programming
• A bachelor's degree in mathematics with a 2.50 overall GPA
• Evidence of work or volunteer experience with K-12 students from diverse populations and cultures that demonstrates commitment to teaching
• Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
• A goal statement addressing why the applicant wants to become a licensed teacher
• Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Suggested Program of Study
Summer Sessions—
CI 5300—Technology for Teaching and Learning (2)
EdPA 5090—School and Society (3)
EPsy 5139—Building a Learning Community (4)
Kin 5530—Biological and Physical Foundations of Education (2)
MthE 5010—Teaching Mathematics: Arithmetic Structures (3)
PubH 5023*—Basic Concepts in Personal and Community Health (4)

Pre-Fall Quarter—
MthE 5600—Introduction to Mathematics Education (2)

Fall Quarter—
CI 5150—Secondary School Teaching (3)
EPsy 5119—Learning and Cognitive Foundations of Education (4)
MthE 5020—Teaching Mathematics: Algebraic Structures (3)
MthE 5620—Clinical Experiences in Teaching Algebra (2)
PubH 5023*—Basic Concepts in Personal and Community Health (4)

Winter Quarter—
MthE 5650—Full-Day Student Teaching in Mathematics (12)

Spring Quarter—
EPsy 5229—Classroom Assessment Methods (2)
MthE 5030—Teaching Mathematics: Geometric Structures (3)
MthE 5630—Clinical Experiences in Teaching Geometry (2)
Any remaining foundations courses

Additional Courses
Students should apply for degree before completing
MthE 5312—Teaching and Supervising Mathematics in the Secondary School (4)
MthE 5980—Directed Studies in Mathematics Education (3)
MthE 5xxx—Chosen in consultation with adviser (3)

Science Education
The science education program includes 20 weeks of practicum experience and 10 weeks of student teaching that build on principles and methods learned in University courses. After successfully completing initial licensure requirements, students are recommended for state licensure to teach life, earth, or physical sciences in grades 7-12
Grades 5-9 science certification may be added to any of those three areas. M.Ed./initial licensure applicants are admitted to the science education emphasis on the basis of the following:

- Prerequisite coursework in earth, life, or physical sciences (the complete prerequisite course list is available from SPS)
- A bachelor's degree with a 2.50 GPA overall and in major coursework
- A summary of work or volunteer experience with youths, including those of diverse cultures and special populations, preferably in a school setting
- Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
- A goal statement addressing why the applicant wants to become a licensed teacher
- Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Suggested Program of Study

Summer Sessions—
Students begin classes in June and continue through August of the following year. During the summer sessions, students complete foundation coursework and/or any remaining science prerequisites. Before taking CI courses, students must have completed at least 80 percent of their major science coursework; the remainder is completed during the program.

Foundation Courses

CI 5300—Technology for Teaching and Learning (2)
EdPA 5090—School and Society (3)
EPSy 5119—Learning and Cognitive Foundations of Education (4)
EPSy 5139—Building a Learning Community (4)
EPSy 5229—Classroom Assessment Methods (2)
Kin 5530—Biological and Physical Foundations of Education (2)
PubH 5023*—Basic Concepts in Personal and Community Health (4)

* Does not count toward M.Ed.

Fall Quarter—
CI 5150—Secondary School Teaching (3)
CI 5530—Science Education for the Middle School (4)
CI 5580—Applying Science Methods in Middle and Secondary Schools (1-4)

Winter Quarter—
CI 5531—Teaching Secondary School Science (4)
CI 5580—Applying Science Methods in Middle and Secondary Schools (1-4)

Spring Quarter—
CI 5572—Seminar: Reflecting on Clinical Experience in Science Teaching (3)
CI 5582—Clinical Experience in Science Teaching (12)

Summer Session—
During the final quarter of enrollment, students complete coursework in foundation courses and CI 5532—Current Developments in Secondary School Science Teaching (4).

Additional Courses

Students should apply for degree before completion.
CI 5186—School-Related Projects in Curriculum and Instruction (4)
CI 5533—Studies in Science Education (4)
CI 5534—Foundations of Science Education (3)

SECOND LANGUAGES AND CULTURES EDUCA TION

This program is for students seeking licensure to teach second languages in grades K-12 or 7-12 and/or English as a Second Language (ESL) in grades K-12. Licensure options for second languages include Chinese, French, German, Hebrew, Japanese, Latin, Russian, and Spanish. Student teaching builds on principles and methods learned in University courses. After successfully completing initial licensure requirements, students are recommended for state licensure in the chosen language(s).

M.Ed./initial licensure applicants are admitted to the second languages and cultures emphasis based on the following:

- High-level proficiency in a second language as measured by the Modern Language Association examination and the Oral Proficiency Interview (a standardized test)
- A bachelor's degree with a 2.80 overall GPA and a 3.00 GPA in major coursework
- A summary of work or volunteer experience with students, including those of diverse cultures and special populations, preferably in a school setting either in the United States or abroad
- Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
- A goal statement addressing why the applicant wants to become a licensed teacher
- Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Students must pass the required/appropriate language assessment test(s) to be considered for admission. These tests include the Modern Language Association examination (MLA), Oral Proficiency Interview (OPI), Test of English as a Second Language (TOFEL), and Michigan English Language Assessment Battery (MELAB).
French, German, and Spanish majors take the MLA and OPI. Chinese, Hebrew, Japanese, Latin, and Russian majors take the OPI only. Nonnative English speakers take the OPI for English proficiency as well as the TOFEL or MELAB.

English as a Second Language (ESL) majors can meet the state second language requirement for licensure with two years of college-level foreign language study, four years of high-school foreign language study, or equivalent language experience through work or study abroad.

Students begin classes in June and continue through August of the following year. During both summers, students take foundations courses and, for those seeking ESL licensure, linguistics courses. During the academic year, students enroll for the same second languages and cultures education courses each quarter.

### Foundation Courses
- CI 5300—Technology for Teaching and Learning (2)
- EdPA 5090—School and Society (3)
- EPsy 5139—Building a Learning Community (4)
- EPsy 5229—Classroom Assessment Methods (2)
- Kin 5530—Biological and Physical Foundations of Education (2)
- PubH 5023*—Basic Concepts in Personal and Community Health (4)

* Does not count toward M.Ed.

### Suggested Program of Study

**Fall, Winter, and Spring Quarters—**
- CI 5150—Secondary School Teaching (3) (fall)
- CI 5631—Second Language Curriculum (3 each quarter for 9 total)
- CI 5632—Second Language Instruction (3 each quarter for 9 total)
- CI 5684—Clinical Experiences in Second Languages (4 each quarter for 12 total; 6 each quarter for 18 total if seeking foreign language licensure for grades 7-12 and ESL licensure for grades K-12)

Students seeking foreign language licensure for grades K-12 must also complete:
- CI 5619—Teaching Second Languages and Cultures in the Elementary Schools (4) and its corresponding practicum, CI 5680.

Students who wish to teach ESL must complete additional studies, including:
- Ling 5001—Introduction to Linguistics (5)
- Ling 5732—The Structure of English (4)
- Ling 5801—Introduction to Language Learning (4)

These courses are usually completed before entering the program or during the first summer.

### Additional Courses
- CI 5633—Second Language Research (6)

During the first year of teaching, students must complete a classroom-based research project and a reflective project. Students should apply for degree before completion.

### Social Studies Education

This program includes 20 weeks of practicum and 10 weeks of student teaching that build on principles and methods learned in University courses. After successfully completing initial licensure requirements, students are recommended for state licensure to teach anthropology, economics, geography, history, political science, psychology, and sociology in grades 7-12.

M.Ed./initial licensure applicants are admitted to the social studies education emphasis based on the following.

- Fully developed knowledge of the social sciences (an emphasis is required in one major area, plus supporting coursework from all areas [see list of prerequisites at the end of this section])
- A bachelor's degree with a 2.80 overall GPA and a 3.00 GPA in major coursework
- A summary of work or volunteer experience with youths, including those of diverse cultures and special populations, preferably in a school setting
- Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
- A goal statement addressing why the applicant wants to become a licensed teacher
- Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Students begin classes in June and continue through August of the following year.

### Foundation Courses
- CI 5300—Technology for Teaching and Learning (2)
- EdPA 5090—School and Society (3)
- EPsy 5139—Building a Learning Community (4)
- EPsy 5229—Classroom Assessment Methods (2)
- Kin 5530—Biological and Physical Foundations of Education (2)
- PubH 5023*—Basic Concepts in Personal and Community Health (4)

* Does not count toward M.Ed.

### Suggested Program of Study

**Fall Quarter—**
- CI 5150—Secondary School Teaching (3)
- CI 5740—Introduction to Social Studies Education (4)
Winter Quarter—
CI 5741—Advanced Methods of Teaching Social Studies (4)
CI 5742—The Social Sciences and the Social Studies (3)
CI 5780—Practicum: Secondary Social Studies Education (4)

Spring Quarter—
CI 5743—Seminar: Reflecting on the Clinical Experience in Social Studies (3)
CI 5782—Student Teaching in Secondary Social Studies (12)

Additional Courses
Students should apply for degree before completion.
CI 5186—School-Related Projects in Curriculum and Instruction (3)
6 additional credits selected in consultation with an adviser from CI 5137, 5151, 5170, 5351, 5360, 5415, 5450, 5460, 5461, 5472, 5645, 5652, 5746, 5747, 5763, EPsy 5151

Anthropology Emphasis
Area Requirement—A course in anthropology or any of the other social sciences in one of the following areas: Latin America, Asia, or Africa. The course may count toward credit requirements listed below.

Anthropology—minimum 28 credits including
Anth 1102—Introduction to Social and Cultural Anthropology (5)
One course in each of the following areas as designated in anthropology listing in the CLA Bulletin: contemporary complex societies, cross-cultural studies, human institutions
One additional 3xxx or 5xxx course

Supporting Fields—minimum 29 credits
Hist 1301, 1302—American History (4 each)
Pol 1001—American Government and Politics (5)
One course each in economics, geography, history, psychology, and sociology
One additional 3xxx or 5xxx course
One additional course to meet major requirement of 60 credits

Economics Emphasis
Area Requirement—A course in economics or any of the other social sciences in one of the following areas: Latin America, Asia, or Africa. The course may count toward credit requirements listed below.

Economics—minimum 32 credits
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 the following areas as designated in economics listing in the CLA Bulletin: economic development, international economics and industrial organization, public finance, or money and banking

Supporting Fields—minimum 26 credits
Hist 1301, 1302—American History (4 each)
Pol 1001—American Government and Politics (5)
One course each in anthropology, geography, psychology, and sociology
One additional 3xxx or 5xxx course
One additional course taken in economics or one of the supporting fields to meet the major requirement of 60 credits

Geography Emphasis
Area Requirement—A course in geography or any of the other social sciences in one of the following areas: Latin America, Asia, or Africa. The course may count toward credit requirements listed below.

Geography—minimum 35 credits
Geog 1301—Human Geography (5)
Geog 1401—Physical Geography (5)
Geog 3001—Introduction to Geographic Inquiry (4)
One regional course (4); one course in geographic techniques (4); one additional topic study (4); and two additional 3xxx and 5xxx courses

Supporting Fields—minimum 30 credits
Hist 1301, 1302—American History (4 each)
Pol 1001—American Government and Politics (5)
One course each in anthropology, economics, psychology, and sociology

History Emphasis
Area Requirement—A course in history or any of the other social sciences in one of the following areas: Latin America, Asia, or Africa. The course may count toward credit requirements listed below.

History—minimum 35 credits
Hist 1301, 1302, 1303—World History (4 each)
or A Third World development course and one of the following pairs of history courses: 3281 and 3282, 3707 and 3708, 3711 and 3712, 3421 and 3422, or 1012 and 1013 (4 each)
Hist 1301, 1302—American History (4 each)

Supporting Fields—minimum 26 credits
Pol 1001—American Government and Politics (5)
One course each in anthropology, economics, geography, psychology, and sociology

Political Science Emphasis
Area Requirement—A course in political science or any of the other social sciences in one of the following areas: Latin America, Asia, or Africa. The course may count toward credit requirements listed below.

Political Science—minimum 30 credits
Pol 1001—American Government and Politics (5)
Pol 1025—World Politics (4)
21 credits in 3xxx and 5xxx courses, including one in each of the following areas as designated in political science listing in the CLA Bulletin: political theory, comparative govern-
ment and politics, international relations, politics and behavior, and American governmental systems and processes.

Supporting Fields—minimum 29 credits

Hist 1301, 1302—American History (4 each)

One course each in anthropology, economics, geography, psychology, and sociology

Additional social science course to meet major requirement of 60 credits

Psychology Emphasis

Area Requirement—A course in one of the social sciences in one of the following areas: Latin America, Asia, or Africa. The course may count toward credit requirements listed below.

Psychology—minimum 34 credits

CPsy 5303—Adolescent Psychology (4)

Psy 1004, 1005—Introductory Laboratory Psychology (4 each)

Psy 3011—Introduction to Psychology of Learning (4)

Psy 3101—Introduction to Personality (4)

or Psy 3604—Introduction to Abnormal Psychology (4)

or Psy 3124—Psychology of Individual Differences (4)

or Psy 3201—Introduction to Social Psychology (4)

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

Supporting Fields (minimum 26 credits)

Hist 1301, 1302—American History (4 each)

Pol 1001—American Government and Politics (5)

One course each in anthropology, economics, geography, psychology, and sociology

Sociology Emphasis

Area Requirement—A course in sociology or any of the other social sciences in one of the following areas: Latin America, Asia, or Africa. The course may count toward credit requirements listed below.

Sociology—minimum 32 credits

Soc 1001—Introduction to Sociology (4)

One course in each of the following areas as designated in the CLA Bulletin: criminology and deviance, social psychology, social change and social movements, social organization, family sociology, and historical/comparative sociology

One additional 3xxx or 5xxx course

Supporting Fields (minimum 26 credits)

Hist 1301, 1302—American History (4 each)

One course each in anthropology, economics, geography, political science, and psychology

One additional 3xxx or 5xxx course

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

UNIVERSITY PARAPROFESSIONAL LICENSURE INITIATIVE FOR TEACHING (UPLIFT)

UPLIFT is an alternative elementary licensure program for educational assistants and paraprofessionals. In June, UPLIFT students enter a two-year scheduled program integrating educational theory with classroom practice. Experience as a paraprofessional/educational assistant plus a minimum of five weeks of student teaching build on principles and methods learned in University courses. School districts support students by allowing job flexibility for a minimum of 2 hours per week of classroom observation. After successfully completing program requirements (minimum of 45 graduate-level credits), students are recommended for state licensure to teach grades 1-6. Students are admitted to the UPLIFT program based on the following:

• At least one year of experience as a full-time paraprofessional/educational assistant

• Completion of prerequisite coursework and liberal arts requirements (the complete prerequisite course list is available from SPS)

• A bachelor's degree with a 2.80 overall GPA

• A summary of work or volunteer experience with elementary-age children, including those of diverse cultures and special populations, preferably in a school setting

• Two references who can address questions about the applicant's work style, language skills, and interpersonal abilities

• A letter of recommendation from the principal of the school at which the applicant is employed as a paraprofessional/educational assistant

• A goal statement addressing why the applicant wants to become a licensed teacher

• Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Applications must be received by February 1. For applications and instructions, contact SPS (110 Wulling Hall, 612/625-6501).

Under the two-year schedule, students meet for courses one night per week during the school year and two nights or half days per week during the summer. Students may shorten the length of time in the program (by up to 19 months) by taking additional available University courses.

Required Courses

Cl 5101—Workshop: Art in Elementary Schools (1)

Cl 5101—Workshop: Music in Elementary Schools (1)

Cl 5101—Workshop: Physical Education in Elementary Schools (1)

CI 5110—Introduction to Elementary School Teaching (3)

Cl 5180—Clinical Experience in Elementary School Teaching (6)

Cl 5300—Technology for Teaching and Learning (2)

Cl 5410—Teaching Reading in the Elementary School (3)

Cl 5416—Workshop: Children's Literature in the Elementary School (2)

Cl 5425—Teaching Language Arts in the Elementary School (3)
CI 5500—Teaching Science in the Elementary School (3)
CI 5700—Teaching Social Studies in the Elementary School (3)
CI 5821—Teaching Math in the Elementary School (3)
EdPA 5090—School and Society (3)
EPsy 5119—Learning and Cognitive Foundations of Education (4)
EPsy 5139—Building a Learning Community (4)
EPsy 5229—Classroom Assessment Methods (2)
Kin 5530—Biological and Physical Foundations of Education (2)

Additional Courses
Students should apply for degree before completion.
CI 5187—Practicum: Improvement of Teaching in Elementary or Prekindergarten Schools (3)
3 additional credits selected in consultation with an adviser

M.Ed. Program for In-Service Teachers and Other Educators (Plans I and II)
The department offers an M.Ed. with a major in curriculum and instruction with foci in early childhood education and elementary education, as well as a focus for middle/secondary teachers and other educators. It is a graduate-level, practitioner-based program specifically for teachers or other educators who want to improve their skills in instruction, decision making, evaluation, and leadership. To accommodate educators' busy schedules, many courses are offered in the late afternoon, on Saturdays, and during the summer. Some courses are offered at off-campus school sites.

Applicants must have a bachelor's degree with a 2.50 minimum GPA from an accredited institution. At least two years of teaching experience is highly recommended but not required. M.Ed. applications and instructions are available from Extension Classes, 200 Wesbrook Hall, 77 Pleasant Street S.E., Minneapolis, MN 55455 (612/626-7196) or SPS (110 Wulling Hall, 612/625-6501). Students may submit applications by one of four deadlines, though some programs admit only once per year.

October 1 for admission winter quarter
February 1 for admission spring quarter
April 1 for admission summer sessions
July 1 for admission fall quarter

For more information, see the admissions section of this bulletin.

Students have seven years to complete their degree, beginning with the first coursework used in the program, and must maintain a 2.80 overall GPA.

Emphasis Areas
Early Childhood Education—This program is designed specifically for those individuals with a prekindergarten license who want to acquire leadership skills and advanced knowledge in early childhood education. The program can be tailored to accommodate individual needs. With guidance from faculty advisers, students complete 48 quarter credits in child psychology and elementary education, a related field with a chosen concentration, and electives from the major or related field.

Courses
Major (34 credits)
CI 5130—Introduction to Curriculum Studies (4)
CI 5155—Classroom Instruction and Assessment (4)
CI 5187—Practicum: Improvement of Teaching (4)
CI 5250—Current Trends in Early Childhood Education (4)
EPsy 5330—Directed Experiences With Young Children (4)
EPsy 5334—Children, Youth, and Society (4)
EPsy 5849—Assessment of Preschool Children (3)
Electives in child psychology (4)
Electives in either CI or CPsy (3)

Related Fields (14 credits)
Concentrations Within Early Childhood Education (12 credits minimum)
In consultation with an adviser, students develop a concentration within early childhood education. Suggested concentrations include family relations, administration, children with special needs, learning, early childhood family education, and health concerns. Some credits may be taken outside of CEHD, with an adviser's approval.

Elementary Education—This program can be tailored to accommodate individual needs. With guidance from faculty advisers, students complete 45 quarter credits in a core program in education, additional selected education courses, and coursework in related fields outside CEHD.

Required Courses
Elementary Education (28 credits)
CI 5130—Introduction to Curriculum Studies (4)
CI 5155—Classroom Instruction and Assessment (4)
CI 5187—Practicum: Improvement of Teaching in Elementary or Prekindergarten Schools (4)
CI 5414—Literacy Development in the Primary Grades (4)
or CI 5415—Literacy Development in the Intermediate Grades (4)
CI 5504—Elementary School Science: Materials and Resources (4)
CI 5730—Social Studies for the Elementary/Middle School Teacher (4)
MthE 5101—Workshop: Elementary School Mathematics (4)

Electives in Education (13-14 credits)
Electives should be selected in consultation with an adviser. Strongly recommended are courses in literacy, classroom management, teaching children with diverse...
Electives in Related Fields (3-4 credits)
At least one elective of three or more credits must be taken outside CEHD, chosen in consultation with an adviser.

Middle/Secondary Teachers and Other Educators—This 45-credit program includes four major components: curriculum/theoretical foundations, instruction/assessment/technology, a school- or other education-based project, and electives. Within each of these components, only a minimum number of credits is required so that students may select courses appropriate to their needs. M.Ed. students consult with an adviser to plan an individual program based on their goals for enhanced professional development.

The program includes opportunities for coursework in one or more specialty areas.

Required Courses
Curriculum/Theoretical Foundations
(12 credits minimum)
CI 5130—Introduction to Curriculum Studies (4)

Instruction/Assessment/Technology
(12 credits minimum)
CI 5155—Classroom Instruction and Assessment (4)
CI 5351—Computer-Based Tools for Teachers (4)
or adviser-approved alternate

School Practicum (6 credits)
CI 51xx—Action Research in Educational Settings (2)
CI 5186—Education-Related Projects in Curriculum and Instruction (4)

Electives (12 credits minimum)
Courses to be selected in consultation with an adviser.

Specialty Areas
- Art education
- Curriculum studies
- English education
- Instructional systems and technology
- Mathematics education
- Science education
- Second languages and cultures education
- Social studies education

In addition to these specialty areas, students may design programs that cut across various specialty areas.

Teacher Leadership—The M.Ed. in teacher leadership program is offered jointly by the Department of Curriculum and Instruction and the Department of Educational Policy and Administration.

Contemporary Educational Issues (10 credits)
CI 5138—Classroom Communication: Multicultural and Moral Perspectives (4)
EdPA 5141—Critical Issues in Contemporary Education (3)
Elective (3)

Leadership (9 credits)
EdPA 5263—Leadership in Education (3)
EdPA 5267—Small Group Dynamics and Shared Decision Making (3)
Elective (3)

Teacher Practice (9 credits)
CI 5152—Innovation and the Instructional Process (3)
CI 5149—American Schools in the 20th Century (3)
Elective (3)

Electives (9 credits)
Credits are applied to each area as appropriate to program objectives.
Project (9 credits)
CI/EdPA 5178—Seminar (1-3)
CI/EdPA 5188—Project (6)

Note: Twenty-one credits total must be from CI and EdPA departments. Electives should be chosen in consultation with an adviser.

A 2.80 GPA must be maintained in an M.Ed. program.

MIDDLE SCHOOL ENDORSEMENT—A teacher completing this program is recommended for licensure to teach grades 5-8. Two programs are available, one for licensed elementary teachers and the other for licensed secondary teachers. Each program has specific course requirements at the 5xxx level divided between designated core and elective courses in a subject area specialization or general elementary curriculum. Included is a required teaching experience component at an appropriate grade level within a middle school setting. The middle school endorsement program does not prepare individuals for initial licensure.

MIDDLE SCHOOL ENDORSEMENT FOR LICENSED ELEMENTARY TEACHERS

Core
CI 5153—Thematic Instruction for Middle Schools (2)
or CI 5130—Introduction to Curriculum Studies (4)
or EPsy 5114—Psychology of Student Learning (3)
or EPsy 5151—Structuring Learning: Social Psychological Approaches (3)
CI 5172—Teaching Students With Learning Difficulties (3)
CPsy 5303—Adolescent Psychology (4)
EdPA 5167—The American Middle School (3)

Subject area specializations are available in English/language arts, mathematics, science, and social studies. Requirements in each area are as follows.

English/Language Arts Education
(Core requirements plus 12 credits in English/language arts)
Four credits from
CI 5450—Teaching Reading in Content Areas (4)
CI 5451—Secondary Remedial Reading Instruction (4)
Four credits from
CI 5440—Teaching Literature in Secondary Schools (4)
CI 5441—Literature for Adolescents (3)
CI 5460—Teaching/ Writing in Secondary School and College (4)
Six credits in literature, including one course in American literature and one course focusing on ethnic or minority literature
Practicum

Mathematics Education
(Core requirements plus 19 credits in mathematics/mathematics education)
* Math 1201—Precalculus (5)
* Math 5005—Diversity of Mathematics (4)
* Math 5006—Diversity of Mathematics (4)
* Math 5007—Diversity of Mathematics (4)
or 2 credits from MthE 5150 or MthE 5160
MthE 5313—Teaching and Supervision of Mathematics in the Middle School (4)
Practicum
* Students with an academic concentration in mathematics should meet with an adviser to plan substitute courses.

Science Education
(Core requirements plus 18 credits in science/science education)
CI 5504—Materials and Resources for Elementary School Science Education (4)
* Earth science
* Life science
* Physical science
Practicum
* Courses must be planned in consultation with a middle school science adviser.

Social Studies Education
(Core requirements plus 19 credits in social studies)
One course in social studies and the middle school learner (4)
CI 5746—Teaching About the Newspaper in the Classroom (3)
or CI 5747—Global and Environmental Education: Content and Process (4)
Practicum
Remaining 12 credits planned in consultation with an adviser.

MIDDLE SCHOOL ENDORSEMENT FOR LICENSED SECONDARY TEACHERS

Core
CI 5153—Thematic Instruction for Middle Schools (2)
or CI 5130—Introduction to Curriculum Studies (4)
or EPsy 5114—Psychology of Student Learning (3)
or EPsy 5151—Structuring Learning: Social Psychological Approaches (3)
CI 5172—Teaching Students With Learning Difficulties (3)
CPsy 5303—Adolescent Psychology (4)
EdPA 5167—The American Middle School (3)

Students seeking endorsement in their licensed field must complete one of the following.

Secondary English/Language Arts Teachers
CI 5401—Literature for the Elementary School (4)
CI 5410—Teaching Reading in the Elementary School (3)
CI 5415—Literacy Development in the Intermediate Grades (4)
CI 5420—Teaching Writing in the Elementary School (4)
CI 5451—Secondary Remedial Reading Instruction (4)
Practicum

Secondary Mathematics Teachers
CI 5411—Reading Difficulties: Assessment and Instruction (4)
or CI 5451—Secondary Remedial Reading Instruction (4)
CI 5415—Literacy Development in the Intermediate Grades (4)
or CI 5450—Teaching Reading in Content Areas (4)
MthE 5150 or MthE 5160—Special topics course (2)
MthE 5313—Teaching and Supervision of
Mathematics in the Middle School (4)
MthE 5355—Mathematics for Diverse Learners (4)
Practicum

Secondary Science Teachers
CI 5415—Literacy Development in the Intermediate Grades (4)
CI 5451—Secondary Remedial Reading Instruction (4)
CI 5504—Materials and Resources for Elementary School Science Education (4)
Practicum

Secondary Social Studies Teachers
CI 5411—Reading Difficulties: Assessment and Instruction (4)
or CI 5451—Secondary Remedial Reading Instruction (4)
CI 5415—Literacy Development in the Intermediate Grades (4)
or CI 5450—Teaching Reading in Content Areas (4)
One course in social studies and the middle school learner (4)
CI 5746—Teaching About the Newspaper in the Classroom (3)
or CI 5747—Global and Environmental Education: Content and Process (4)

For more information, contact the academic areas that offer middle school endorsement.

REMEDIAL AND DEVELOPMENTAL READING AND REMEDIAL AND DEVELOPMENTAL READING SUPERVISOR ENDORSEMENT—Coursework is available at the postbaccalaureate level leading to recommendation as an elementary remedial reading teacher, secondary remedial reading teacher, or secondary developmental reading teacher. To be recommended for the remedial or developmental endorsement, students must have a valid Minnesota teaching license, at least two years of teaching experience at the appropriate level, and the required coursework.

MASTER’S AND DOCTORAL PROGRAMS

The department offers graduate-level study in all of its emphasis areas. Programs leading to the M.A. and Ph.D. are offered by the Graduate School. The M.A. program is available in art education, education, elementary education, and mathematics education, with specialties possible within curriculum and instruction, including curriculum studies, English education, instructional systems and technology, reading education, science education, second languages and cultures education, and social studies education. The Ph.D. in education: curriculum and instruction offers opportunities for specialization in art education, curriculum studies, instructional systems and technology, literacy education, mathematics education, science education, second languages education, and social studies education.

These graduate programs prepare teachers at an advanced level for classroom work or prepare education specialists, such as supervisors, consultants, principals, or teacher educators. Requirements for the M.A. and Ph.D. degree programs are described in the Graduate School Bulletin.

EDUCATIONAL POLICY AND ADMINISTRATION

William M. Ammentorp, chair

330 Wulling Hall
86 Pleasant Street S.E.
Minneapolis, MN 55455-0221
(612) 624-1006
Fax: (612) 624-3377

DEGREES OFFERED—M.Ed.; Ed.D., M.A., and Ph.D. degrees are offered by the Graduate School.

FACULTY:
Gary F. Alkire, Ed.D., Michigan State University
Educational facilities planning, principalship, personnel administration

William M. Ammentorp, chair, Ph.D., University of Chicago
Organizational systems and theory, higher education administration and finance

Melissa S. Anderson, Ph.D., University of Minnesota
Higher education administration and policy, equity and finance, organizational theory, faculty issues

Ayers L. Bagley, Ph.D., Indiana University
History and philosophy of education, iconography of education
John J. Cogan, Ph.D., The Ohio State University
Comparative and international development education

Arthur M. Harkins, Ph.D., University of Kansas
Educational and workplace futures, knowledge-based education, anticipatory leadership

Jean A. King, Ph.D., Cornell University
School change, program evaluation, action research

Dale L. Lange, Ph.D., University of Minnesota
Teacher education, educational innovations, educational technology, foundations of education

Darrell R. Lewis, Ph.D., Louisiana State University
Economics of education, economic evaluation, equity issues

Karen Seashore Louis, Ph.D., Columbia University
Organizational theory, planned change, schools as workplaces, leadership, administration

Marion L. Lundy-Dobbert, Ph.D., University of Wisconsin
Anthropology of education, general systems theory, ethnographic research methods, nonstatistical mathematical studies of education

Tim L. Mazzoni, Jr., Ph.D., Claremont Graduate School
Educational policy development, politics of education

Josef A. Mestenhauser, Ph.D., University of Minnesota
International education, culture learning theory, social and cultural change, leadership

Van D. Mueller, Ed.D., Michigan State University
Educational finance

R. Michael Paige, Ph.D., Stanford University
International development education, intercultural education and training, multicultural education, international education exchange

Byron J. Schneider, Ph.D., University of Chicago
Youth development leadership, youth policy

Charles H. Sederberg, Ph.D., University of Minnesota
Resource management, budgeting, elementary/secondary school finance

Caroline Sotello Viernes Turner, Ph.D., Stanford University
Higher education administration and policy analysis, access and equity in higher education, organizational studies, qualitative research methods

Richard F. Weatherman, Ed.D., Michigan State University
Administration and supervision of special education, international education

Jennifer York-Barr, Ph.D., University of Wisconsin
Interprofessional collaboration, staff development, school restructuring and inclusion, developmental disabilities

UNDERGRADUATE PROGRAMS
Though the department offers only graduate programs, undergraduates may use appropriate courses in the curriculum as part of their professional preparation. Some of the following courses may be particularly useful.

EdPA 3099—Inventing the Future (4)
EdPA 3101—Historical Foundations of Modern Education (4)
EdPA 3120—Childhood Education: Western Civilization (4)
EdPA 3155—History of Western Educational Thought (4)
EdPA 5201—Formal Organizations in Education (3)
EdPA 5202—Politics of Education (3)
EdPA 5222—Introduction to Policy Research (3)
EdPA 5224—Legal Implications of Acts by School Boards, Administrators, and Teachers (3)
EdPA 5260—Introduction to Educational Planning (3)
EdPA 5281—Economic Analysis in Educational Evaluation (3)

The department offers professional education courses basic to teacher preparation programs. Juniors and seniors are encouraged to enroll in appropriate foundation courses as part of their professional preparation or in fulfillment of program electives. Courses listed below are particularly appropriate and useful to students in light of current teacher accreditation standards.

EdPA 5090—The School and Society (3)
EdPA 5101—Historical Foundations of Modern Education (4)
EdPA 5102—Education Imagery in Europe and America (3)
EdPA 5131—Comparative Education (4)
EdPA 5141—Critical Issues in Contemporary Education (3)
EdPA 5171—Anthropology and Education (4)
(same as Anth 5145)
EdPA 5182—Comparative Philosophies of Education (3)
EdPA 5190—Sociology of Education (4) (same as Soc 5953)
EdPA 5209—Education in Future Social Systems (3)
EdPA 5280—Introduction to the Economics of Education (4)

ADVANCED STUDY / M.ED. PROGRAMS

TEACHER LEADERSHIP
This program, offered jointly with the Department of Curriculum and Instruction, is open to a new cohort of 36 students each fall and is taught both on campus and at off-campus metropolitan locations. Coursework is distributed among three content areas: leadership, educa-
tional issues, and teaching. Generally, students attend classes one evening per week, completing two courses each ten-week quarter during the academic year. Combined with summer sessions, this schedule allows students to complete their graduate degree in two years.

For more information about the program, see the curriculum and instruction section of this bulletin.

YOUTH DEVELOPMENT LEADERSHIP
This degree is for individuals who work with youth in academic or nonacademic settings. The program, offered jointly with the Department of Work, Community, and Family Education, uses experiential learning techniques and emphasizes a community-based model of positive youth development. Students admitted to the program take core courses together as a cohort and work with advisers to select courses from across the University to build a program to meet their professional needs and interests. It generally takes two to three years to complete the program.

For more information about the program, see the work, community, and family education section of this bulletin.

MASTER’S AND DOCTORAL PROGRAMS
The department offers graduate and professional work leading to the M.A., Ed.D. and Ph.D. degrees administered within the education programs identified below. In addition, freestanding minors in international education and in social and philosophic studies of education are available through the Graduate School. For more information, contact the director of graduate studies, Department of Educational Policy and Administration, University of Minnesota, 330Wulling Hall, 86 Pleasant Street S.E., Minneapolis, MN 55455-0221.

COMPARATIVE AND INTERNATIONAL DEVELOPMENT EDUCATION
This program gives U.S. and international students the opportunity to systematically study the relationship between education and development. International students acquire theoretical knowledge and research skills to address research questions about education and development in their own nations. U.S. students prepare to serve in development education projects outside the United States or work with government agencies, foundations, or private organizations with international interests. The program offers M.A. and Ph.D. degrees in educational policy and administration.

EDUCATIONAL ADMINISTRATION
The graduate programs in educational administration prepare personnel for administrative, supervisory, and leadership positions in schools and other educational settings, including international schools and postsecondary institutions. Other programs include preparation for leadership positions in regional, state, and federal educational agencies as well as professional groups and unions.

EVALUATION STUDIES
Evaluation studies combines the study of policy research techniques and processes with the study of the social and political context within which evaluation occurs. Students gain expertise in both qualitative and quantitative methods as well as practical experience conducting evaluation and policy studies.

HIGHER EDUCATION
The graduate program in higher education offers M.A. and Ph.D. degrees with a concentration in educational policy and administration (emphasizing higher education). The Ph.D. program focuses on applying knowledge of human behavior and organization to key problems in postsecondary education and deals with federal and state postsecondary policy, faculty development, institutional functioning and effectiveness, professional socialization, student development, academic program planning and evaluation, and institutional leadership. Courses with a higher education focus are listed under educational policy and administration (EdPA) and educational psychology (EPsy). These courses are for specialists in a variety of academic and professional disciplines as well as those whose majors have a higher education emphasis.

EDUCATIONAL PSYCHOLOGY
Susan C. Hupp, chair
204 Burton Hall
178 Pillsbury Drive S.E.
Minneapolis, MN 55455
(612) 624-6083
Fax: (612) 624-8241

DEGREES OFFERED—M.Ed., specialist certificate; M.A. and Ph.D. degrees are offered by the Graduate School.
FACULTY:
V. Lois Erickson, Ph.D., University of Minnesota
Human development, cognitive development, depth psychology

COUNSELING AND STUDENT PERSONNEL PSYCHOLOGY
L. Sunny Hansen, Ph.D., University of Minnesota
Career development, counseling women, multicultural counseling, school counseling and guidance

Thomas J. Hummel, Ph.D., Ohio University
Computer applications, experimental design as applied to counseling research

Patricia McCarthy Veach, Ph.D., The Ohio State University
Research in counseling process and self-disclosure; practica, supervision, and counseling; personality and social development

James R. Rest, Ph.D., University of Chicago
Moral development and education, personality and social development

John L. Romano, Ph.D., Arizona State University
Stress, coping, and wellness; college student development; international education

Thomas M. Skovholt, Ph.D., University of Missouri
Professional psychology, counselor training, sex roles

PSYCHOLOGICAL FOUNDATIONS
William M. Bart, Ph.D., University of Chicago
Cognitive process in reasoning, cognitive diagnostic testing and associated psychometric models, educational reform and improvement

Ernest C. Davenport, Ph.D.,
University of North Carolina at Chapel Hill
Use of computers in social science research, exploratory data analysis, tests and measurement, classical statistical analysis

Mark L. Davison, Ph.D.,
University of Illinois—Urbana-Champaign
Educational and psychological measurement, psychological scaling, statistics, cognitive-social development in adolescents and young adults

Lynne K. Edwards, Ph.D., University of Washington—Seattle
Longitudinal observation, computer-intensive models, psychometric issues in personality and interest measures

Lynn Friedman, Ph.D., University of Chicago
Meta-analysis; cognitive gender differences; multivariate statistics; school mathematics achievement, particularly problem solving

Joan Garfield, Ph.D., University of Minnesota
Applied statistics, survey design, evaluation methods

David W. Johnson, Ed.D., Columbia University
Cooperative, competitive, and individualistic efforts; conflict resolution; social psychology of groups

Donald G. MacEachern, Ph.D., University of Minnesota
Application of statistical methods to problems in education and psychology

Geoffrey M. Maruyama, Ph.D.,
University of Southern California
Diversity in education, educational applications of social psychology, methods for analyzing nonexperimental quantitative data

Darcia F. Narváez, Ph.D., University of Minnesota
Multicultural education, moral development, teacher development

James R. Rest, Ph.D., University of Chicago
Moral development and education, personality and social development

S. Jay Samuels, Ed.D., University of California
Learning and cognition, psychology of values, character education

Robert D. Tennyson, Ph.D., Brigham Young University
Adult learning, instructional psychology and technology, related issues in educational technology

James S. Terwilliger, Ph.D.,
University of Illinois—Urbana-Champaign
Measuring classroom achievement, assigning grades, applying regression models and factor analysis to educational data

Paulus van den Broek, Doctoraals,
University of Leiden—The Netherlands
Ph.D., University of Chicago
Performance of complex cognitive tasks, such as learning, reading, remembering, and reasoning

SCHOOL PSYCHOLOGY
Sandra L. Christenson, Ph.D., University of Minnesota
Home-school-community collaboration, ecological assessment
Scott R. McConnell, Ph.D., University of Oregon
Early childhood, prenatal exposure to drugs and alcohol

Richard J. Spicuzza, Ph.D., University of Minnesota
Assessment, computer-based observation systems

James E. Ysseldyke, Ph.D., University of Illinois
Educational outcomes, assessment, education of students with mild disabilities

Robert H. Bruininks, Ph.D., Vanderbilt University
Developmental disabilities

Carol A. Davis, Ed.D., University of Houston
Emotional/behavioral disorders

Stanley L. Deno, Ph.D., University of Minnesota
Mild disabilities

Christine A. Espin, Ph.D., University of Minnesota
Learning disabilities

Susan C. Hupp, chair, Ph.D., University of Illinois
Severe/profound disabilities

Marie Knowlton, Ph.D., Cornell University
Visual impairments

Mary A. McEvoy, Ph.D., University of Tennessee
Early childhood/special education

Susan Rose, Ph.D., The Ohio State University
Deaf/hard-of-hearing

John E. Rynders, Ph.D., University of Wisconsin
Mild/moderate intellectual disabilities

John Tabor, Ph.D., University of Minnesota
Cultural diversity

James E. Turnure, Ph.D., Yale University
Mild/moderate intellectual disabilities

Frank B. Wilderson, Jr., Ph.D., University of Michigan
Emotional/behavioral disorders

Pearl Barner II, Ph.D., University of Minnesota
Counseling African-Americans and adolescents, counseling practicum supervision

Jerome Beker, Ed.D., Columbia University
Group care programs for youth, professionalization and preparation for youth work

Ann Casey, Ph.D., University of Minnesota
Field placement coordinator for school psychology

Eli Coleman, Ph.D., University of Minnesota
Chemical dependency and family intimacy, sex therapy, homosexuality

Byron Egeland, Ph.D., University of Iowa
Child development, psychological assessments

Vernon Hendrix, Ph.D., University of Texas
Evaluation and institutional research, measurement and sampling techniques

David R. Johnson, Ph.D., University of Minnesota
Special education administration

Roger T. Johnson, Ed.D., University of California–Berkeley
Cooperative learning, science education

Jean A. King, Ph.D., Cornell University
Program and evaluation studies

Sue A. Kroeger, Ed.D., University of Northern Colorado
Disabled student development, college student personnel services

Frances P. Lawrenz, Ph.D., University of Minnesota
Science education

Jane S. Levin, Ph.D., Washington University, St. Louis
Individual and group counseling, abnormal psychology

Rodney G. Loper, Ph.D., University of Minnesota
Academic and practicum preparation of professional applied psychologists

Douglas Marston, Ph.D., University of Minnesota
Classroom-based assessment

Ronald P. Matross, Ph.D., University of Minnesota
College student development/outcomes

Kevin Nutter, Ph.D., University of Northern Colorado
Career, student, and adult development; student services administration

ADJUNCT/COOPERATING FACULTY

Brian H. Abery, Ph.D., University of Minnesota
School-age services, community integration

Annie P. Baldwin, Ph.D., University of Minnesota
Physical disabilities
Educational psychology is the study of human behavior in educational contexts. It plays a major role in translating knowledge of the behavioral and social sciences into educational practice. The department's work extends beyond schools to include education and human development in businesses, government agencies, youth development centers, and clinics.

The department has four emphasis areas: counseling and student personnel psychology, psychological foundations of education, school psychology, and special education. Together these programs provide a unique blend of basic and applied research. The goals of applied research are to discover what is effective in education and develop improved educational methods. Basic research explores theoretical underpinnings of educational practice, education outcomes, and psychological processes that occur in educational contexts. In addition to conducting basic and applied research, the department seeks to improve research measurement techniques, designs, and statistical analyses and disseminate important findings.

Through teaching, the department shares classic and new findings and practices. Students learn educational theory and practice and add to that knowledge through research, writing, speaking, and reflection on their own practice.

**UNDERGRADUATE PROGRAMS**

Though the department does not offer undergraduate programs or majors, juniors and seniors may take selected courses as part of their teacher preparation or in fulfillment of program electives. For example, EPsy 3132—Psychology of Multiculturalism in Education satisfies social science and cultural diversity requirements. EPsy 3260—Basic and Applied Statistics satisfies math requirements. In addition, given federal legislation mandating universal educational opportunities for persons with disabilities and the increased emphasis on mainstreaming approaches to special education, several courses listed below are particularly useful to students majoring in education or social, health-related services.

EPsy 5601—Education of Exceptional Children (6)  
EPsy 5608—Parent and Professional Planning for Handicapped Students (6)  
EPsy 5612—Education of Learning-Disabled Children (6)  
EPsy 5620—Introduction to Mental Retardation (6)  
EPsy 5625—Education of Infants and Preschool Children With Developmental Disabilities (6)  
EPsy 5700—Assessment and Decision Making in Special Education (6)  

In addition, the American Sign Language (ASL) program fulfills the liberal education requirement for competency in a second language. All candidates for licensure in the education of deaf and hard-of-hearing children must demonstrate competency in ASL before being recommended for licensure. For more information, contact the ASL program at (612) 626-9392.

The counseling and student personnel psychology (CSPP) program offers courses focusing on psychological concepts in areas relative to the helping process and on self-development and self-knowledge for upper division undergraduates and adult special and nonmajor graduate students. These courses, which involved discussions, small group sessions, and individual laboratory experiences, include

EPsy 5400—Workshop: Counseling Psychology (1-6)  
EPsy 5401—Counseling Procedures (3)  
EPsy 5430—Foundations of Career Development (3)  
EPsy 5432—Career Development Programs and Organizational Change (3)  
EPsy 5433—Developmental Career Counseling of Women (3)
EDUCATIONAL PSYCHOLOGY

EPsy 5434—Counseling Adults in Transition (3)
EPsy 5461—Cross-Cultural Counseling (3)

ADVANCED STUDY

M.ED. PROGRAM

The M.Ed./initial licensure program in special education is a professional degree. Areas of study include early childhood special education, emotional/behavioral disorders, deaf/hard-of-hearing, learning disabilities, mild to moderate intellectual disabilities, moderate to severe disabilities, physical disabilities, and visual impairments. Students may obtain Minnesota state licensure in these areas but must be enrolled in an M.Ed., M.A., or Ph.D. program.

MASTER’S, SPECIALIST CERTIFICATE, AND DOCTORAL PROGRAMS

The department offers graduate programs leading to the M.A. and Ph.D. degrees in counseling and student personnel psychology (school counseling, counseling psychology, college student development), psychological and methodological foundations of education, school psychology, and special education. A specialist certificate program also is available. Students planning a major or minor in one of these areas should apply to the Graduate School and the appropriate unit within the department, and should plan their program in consultation with an adviser. All students must 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 PERSONNEL PSYCHOLOGY—

This program offers graduate study leading to the M.A. and Ph.D. degrees and the specialist certificate. The M.A. program offers preparation in counseling for careers in a variety of areas, including school counseling, higher education, community agencies, and business and industry. Preparation includes coursework in counseling theory and psychological foundations as well as supervised practice in educational and community settings.

The doctoral program, accredited by the American Psychological Association since 1952, prepares counseling psychologists for work in educational and community 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 educational or community settings. It also includes coursework in the psychology of learning, statistics, personality development, measurement, social psychology, individual and group counseling, and multicultural counseling. Doctoral students take advanced courses in statistics and measurement, complete research projects, and may become involved in teaching.

PSYCHOLOGICAL FOUNDATIONS OF EDUCATION—

This area of graduate study offers instruction in statistics, research methodology, program evaluation and measurement, learning and cognition, computer applications, educational technology, human relations, and social psychology. Graduate students must attain general competence in educational psychology and specialized knowledge and skills in one of the areas of concentration.

SCHOOL PSYCHOLOGY—

The department offers two graduate programs in school psychology: a five-year program leading to a Ph.D. degree and a three-year Ed.S. program leading to a master’s degree/specialist certificate. The Ph.D. program prepares individuals for work in educational or community settings as psychologists, administrators, researchers, or professors. The master’s degree/specialist certificate program prepares individuals to work as psychologists in school settings. A strong interdisciplinary emphasis allows Ph.D. students to choose among majors in child psychology, psychology, and educational psychology. The curriculum includes courses in learning, child psychology, learning difficulties, prevention and intervention strategies, diagnostic and remedial procedures, statistics and measurement, specialized research techniques, and special education. All students work in a school and clinical environment as part of their practicum experience; students also take a one-year internship in a school or community/hospital mental health agency. The program is approved by the American Psychological Association, the National Association of School Psychologists, and the National Council for Accreditation of Teacher Education. Program applicants must fulfill all Graduate School requirements.

SPECIAL EDUCATION—

All special education programs require admission to the Graduate School or CEHD. For more information, contact the Special Education Programs admissions office (227 Burton Hall, 612/624-2342).

Students in any college who are at least juniors may take 5xxx courses such as EPsy 5601—Education of Exceptional Children to obtain an overview of school programs for children with special needs.

Applications to all endorsement programs are competitive. The following information is used to make admissions decisions: grades in pre- and postbaccalaureate courses, experience and/or interest in educating persons with special needs, strength of recommendations, and quality of autobiographical statement submitted.

While the program provides instruction to educators of exceptional children, it also emphasizes mainstreaming, interdisciplinary instruction, and other outreach activities. Teaching specialties are organized according to the specific needs of children’s needs. Students in all programs receive a basic orientation to special education that prepares them for subsequent concentration in the specific licensure programs for teaching persons who are deaf/hard-of-hearing, visually impaired, physically dis-
abled, and moderately/severely disabled; and the inter-related licensure programs for early childhood/special education, learning disabilities, emotional/behavioral disorders, and mild/moderate intellectual disabilities. Professional preparation opportunities also are available for special education administrators and persons working with culturally diverse children and youth.

Minnesota is currently revising state special education license requirements. Contact the program for up-to-date information on coursework and other requirements needed for licensure.

INTERDISCIPLINARY STUDIES IN DEVELOPMENTAL DISABILITIES

The interdisciplinary certificate program in developmental disabilities offers specialized training for educators, human services professionals, students in a variety of majors, and community members. By combining the certificate program with their majors or fields of expertise, trainees enhance their abilities to serve individuals with developmental disabilities.

The program is offered through the Department of Educational Psychology’s Institute on Community Integration. The institute is nationally recognized for its research, training, and technical assistance and its commitment to the belief that individuals with developmental disabilities should have access to the necessary services enabling them to live, work, play, attend school, and build relationships in their communities. For more information, call (612) 624-4848.

SUPERVISION AND ADMINISTRATION OF SPECIAL EDUCATION PROGRAMS

Through the Graduate School, special education and educational administration faculty offer programs leading to the specialist certificate in special education and the doctorate in educational administration with an emphasis in administration of special education programs. These programs combine coursework in general school administration and supervision with specialized courses and internships or other practical experiences for students planning to serve as directors, coordinators, supervisors, or consultants in special education programs. Admission to these programs requires completion of the M.A. degree, special licensure, and experience in some area of special education.

DEVELOPMENTAL/ADAPTED PHYSICAL EDUCATION

Licensure programs in developmental/adapted physical education for grades K-12 are offered for both the M.Ed./initial licensure and M.Ed./in-service programs. Requirements are listed under physical education in the kinesiology and leisure studies section of this bulletin.
Maria D. Sera, Ph.D., Indiana University
Cognitive and linguistic development

L. Alan Sroufe, Ph.D., University of Wisconsin
Socioemotional development, developmental psychopathology

Richard A. Weinberg, director, Ph.D., University of Minnesota
Behavior genetics, assessment, preschool education

Albert Yonas, Ph.D., Cornell University
Perceptual development

ADJUNCT/COOPERATING FACULTY

Carrie M. Borchardt, M.D., University of Nebraska College of Medicine
Child and adolescent depression

Geraldine K. Brookins, Ph.D., Harvard University
Child welfare, youth policy

Sandra Christenson, Ph.D., University of Minnesota
Family-school partnerships, family learning environments

Norman Garmezy, Ph.D., University of Iowa
Clinical psychology, personality

Michael Georgieff, Ph.D., University of Minnesota
Neonatal nutrition

Harold D. Grotevant, Ph.D., University of Minnesota
Adolescent development, family relationships, adoptive families, family assessment

Susan C. Hupp, Ph.D., University of Illinois
Social behavior, personality development

Gloria Leon, Ph.D., University of Maryland
Eating disorders, stress and coping health psychology

Scott McConnell, Ph.D., University of Oregon
Early childhood development

Charles Oberg, M.D., University of Minnesota
Child and family policy

Elsa G. Shapiro, Ph.D., University of Minnesota
Neurology

Auke Tellegen, Ph.D., University of Minnesota
Personality assessment, personality theory, hypnosis, behavior genetics

Ruth Thomas, Ph.D., University of Minnesota
Teaching and learning cognitive theory, parent-child relations

James E. Turnure, Ph.D., Yale University
Mild/moderate intellectual disabilities

Paulus van den Broek, Doctoraals, University of Leiden-The Netherlands, Ph.D., University of Chicago
Learning, cognition

Susan L. Warren, M.D., Brown University
Emotional development of young children

Carolyn L. Williams, Ph.D., University of Georgia
Healthcare psychology

The Institute of Child Development faculty are international leaders in their fields, holding offices and editorships in many professional organizations. The undergraduate program has received many awards for excellence and the graduate program is consistently ranked first in the country. For program information, contact the Child Psychology Advising Office, 106 Child Development Building (612/624-1891).

UNDERGRADUATE PROGRAMS
The institute offers B.A. and B.S. degrees in child psychology in conjunction with the College of Liberal Arts. The B.A. degree emphasizes basic processes in development and serves primarily those students planning to earn advanced degrees in psychology, education, medicine, law, sociology, and other behavioral sciences. The B.S. degree combines intensive training in developmental psychology with in-depth work in related fields and practical field experience. This degree is for students planning careers and additional training in areas such as early childhood education, counseling, and human service programs. Courses leading to licensure in early childhood education, developmental disabilities, and parent education may be taken as part of the B.S. degree.

ADVANCED STUDY

DOCTORAL PROGRAMS
Graduate study is available in several child psychology areas. Students interested in the Ph.D. program should apply to the institute’s director of admissions and the Graduate School, specifying child psychology as their major. Consult the Graduate School Bulletin for Ph.D. program admission requirements. Students interested in an M.Ed./initial licensure program in early childhood education should see the description in the curriculum and instruction section of this bulletin.
Michael Wade, director

110 Cooke Hall
1900 University Avenue S.E.
Minneapolis, MN 55455

Fax: (612) 626-7700

DEGREES OFFERED—B.S., M.Ed.; licensure in physical education, coaching, and developmental/adapted physical education; M.A. and Ph.D. degrees are offered by the Graduate School.

FACULTY

KINESIOLOGY

Allen Burton, Ph.D., University of Oregon
Adapted physical education, motor development, movement skill assessment

Peter Hancock, Ph.D., University of Illinois
Human factors, study of time

March Krotee, Ph.D., University of Pittsburgh
Psychology, sociology, international and comparative dimensions of sport and physical activity

Art Leon, M.D., University of Wisconsin
Exercise physiology, the role of physical activity in reducing risk of chronic disease

Robert Pickert, M.A., University of South Dakota
Physical activity programming, management, coaching, undergraduate advising

Robert Serfass, Ph.D., University of Minnesota
Exercise physiology, sport training, fitness, sports nutrition

Elizabeth Spletzer, M.S., Eastern Michigan University
Pedagogy, biomechanics

Leo McAvoy, Ph.D., University of Minnesota
Outdoor recreation programs and resources, outdoor education, park planning and management, wilderness programs

Stuart J. Schleien, Ph.D., University of Maryland
Therapeutic recreation, inclusive community leisure services, friendship development, sustainable systems change

John H. Schultz, Ph.D., University of Minnesota
Legal and financial aspects of sport and recreation management

Carla Tabourne, Ph.D., New York University
Recreation therapy, geriatrics, intergenerational programming, comprehensive program and patient management

Diane Wiese-Bjornstal, Ph.D., University of Oregon
Sport psychology, sport injury psychology, youth sports

REC创ATION, PARK, AND LEISURE STUDIES

Bruce Anderson, Ph.D., University of Minnesota
Recreational sports, sports facility management

Mary Jo Kane, Ph.D., University of Illinois
Social-psychological parameters of sport/physical activity, women in sport and leisure, sport management, research methods, leisure behavior

Leo McAvoy, Ph.D., University of Minnesota
Outdoor recreation programs and resources, outdoor education, park planning and management, wilderness programs

Stuart J. Schleien, Ph.D., University of Maryland
Therapeutic recreation, inclusive community leisure services, friendship development, sustainable systems change

John H. Schultz, Ph.D., University of Minnesota
Legal and financial aspects of sport and recreation management

Carla Tabourne, Ph.D., New York University
Recreation therapy, geriatrics, intergenerational programming, comprehensive program and patient management

The School of Kinesiology and Leisure Studies offers undergraduate and graduate programs in both kinesiology and recreation, park, and leisure studies. In addition to degree programs, physical education activity courses in a variety of sport skills are open to all University students for meeting college requirements. These courses are listed in the Class Schedule under physical education and numbered under 1500. Many of these courses are considered highly intensive unless otherwise indicated. It is recommended that students know their health status and any limitations on their ability to participate safely in the activities involved. Students who have questions about their health status should seek advice from a personal physician. Physical education activity courses are offered at various levels in each of the following areas.

- Aquatics
- Conditioning, weight training
- Dance (offered through the College of Liberal Arts)
- Individual and dual sports/activities
- Team sports/activities

See course descriptions later in this bulletin and in the Class Schedule for more information about each activity course.
### UNDERGRADUATE PROGRAMS

**KINESIOLOGY**

The undergraduate program in kinesiology prepares individuals for roles in sports/health clubs or corporate fitness/exercise centers or serves as background for exercise rehabilitation, exercise physiology, biomechanics, social psychology of sport, motor behavior, ergonomics and human factors, or other human performance contexts. The program also prepares students for M.Ed./initial licensure programs in physical education. The kinesiology degree offers good background for other health science degrees, such as athletic training, physical and occupational therapy, medicine, and nursing.

The kinesiology curriculum includes a background of two years of liberal education; a core of basic and applied sciences, physical activity skills, and courses in kinesiology’s major subdisciplines; and practicum experience in various sport, exercise, educational, or public service/workplace settings. Undergraduate kinesiology programs include the major in kinesiology, coaching licensure, a coaching minor, and developmental/adapted physical education licensure. Courses for these programs are listed in the Class Schedule under kinesiology and numbered above 1500. (Courses that apply to licensure are indicated by PEL [physical education licensure].)

Admissions requirements for the kinesiology program include the following.

- A 2.50 overall GPA; a 2.80 GPA is required for students entering the sport management certificate program.
- Completion of at least 85 quarter credits, including the following coursework that partially fulfills the college liberal education requirements for graduation.
  - Comp 1011 or equivalent
  - One four-credit speech course
  - One mathematics or statistics course
  - One course each in biology and chemistry (with labs), one science elective (12 credits total)
  - Psy 1001 (5 credits) and two additional courses from history and the social sciences (one must have a historical perspective) (12 credits total)
  - A minimum of three courses from the arts and humanities, including courses in two of the following: literature, philosophical perspective, visual and performing arts (12 credits total)
- Completion of the following required major coursework:
  - CBN 1027—Anatomy for Kinesiology Students (4) or equivalent
  - Kin 1871—Introduction to Kinesiology (3)

### REQUIREMENTS FOR ALL KINESIOLOGY MAJORS

**Pre-kinesiology Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CBN 1027</td>
<td>Anatomy for Kinesiology Students (4) or equivalent</td>
</tr>
<tr>
<td>Kin 1871</td>
<td>Introduction to Kinesiology (3)</td>
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**Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>Kin 3111</td>
<td>Mechanics of Movement (3)</td>
</tr>
<tr>
<td>Kin 3131</td>
<td>History and Philosophy of Kinesiology and Sport (4)</td>
</tr>
<tr>
<td>Kin 3132</td>
<td>Motor Development (3)</td>
</tr>
<tr>
<td>Kin 3135</td>
<td>Motor Learning and Human Performance (3)</td>
</tr>
<tr>
<td>Kin 3150</td>
<td>Introduction to Evaluation (4)</td>
</tr>
<tr>
<td>Kin 3385</td>
<td>Exercise Physiology I (4)</td>
</tr>
<tr>
<td>Kin 3386</td>
<td>Exercise Physiology II (4)</td>
</tr>
<tr>
<td>Kin 5126</td>
<td>Advanced Psychological and Sociological Dimensions of Physical Activity (3)</td>
</tr>
<tr>
<td>Kin 5980</td>
<td>Research Methodology (3)</td>
</tr>
</tbody>
</table>

**Electives**

- 32-42 credits based on student’s objective statement; 12 credits must be Kin 3xxx and 5xxx

**Field Experience and Directed Study (15 credits)**

- Kin 3624—Student Teaching: Coaching (3) (optional)
- Kin 3625—Supervised Practical Experience (12)
- Kin 3900—Directed Study (3)

**Special Requirements (12-13 credits)**

One of the following:

- EPsy 5139—Building a Learning Community (4) (required for teacher licensure)
- or AdEd 5401—Adult Learning and Development Through the Life Span (3)
- or AdEd 5411—Strategies for Teaching Adults (3)
- or CPsy 3331—Introduction to Social Development (4)
- or EdPA 5125—Youth in Modern Society (4)
- or HRD 5808—Diversity Issues and Practices (3)
- or Psy 3201—Introduction to Social Psychology (4)

One of the following:

- PubH 3004—Basic Concepts in Personal and Community Health (5)
- or PubH 3001—Personal and Community Health (3)
- and PubH 3003—Fundamentals of Alcohol and Drug Abuse (2)

One of the following for the upper division writing requirement:

- Comp 3xxx (Comp 3033—Writing for the Health Sciences preferred) (4)
- or Rhet 3562—Writing in Your Profession (4)

Students completing this curriculum receive the B.S. degree in kinesiology. A total of 186 credits must be com-
completed with a GPA of 2.50 overall and in major courses. Students must also complete the University’s liberal education requirements; appropriate related and major courses may be applied toward these requirements.

COACHING LICENSURE AND MINOR—Students may choose from two coaching programs: a Minnesota public secondary school coaching licensure program and a coaching minor. Coaching licensure is available to students enrolled in, or making application to, a program leading to teaching licensure or to persons who already have a Minnesota teaching license. Any CEHD student may apply for a coaching minor, which leads to licensure only for those persons who have or are eligible for a Minnesota teaching license. Prospective students must apply to the Division of Kinesiology for either coaching program. Application to enroll in Kin 3624—Student Teaching: Coaching requires satisfactory completion of all coaching coursework with a minimum GPA of 2.50. Those eligible and successfully completing the required courses are recommended for licensure for coaching boys and girls interscholastic sports in Minnesota public secondary schools.

COACHING LICENSURE (18 credits)
CBN 1027—Anatomy for Kinesiology Students (4)
  or Kin 3110—Human Anatomy (3)
Kin 3111—Mechanics of Movement (3)
  or Kin 3115—Physiological Application to Sports (3)
  or Kin 3386—Exercise Physiology II (4)
Kin 3112—First Responder for Athletic Coaches and Athletic Trainers (3)
  or A current American Red Cross standard first aid card and current adult CPR card
Kin 3114—Prevention and Care of Athletic Injuries (3)
  or Kin 5620—Advanced Athletic Training (3)
Kin 3115—Physiological Application to Sports (3)
  or Kin 3366—Exercise Physiology II (4)
Kin 3131—History and Philosophy of Physical Education and Sport (4)
  or Kin 5136—Psychology of Coaching (3)
Kin 3135—Motor Learning and Human Performance (3)
Kin 3143—Organization and Management of Sport and Physical Education (3)
Kin 3624—Student Teaching: Coaching (3)
4 credits from
  Kin 3169—Volleyball Coaching (2)
  Kin 3170—Baseball Coaching (2)
  Kin 3171—Basketball Coaching (2)
  Kin 3172—Football Coaching (2)
  Kin 3173—Golf Coaching (2)
  Kin 3174—Gymnastics Coaching (2)
  Kin 3175—Ice Hockey Coaching (2)
  Kin 3176—Swimming and Diving Coaching (2)
  Kin 3177—Tennis Coaching (2)
  Kin 3178—Track and Field Coaching (2)
  Kin 3179—Wrestling Coaching (2)
  Kin 3371—Soccer Coaching (2)
  Kin 5740—Workshop: Coaching of Individual, Dual, or Team Sports (2 min)

COACHING MINOR (30 credits)
CBN 1027—Anatomy for Kinesiology Students (4)
  or Kin 3110—Human Anatomy (3)
Kin 3111—Mechanics of Movement (3)
Kin 3112—First Responder for Athletic Coaches and Athletic Trainers (3)
  or Current American Red Cross standard first aid card and current adult CPR card
Kin 3114—Prevention and Care of Athletic Injuries (3)
  or Kin 5620—Advanced Athletic Training (3)
Kin 3115—Physiological Application to Sports (3)
  or Kin 3366—Exercise Physiology II (4)
Kin 3131—History and Philosophy of Physical Education and Sport (4)
  or Kin 5136—Psychology of Coaching (3)
Kin 3135—Motor Learning and Human Performance (3)
Kin 3143—Organization and Management of Sport and Physical Education (3)
Kin 3624—Student Teaching: Coaching (3)
4 credits from
  Kin 3169—Volleyball Coaching (2)
  Kin 3170—Baseball Coaching (2)
  Kin 3171—Basketball Coaching (2)
  Kin 3172—Football Coaching (2)
  Kin 3173—Golf Coaching (2)
  Kin 3174—Gymnastics Coaching (2)
  Kin 3175—Ice Hockey Coaching (2)
  Kin 3176—Swimming and Diving Coaching (2)
  Kin 3177—Tennis Coaching (2)
  Kin 3178—Track and Field Coaching (2)
  Kin 3179—Wrestling Coaching (2)
  Kin 3371—Soccer Coaching (2)
  Kin 5740—Workshop: Coaching of Individual, Dual, or Team Sports (2 min)

RECREATION, PARK, AND LEISURE STUDIES

The undergraduate program in recreation, park, and leisure studies prepares students to assume leadership, supervisory, or beginning administrative responsibilities in various park, recreation, leisure service, and sport management agencies and for therapeutic recreation certification and practice. The program prepares students for graduate study in outdoor recreation/education, park and recreation administration, sport management, and therapeutic recreation. Many students couple recreation, park, and leisure studies with training in other disciplines (e.g., management, social work, physical and occupational therapy, creative arts, human growth and development, special education, psychology).

Students pursuing a B.S. degree in recreation, park, and leisure studies may choose one of two options: leisure services management or therapeutic recreation. Within the leisure services option, students may select one of four emphasis areas: public parks and recreation, commercial
recreation, outdoor recreation/education, or sport management. Lists of suggested and required courses to help students develop an individualized program are available from the division. A preliminary program of coursework should be filed during the second quarter after admission. To graduate, students must complete 186 credits with a minimum GPA of 2.50 in Rec-designated courses. A minor is not required of majors in this program.

Admissions requirements for an undergraduate major in recreation, park, and leisure studies include the following:

- Completion of a minimum of one year of liberal education coursework (at least 45 quarter or 30 semester credits), including the writing skills requirement
- A minimum overall GPA of 2.00, with preference given to applicants with a higher average
- 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

**Courses for All Students (186 credits minimum)**

Rec 1520 — Orientation to Leisure and Recreation (4)
Rec 3530 — Recreation and Park Areas and Facilities (4)
Rec 3540 — Recreation Programming (4)
Rec 3550 — Park and Recreation Administration (4)
Rec 5270 — Community Leisure Services and Persons With Disabilities (4)
Rec 5299 — Assessment and Evaluation in Leisure Studies (4)
15 credits in Rec 3700 — Senior Internship (1-15)
16 credits in recreation courses related to an emphasis area, selected in consultation with a major adviser
37 credits related to the selected emphasis area (no more than three 1xxx courses), selected in consultation with an appropriate academic adviser

Students must complete the University's liberal education requirements in addition to college and Division of Recreation, Park, and Leisure Studies curriculum requirements. Certain emphasis areas require specific courses to meet curriculum requirements; consult the division office.

**SPORT MANAGEMENT CERTIFICATE PROGRAM**

Certain emphasis areas require specific courses to meet curricular requirements. Park, and Leisure Studies curriculum requirements.

**ADVANCED STUDY**

**M.ED. PROGRAMS**

The school offers programs leading to M.Ed. degrees in physical education and recreation, park, and leisure studies. These degrees provide continuing education for in-service professionals in physical education and recreation, park, and leisure studies and specialized training for persons seeking initial licensure in physical education or developmental/adapted physical education.

**PHYSICAL EDUCATION** — The Division of Kinesiology offers both M.Ed./initial licensure and M.Ed./in-service programs. The first is for individuals pursuing initial licensure; the second is for individuals who already have a physical education license. The in-service program has two options: general preparation and a focus on developmental/adapted physical education (D/APE) leading to D/APE endorsement.

**PHYSICAL EDUCATION (M.ED./INITIAL LICENSURE)**

Physical education licensure students enter a 12-month M.Ed./initial licensure program integrating educational theory with classroom practice. Ten weeks of practicum and 20 weeks of student teaching build on principles and methods learned in University courses. Working closely with master teachers, students experience firsthand the daily rewards and pressures of their profession. After successfully completing initial licensure requirements, students are recommended for state licensure to teach physical education in grades K-12.

M.Ed./initial licensure applicants are admitted to the physical education program based on the following:

- Completion of all prerequisite coursework (the complete prerequisite course list is available from SPS)
- A bachelor’s degree in kinesiology, sport and exercise science, or equivalent with an overall GPA of 2.80 and a major GPA of 3.00
- Evidence of satisfactory completion of 200 hours of practical experience working with children (K-12) in sport/physical education-related settings, including children of diverse cultures and special populations
- Two references who can address questions about the applicant’s education-related experience, work style, and personal attributes
• A goal statement addressing why the applicant wants to become a licensed teacher
• Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

**Foundation Courses**
CI 5300—Technology for Teaching and Learning (2)
EdPA 5090—School and Society (3)
EPsy 5119—Learning and Cognitive Foundations of Education (4)
EPsy 5139—Building a Learning Community (4)
EPsy 5229—Classroom Assessment Methods (2)
Kin 5530—Biological and Physical Foundations of Education (2)
PubH 5023—Basic Concepts in Personal and Community Health (4)

**Major Courses**
Kin 3143—Organization and Management of Sport and Physical Education (3)
Kin 5151—Curriculum Implementation (3)
Kin 5152—Curriculum Development (3)
Kin 5521—Pedagogy I: Elementary Physical Education (6)
Kin 5522—Pedagogy II: Secondary Physical Education (6)
Kin 5561—Clinical Experience I: Physical Education (6)
Kin 5562—Clinical Experience II: Physical Education (6)
Kin 5563—Clinical Experience III: Physical Education (9)
Kin 5981—Problems (Cr ar)

* Does not count toward M.Ed.

**GENERAL PREPARATION (M.ED./IN-SERVICE)**
Students may choose courses from a variety of areas within physical education and kinesiology or focus on a particular area of specialization.

**Requirements (45 credits)**
At least 30 credits of kinesiology courses, including Kin 5980 or 5985 (3) and 5981 (Cr ar)
No more than 15 credits of electives

**DEVELOPMENTAL/ADAPTED PHYSICAL EDUCATION (M.ED./IN-SERVICE)**
The developmental/adapted physical education (D/APE) emphasis meets requirements for the general preparation M.Ed. option plus includes coursework leading to D/APE endorsement. The endorsement, which leads to a teaching license, requires 32-37 credits of coursework plus 8-13 additional credits (45 credits total) to complete the M.Ed. degree.

**Requirements (45 credits)**
Kin 5100—Developmental/Adapted Physical Education (3)
Kin 5101—Physical Activities for Persons With Disabilities (3)
Kin 5102—Practicum: Developmental/Adapted Physical Education (6)
Kin 5132—Motor Development (3)
Kin 5163—Developmental Motor Assessment (3)

One of the following
• Kin 5106—Adapted Aquatics (2)
• or Kin 5120—Advanced Biomechanics (4)
• or Kin 5122—Applied Physiology (3)
• or Kin 5126—Advanced Psychological and Social Dimensions of Physical Activity (3)
• or Kin 5135—Motor Learning and Human Performance
• or Kin 5141—Nutrition for Exercise and Physical Performance (3)
• or Kin 5152—Curriculum Development (3)
• or Kin 5375—Competitive Sport for Children and Youth (3)
• or Kin 5385—Exercise for Special Populations (3)

One of the following
• EPsy 5601—Education for Exceptional Children (4)
• or EPsy 5710—Contemporary Services for Persons With Developmental Disabilities (3)

One of the following
• EPsy 5608—Parent and Professional Planning for Handicapped Students (3)
• or EPsy 5609—Family-Professional Planning for Persons With Severe Handicaps (3)

Two of the following
• EPsy 5612—Education of Learning-Disabled Children (3)
• EPsy 5620—Introduction to Mental Retardation (4)
• or EPsy 5621—Methods and Materials for Students With Mild to Moderate Mental Retardation (4)
• EPsy 5622—Programs and Curricula for Learners With Moderate to Severe Disabilities (4)
• EPsy 5624—Biomedical and Physical Aspects of Developmental Disabilities (3)
• EPsy 5625—Education of Infants and Preschool Children With Developmental Disabilities (4)
• or EPsy 5681—Methods and Materials for Infants and Preschool Children With Developmental Disabilities (4)
• EPsy 5635—Education of Students With Physical Disabilities (4)
• EPsy 5640—Psychological, Social, and Educational Aspects of Deafness (3)
• or EPsy 5641—Models of Service Delivery to Students With Hearing Loss (3)
• EPsy 5656—Educational Needs of Students With Emotional Disturbances or Behavioral Disorders (3)
• EPsy 5670—Introduction to Education of Children With Visual Disabilities (3)
• or EPsy 5673—Methods of Teaching Children With Visual Disabilities (4)

To complete the M.Ed., students must complete an additional 8-13 credits, including at least 30 credits in kinesiology (Kin 5980 or 5985 [3] and 5981 [Cr ar] are re-
required) and no more than 15 credits from other departments (45 credits total).

RECREATION, PARK, AND LEISURE STUDIES (M.ED./IN-SERVICE)
The M.Ed. program in recreation, park, and leisure studies is for nonlicensed practitioners. Students may choose from outdoor recreation, public parks and recreation, therapeutic recreation, sport management, or commercial recreation. Students must 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 describing the applicant’s experience in recreation, park, and leisure services. Adequate skill proficiency in the selected area is required for admission to the program.

MUSIC EDUCATION
Vern Sutton, director
200 Ferguson Hall
2106 Fourth Street S.
Minneapolis, MN 55455
(612) 624-5093
Fax: (612) 626-2200
Claire W. McCoy, Ph.D., University of Iowa
Music education, choral music, movement-based methods, measurement
Stephen W. Schultz, Ph.D., Northwestern University
Music education, instrumental music, computers in music instruction

The B.M. in music education is offered through the College of Liberal Arts, with teaching licensure for undergraduate and in-service teachers available through CEHD. There are two undergraduate emphases in music education: instrumental/general music and choral/general music. (For information about the music therapy program, see the CLA Bulletin.) Consult the School of Music for admission and program requirements.

UNDERGRADUATE PROGRAMS
PRECOLLEGE MUSIC PREPARATION — An extensive background in high school instrumental and/or vocal ensembles is expected. Private lessons in voice or a band/orchestral instrument are desirable. Students must meet the School of Music entrance requirements for performance in one of the following areas of applied music: voice, piano, organ, classical guitar (for the choral/general concentration); a standard band or orchestral instrument (for the instrumental/general concentration). Piano lessons as well as beginning-level music theory (fundamentals) and music history/literature preparation via classes or individual study with texts, computer programs, and recordings are helpful, as are conducting and leadership experiences.

ADMISSION — Students must complete two years (90 credits) of coursework in music and liberal arts before admission to the music education program. A minimum cumulative GPA of 2.50 must be earned in all music courses. A minimum overall GPA of 2.00 must be earned in all courses (music and nonmusic). Students must also complete an interview with a major adviser in music education before their admission application will be given final consideration.

Core Curriculum for All Music Majors
See the CLA Bulletin for information regarding courses required of all music students during the first two years of study, as well as the University’s liberal education requirements.
Additional Requirements for All Students
MuEd 1201—Introduction to Music Education (1)
Psy 1001—General Psychology (5)

CHORAL/GENERAL MUSIC EDUCATION CONCENTRATION
This concentration is for vocalists, keyboard performers, or classical guitarists planning to teach choral and classroom music in elementary and secondary schools. Students completing the program meet requirements for licensure to teach choral and general classroom music in grades K-12 in Minnesota.

Music Courses
APPLIED MUSIC — Minimum 11 quarters (22 credits), with majors in voice, piano, organ, or guitar
12 credits lower division lessons:
- MusA 1201—Piano, MusA 1203—Organ,
- MusA 1204—Voice, or MusA 1223—Guitar
10 credits upper division lessons:
- MusA 3201—Piano, MusA 3203—Organ,
- MusA 3204—Voice, or MusA 3223—Guitar
SEC ON DARY A PPLIED STUDY — Minimum 6 credits
For nonvoice majors:
- MusA 1404—Voice: Secondary Required (6 [2 per qtr])
For nonkeyboard majors:
- Mus 1151-1152-1153—Piano: Class Lessons (2 each) and MusA 1401—Piano: Secondary Required (6 [2 per qtr])
For keyboard majors:
- Mus 1521-1522-1523—Keyboard Skills (2 each)
ENSEMBLE — Minimum 11 quarters, to be selected in consultation with an adviser
- Mus 3331—Jazz Improvisation I (2)
- Mus 1161-1166—Diction for Singers I-VI (1 each)

Professional Education Courses
EdPA 5090—School and Society (3)
EPsy 5119—Learning and Cognition (4)
EPsy 5139—Interpersonal and Personality Effects on Learning (4)
EPsy 5229—Measurement and Assessment (2)
Kin 5530—Biological and Physical Foundations of Education (2)
MuEd 3301—Teaching Elementary Vocal and General Music (4)
MuEd 3302—Teaching Secondary Vocal and General Music (4)
MuEd 3322—Techniques of Classroom Instruments (2)
MuEd 3415—Choral Laboratory I (4)
MuEd 3416—Choral Laboratory II (4)
MuEd 3650—Student Teaching in Music (18)
PubH 3004*—Basic Concepts in Personal and Community Health (5)
or PubH 5023*—Basic Concepts in Personal and Community Health (4)
or PubH 3001*—Personal and Community Health (3) and PubH 3003*—Fundamentals of Drug and Alcohol Abuse (2)
or PubH 5003*—Fundamentals of Drug and Alcohol Abuse (2) and PubH 5022*—Personal and Community Health (2)

* Does not count toward M.Ed.

ADMISSION TO STUDENT TEACHING — Students should meet with their major adviser early in the spring quarter of their junior year to plan the student teaching experience. Each applicant must have completed all professional education courses (except EdPA 5090 and EPsy 5229); all major courses in theory, ear training, music history, and secondary applied study; and a minimum of 9 credits in ensembles with a GPA of 2.50 in all major and professional education courses. Grades for ensemble courses are not counted in calculating the grade average. Twelve credits of applied music in 1xxx courses and a minimum of 6 credits in 3xxx courses must be completed in the study of the major instrument or voice.

INSTRUMENTAL/GENERAL MUSIC EDUCATION CONCENTRATION
This concentration prepares students to teach band, orchestra, and general music in elementary and secondary schools. Students successfully completing the program meet licensure requirements to teach band, orchestra, and general classroom music in grades K-12 in Minnesota.

Music Courses
APPLIED MUSIC — Minimum 9 quarters (18 credits) of principal instrument (standard band or orchestral instrument)
12 credits lower division principal lessons
- MusA 14xx—Principal Lessons (12xx or higher)
6 credits upper division principal lessons (32xx)
(See CLA Bulletin applied music listing for specific course numbers.)
ENSEMBLE — Required during 10 quarters of on-campus study (minimum 12 credits) to be selected in consultation with an adviser. Marching band experience is recommended for students whose major performance instrument is brass, woodwind, or percussion. Chamber ensemble experience is required during two quarters of on-campus study (minimum 2 credits).
10 credits from Mus 3410—Concert Band, or Mus 1480—Marching Band, or Mus 3420—Orchestra (1 each)
2 credits from Mus 5360—Woodwind Ensemble, Mus 5380—Brass Choir, Mus 5390—Percussion Ensemble, Mus 3440—Ensemble, Mus 5340—Jazz Ensemble (1 each)

**DEGREES OFFERED**

— B.S., M.Ed.; M.A., Ed.D., and Ph.D. degrees are offered by the Graduate School.

**Professional Education Courses**

- **EdPA 5090**—The School and Society (3)
- **EPsy 5119**—Learning and Cognitive Foundations of Education (4)
- **EPsy 5139**—Building a Learning Community (4)
- **EPsy 5229**—Measurement and Assessment (2)
- **Kin 5530**—Biological and Physical Foundations of Education (2)
- **MuEd 3301**—Teaching Elementary Vocal and General Music (4)
- **MuEd 3302**—Teaching Secondary General Music (4)
- **MuEd 3322**—Techniques of Classroom Instruments (2)
- **MuEd 3500**—String Techniques I (3)
- **MuEd 3501**—String Techniques II (3)
- **MuEd 3503**—Woodwind Techniques (4)
- **MuEd 3504**—Brass Techniques (4)
- **MuEd 3505**—Percussion Techniques (4)
- **MuEd 3515, 3516**—Instrumental Laboratory I, II (4 each)
- **MuEd 3650**—Student Teaching in Music (18)
- **PubH 3004**—Basic Concepts in Personal and Community Health (5)
- **PubH 5003**—Fundamentals of Drug and Alcohol Abuse (2)
- **PubH 5004**—Basic Concepts in Personal and Community Health (4)
- **PubH 5022**—Personal and Community Health (2)

* Does not count toward M.Ed.

**ADMISSION TO STUDENT TEACHING**

— See choral/general music education concentration above.

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**WORK, COMMUNITY, AND FAMILY EDUCATION**

Charles Hopkins, chair

210A Vocational and Technical Education Building

1954 Buford Avenue

St. Paul, MN 55108

(612) 625-3757

Fax: (612) 624-2231

**DEGREES OFFERED**—B.S., M.Ed., M.A., Ed.D., and Ph.D. degrees are offered by the Graduate School.

**FACULTY:**

- **Michael Baizerman,** Ph.D., University of Pittsburgh
  Everyday lives of youth; comprehensive work, community, and family education; youth leadership development

- **James Brown,** Ph.D., Bowling Green State University
  Special learning needs, diversity in education and work settings, program evaluation

- **George H. Copa,** Ph.D., University of Minnesota
  Aims and curriculum of work, community, and family education, school design

- **Charles R. Hopkins,** chair, Ph.D., University of Minnesota
  Business and economic education; curriculum development; trends and issues in work, community, and family education

- **Stephan P. Jones,** Ph.D., Iowa State University
  Agricultural education and extension, extension education, international vocational education and training

- **James C. Kielmeier,** Ph.D., University of Colorado
  Youth service and leadership, experiential education

- **Richard A. Krueger,** Ph.D., University of Minnesota
  Program evaluation, focus group interviews

- **Judith Lambrecht,** Ph.D., University of Wisconsin
  Business teacher education, instructional use of business software

- **Gary W. Leske,** Ph.D., University of Minnesota
  Experiential education, leadership development

- **Theodore Lewis,** Ph.D., The Ohio State University
  Technology education curriculum, technology and work, workplace literacy

- **Jerry McClelland,** Ph.D., Iowa State University
  Family education, parent education
Gary N. McLean, Ed.D., Columbia University
International management development, organizational quality and productivity, keyboarding

Curtis D. Norenberg, Ph.D., University of Minnesota
Distance delivery of agricultural, extension, and adult education programs

Rosemarie Park, Ed.D., Harvard University
Adult literacy education, workplace literacy, women’s issues

Edgar Persons, Ph.D., University of Minnesota
Agricultural education for youth and adults, international development

Roland Peterson, Ed.D., University of Nebraska
Integration of vocational and academic education; curricular development; decision-based development; teacher education in work, community, and family education

Shari L. Peterson, Ph.D., University of Minnesota
Adult education, human resource development, career development, self-efficacy, student retention

Jane Plihal, Ph.D., University of Chicago
Research methodology, economic education, integration of vocational and academic education, international education

David J. Pucel, Ph.D., University of Minnesota
Education and training systems

The Department of Work, Community, and Family Education’s mission is to improve educational theory and practice and prepare professionals concerned with education and training that enables youth and adults to carry out their responsibilities in the workplace, family, and community.

The department offers undergraduate degrees in agricultural and industrial education, an undergraduate minor in family education, and an undergraduate focus in human resource development.

In addition, the department offers M.Ed./initial licensure programs in agricultural education, business and industry education, and family education and M.Ed./in-service programs in adult education; agricultural education; business and industry education; family education; and work, community, and family education, which includes specializations in comprehensive work, community, and family education; extension education; human resource development; international vocational education and training; vocational education administration; and vocational special needs. The M.Ed./in-service youth development leadership program is offered jointly with the Department of Educational Policy and Administration. The department also offers coursework that supports Minnesota educator licensure in adult education, with options for adult basic and continuing education.

Two certificate programs are available. The certificate in human resource development is available to adult special students or as an option within various degree programs. The certificate in continuous quality improvement is offered in conjunction with the University’s Institute of Technology and Carlson School of Management.

Graduate programs include an M.A. and Ph.D. in education with an emphasis in work, community, and family education and an Ed.D. in work, community, and family education. Doctoral students may choose from nine specializations: adult education; agricultural education; business and marketing education; comprehensive work, community, and family education; extension education; family education; human resource development; industrial education; and international vocational education.
and training. In addition to these specializations, M.A. students may choose specializations in vocational education administration or vocational special needs.

For more information about M.A., Ph.D., or Ed.D. degrees, consult the Graduate School Bulletin and the Department of Work, Community, and Family Education director of graduate studies, R350 Vocational and Technical Education Building, 1954 Buford Avenue, St. Paul, MN 55108 (612/624-1220; votech@umn.edu).

UNDERGRADUATE PROGRAMS

AGRICULTURAL EDUCATION

The undergraduate major in agricultural education, offered jointly by CEHD and the College of Agricultural, Food, and Environmental Sciences (COAFES), is for students who plan to teach agriscience, agriculture, horticulture, agribusiness, food systems, or natural resource management education in public schools, technical colleges, or community colleges, or for those who plan to work in educational positions in agricultural development or sales positions in various agricultural-related organizations. The program provides comprehensive education for those preparing for teaching: extension work; local, national, and international development; other professional careers in sales and marketing; financial management; or production agriculture. The program requires a broad study of agriculture and permits emphasis in animal science, crop science, agricultural economics, agricultural business, horticulture, soils, natural resources, and agricultural engineering technology. The program's agricultural education and natural and managed environmental systems specializations offer preparation necessary to qualify for licensure to teach agricultural education, such as cultural business, horticulture, soils, natural resources, and agricultural development or sales positions in various agricultural-related organizations. The program provides comprehensive education for those preparing for teaching: extension work; local, national, and international development; other professional careers in sales and marketing; financial management; or production agriculture.

Students may enter a pre-agricultural education major in COAFES as freshmen or transfer students. Students must earn 90 credits in the pre-agricultural education major before transferring to COAFES. These students then apply to CEHD in the quarter in which they complete their sophomore year.

Transfer students who have completed less than two years of college work also apply for admission to COAFES. During the first quarter of enrollment in COAFES, students apply for admission to CEHD.

GRADUATION REQUIREMENTS

Students majoring in agricultural education must complete the liberal education requirements listed on the following page. Changes in the liberal education requirements require the approval of the University’s Council on Liberal Education. Course substitutions in the foundation courses may be
made only with the approval of an academic adviser and COAFES. Course substitutions in the education courses may be made only with the approval of an academic adviser and CEHD. Changes in the technical requirements may be made only with an academic adviser’s recommendation and the approval of the agricultural education coordinator.

LIBERAL EDUCATION DIVERSIFIED CORE AND DESIGNATED THEMES—See the liberal education requirements on page 30. Different liberal education requirements apply to students who enrolled in a degree program at the University of Minnesota–Twin Cities campus before fall 1994; consult an academic adviser for more information.

Foundation Requirements
BioC 1401—Elementary Biochemistry (4)
or Chem 3301—Organic Chemistry I (4)
Biol 1009—General Biology (5)
Biol 1103—General Botany (5)
or Biol 1106—General Zoology (5)
Chem 1001, 1002—General Principles of Chemistry (4, 4)
or Chem 1051, 1052—Chemical Principles I, II (4, 4)
Math 1031—General Physics (5)
Psy 1001—Introduction to Psychology (4)
Two oral communication courses (8)
Two writing courses (8) (at least one 3xxx course is required)
Electives in physical or biological sciences (varies by specialization)

Professional Requirements
AgEd 1001—Introduction to Agricultural Education (1)
AgEd 1002—Principles of Career Planning in Agriculture (1)
AgEd 3029—Directed Experience in Agricultural Education (1)

Additional Courses for the Agricultural Education and Natural and Managed Environmental Systems Specializations
General Education
CI 5300—Technology for Teaching and Learning (2)
EdPA 5090—School and Society (3)
EPsy 5119—Learning and Cognitive Foundations of Education (4)
EPsy 5139—Building a Learning Community (4)
Kin 5330—Biological and Physical Foundations of Education (2)
PubH 3004—Basic Concepts in Personal and Community Health (5)
or PubH 3001—Personal and Community Health (3)

Agricultural Education
AgEd 5028—Teaching Methods in Agricultural Education (5)
AgEd 5049—Agricultural Education for Adults (3)
(not required for the natural and managed environmental systems specialization)
AgEd 5061—Program Planning and Evaluation (3)
AgEd 5072—Practicum: Agricultural Business and Industry (3)
WCFE 5300—Philosophy and Practice of Vocational Education (3)
WCFE 5330—Coordination Techniques in Cooperative Education (3)
WCFE 5602, 5603, 5604—Student Teaching (2,2,8)

Technical Requirements for the Agricultural Education Specialization
Animal Science (14 credits)
AnSc 1100—Introductory Animal Science (5)
or AnSc 3311—Live Animal Performance and Selection (3)
AnSc 3220—Animal Breeding (4)
or AnSc 3301—Systemic Physiology (6)
or GCB 3022—Genetics (4)
AnSc 3401—Principles of Animal Nutrition (4)

Applied Economics/Business (20 credits)
ApEc 1101—Principles of Microeconomics (4)
ApEc 3300—Agricultural and Food Sales (3)
or BIE 3060—Professional Sales Management (3)
or GC 1537—Professional Selling (4)

At least one course each in marketing, management, and accounting

Mechanical Technology and Environment (6 credits)
AgEd 1042—Current Technical Competencies (1)
AgEd 5042—Agricultural Mechanics (3)

Natural Resources (9 credits)
Plant Science/Plant Pathology or Entomology (12 credits)

Soil Science (5 credits)
Soil 1020—The Soil Resource (5)
or Soil 3125—Basic Soil Science (5)

Electives to complete the 198 credits required for a B.S. degree.

Additional Foundation Requirements for the Natural and Managed Environmental Systems Specialization
Biol 3008—Ecology and Evolution (4)
or EEB 3001—Introduction to Ecology (4)
Geol 1001—The Dynamic Earth: An Introduction to Geology (4)
or Geol 1012—Planet Earth (4)
or Geol 1701—Faces of the Earth (4)
Stat 3011—Statistical Analysis (4)
or Agro 3060—Field Plot Design (4)

Electives in physical or biological sciences totaling 38 credits.

**Technical Requirements for the Natural and Managed Environmental Systems Specialization**

**Animal Science (6 credits)**
- AnSc 3401—Principles of Animal Nutrition (4)
- Two from the following:
  - AnSc 1301—Management Technique: Swine (1)
  - AnSc 1302—Management Technique: Sheep (1)
  - AnSc 1303—Management Technique: Beef (1)
  - AnSc 1304—Management Technique: Dairy (1)
  - AnSc 1305—Management Technique: Poultry (1)

**Soil and Plant Science (26 credits)**
- Agro 1010—Principles of Agronomy (5)
or Hort 1021—Woody Plant Materials (5)
or FR 1100—Dendrology (4)
- Agro 3020—Growth and Development of Field Crops (4)
or Hort 3001—Growth Regulation of Horticultural Plants (5)
- AnPl 3010—Environment and World Food Production (4)
or AnPl 5060—Integrated Management of Cropping Systems (4)
- Soil 1020—The Soil Resource (5)
or Soil 3125—Basic Soil Science (5)
- Soil 1425—Introduction to Meteorology (4)
or Geog 1425—Introduction to Meteorology (4)
- Soil 3220—Soil Conservation and Land Use Management (4)
or Soil 3416—Soil Fertility (4)

**Natural Resources and Environmental Studies (15 credits)**
- NRES 3001—Colloquium in Natural Resources and Environmental Studies (1)
- NRES 3060—Water Quality in Natural Resource Management (3)
or AgET 5410—Hydrology and Water Quality (5)
- NRES 5100—Problem Solving in Natural Resources and Environmental Studies (5)
- NRES 5210—Survey, Measurement, and Modeling Methods for Natural Resource Analysis (3)
- One from the following:
  - NRES 1010—Issues in the Environment (3)
or FR 1201—Conservation of Natural Resources (3)
or FW 1002—Wildlife: Ecology, Values, and Human Impact (3)
or FW 1101—Ethics and Values in Research Management (3)
or FW 3052—Introduction to Fisheries and Wildlife (3)
or PlPa 3004—Air Pollution, People, and Plants (3)

**Mechanical Technology and Environment (6 credits)**
- AgEd 1042—Current Technical Competencies (3)
- AgEd 5042—Agricultural Mechanics (3)

**Agricultural Economics/Business (8 credits)**
- ApEc 1250—Principles of Accounting (4)
or ApEc 3810—Principles of Farm Management (4)

Electives to complete the 198 credits required for a B.S. degree.

**Additional Courses for the Agricultural Development Specialization**

**General Education**
- AdEd 5401—Adult Learning and Development Through the Life Span (3)

**Agricultural Education**
- AgEd 5010—Rural Development Leadership (3)
or AgEd 5021—Education Through Extension Methods (3)
or AgEd 5023—Methods for Change in Extension Methods for Developing Countries (3)
or AgEd 5055—Methods in Farming Systems Research and Extension (3)
- WCNE 5025—Extension Program Development (3)
- Ten credits from the following:
  - ApEc 3001—Experiential Learning: Production Agriculture (0-10)
or AgEd 3002—Experiential Learning: Agricultural Business (0-10)

**Development**
- Two from the following:
  - ApEc 3070—Agriculture and Economic Growth in Developing Countries (4)
or ApEc 5790—World Food Problems (3)
or Econ 5401—International Economics (4)
or Pol 3477—Political Development (4)
or Pol 3835—International Relations (4)
- Two from the following:
or ApEc 3007—Applied Microeconomics: Trade, Policy, and Development (4)
or ApEc 3040—Economic Development of American Agriculture (4)
or ApEc 3610—Resource Development and Environmental Economics (4)
or Econ 5301—Economic Development (4)
or Econ 5307—Comparative Economic Systems (4)
or FScN 1102—Technology of Food Processing (4)
or FScN 1612—Principles of Nutrition (4)
Technical Requirements for the Agricultural Development Specialization

Animal Science (7 credits)

Agricultural Economics (18 credits)
ApEc 1250—Principles of Accounting (4)
or Acct 1050—Principles of Accounting (4)
ApEc 3300—Agricultural and Food Sales (3)
or BIE 3060—Professional Sales Management (3)
or GC 1537—Professional Selling (4)
ApEc 3810—Principles of Farm Management (4)

Two from the following
ApEc 3420—Grain Marketing Economics (4)
ApEc 3430—Dairy Marketing Economics (4)
ApEc 3440—Livestock and Meat Marketing Economics (3)
ApEc 3450—Agricultural Input Marketing Economics (4)

Mechanical Technology and Environment (5 credits)

Natural Resource Management (6 credits)

Plant Science/Plant Pathology or Entomology (12 credits)

Soil Science (5 credits)
Soil 1020—The Soil Resource (5)
or Soil 3125—Basic Soil Science (5)

Electives to complete the 198 credits required for a B.S. degree.

Business and Industry Education

The business and industry education program offers an undergraduate major in industrial education with three possible foci, described below. The major in business education, emphasizing administrative management and training, is under revision.

Industrial education courses are listed under the designator BIE (business and industry education) in the course descriptions section of this bulletin.

Related Course Requirements

BIE 5010—Microcomputer Applications in Business and Industry Education (3)
Comp 1000—Writing Practice I (5)
or GC 1421—Writing Laboratory: Personal Writing (4)
or Rhet 1101—Writing to Inform and Persuade (4)
Comp 3032—Preprofessional Writing for Business (4)
or Rhet 3562—Writing in Your Profession (4)
Math 1031—College Algebra and Probability (4)
or Math 1001—Excursions in Mathematics (4)
(or vocational-industrial focus only)
or Math 1111—College Algebra and Analytic Geometry (5)
Phys 1001—The Physical World (4)
(or general industrial focus only)
Phys 1005—Physical Laboratory (1)
(or general industrial focus only)
Psy 1001—Introduction to Psychology (5)  
Spch 1101—Fundamentals of Speech Communication (4)  
or Rhet 1222—Public Speaking (4)

**Technical Content—53 credits**

Students can gain technical specialty expertise through coursework or a combination of coursework and work experience, as approved by adviser.

Focus 1: Students in the general industrial education focus must complete the basic technology content plus 18 credits of advanced technology content.

**Basic Technology Content—35 credits**

- BIE 1100—Technical Drawing (3)
- BIE 1101—Technical Design and Product Development (3)
- BIE 1110—Introduction to Production Systems (4)
- BIE 1120—Communication Technology (3)
- BIE 1130—Principles of Energy and Power (4)
- BIE 3111—Manufacturing (3)
- BIE 3112—Construction (3)
- BIE 3121—Graphic Communication (3)
- BIE 3131—Industrial Power Systems (3)
- BIE 3132—Industrial Electronics (3)
- BIE 3140—Transportation Systems (3)

**Advanced Technology Content—18 credits**

- BIE 3150—Technical Development: Advanced (1-12 [18 max])
- BIE 5150—Technical Development: Specialized (1-12 [18 max])

Focus 2: Students in the vocational-industrial focus may meet the technology requirements by completing at least 8 credits of technology courses selected with adviser approval and may receive up to 45 credits for technical work experience with adviser approval.

Focus 3: Students planning to specialize in industrial training may fulfill the technology content requirement by completing an 18-credit block of adviser-approved courses in the area of specialization and may receive up to 27 credits for technical work experience. In place of technical work experience, industrial training students may complete additional approved industrial education coursework that develops technical competence.

**Professional Education Requirements for All Students**

- BIE 1300—Introduction to Industrial Education Teaching (2)  
or BIE 1301—Introduction to Vocational-Technical Teaching (3)
- BIE/HRD 5301—Student and Trainee Evaluation Systems (3)
- BIE 5303—Instructional Aids (3)
- BIE 5320—Vocational Guidance (3)  
or BIE 5344—Facilities Management (3)
- BIE 5325—Foundations of Industrial Education (3)
- BIE 5630—Course Development (3)

- BIE/HRD 5660—Instructional Methods (3)
- EPsy 5139—Building a Learning Community (4)
- PubH 5023—Basic Concepts in Personal and Community Health (4)
- WCFE 5800—Educating Persons With Special Learning Needs (3)

**Evidence of current American Red Cross standard first aid and CPR certification**

**FOCUS 2 REQUIREMENTS**

- BIE 1302—Supervised Vocational-Technical Teaching (3)  
  (required for those without teaching experience)
- WCFE 5300—Philosophy and Practice of Vocational Education (3)

**FOCUS 2 AND 3 REQUIREMENTS**

- AdEd 5401—Adult Learning and Development Through the Life Span (3)

**REQUIREMENTS FOR ALL STUDENTS**

- 12 credits in issues, structures, and functions of industry selected in consultation with an adviser
- Electives to complete the 186 credits required for a B.S. degree.

**FAMILY EDUCATION MINOR**

While secondary school licensure in family education is not available at the undergraduate level, students in the Colleges of Human Ecology and Liberal Arts, Inter-College Program, and University College can choose a minor in family education (18-20 credits). Students develop the ability to plan, deliver, and evaluate family education programs in work and community settings. Courses taken in this minor may be applied toward a parent educator license. Applicants are encouraged to seek prerequisite advising.

**UNDERGRADUATE FOCUS IN HUMAN RESOURCES DEVELOPMENT**

The department offers a focus at the undergraduate level (as well as continuing education and master’s degree levels) in human resource development, which includes training and organization development. Students pursuing a degree in any of the department’s major fields may also fulfill a human resource development focus by completing the following courses in addition to or as a part of their major requirements.

- HRD 5750—Personnel Training and Development (4)
- HRD 5760—Organization Development (4)
- HRD 5780—Internship: Human Resource Development (6)

Other HRD courses to complete 20 credits, to be selected in consultation with human resource development adviser.
Non-WCFE undergraduates include WCFE instructional methods and curriculum development courses to complete their 20 credits. A human resource development professional certificate is awarded to majors and nonmajors completing these requirements.

ADVANCED STUDY

M.ED./INITIAL LICENSURE PROGRAMS

AGRICULTURAL EDUCATION — This program prepares individuals to teach agricultural production systems, horticulture, natural resources, environmental education, forestry, agribusiness, agrimechanics, agriscience, agrimarketing, or food systems at the secondary or postsecondary and adult levels. The program offers students the unique opportunity to become licensed as agricultural education teachers while working toward their M.Ed. degree. This program is for students who have a bachelor’s degree (e.g., in agricultural economics, plant and animal science, soil science, horticulture, natural resources, soil and water resource management, agricultural industry and marketing, animal and plant systems, science in agriculture, agribusiness management, agricultural engineering, or food science) and a variety of professional and educational backgrounds. Students • may enroll any quarter and complete the licensing program over a 12- to 15-month period.
• complete a clinical experience in which they apply theories and methods in the classroom.
• are licensed to teach after completing the program’s licensing requirements and can begin their teaching career immediately, provided they have the work experience required for licensure.

M.Ed./initial licensure applicants are admitted to the agricultural education program based on the following.
• Completion of at least 50 credits in agriculture and at least 30 credits in biological and physical sciences.
• A bachelor’s degree with a 2.80 minimum overall GPA.
• A summary of work or volunteer experience with K-12 students, including those of diverse cultures and special populations, preferably in a school setting.
• Two references who can address questions about the applicant’s education-related experience, work style, and personal attributes.
• Completion of an admission essay and personal data form.
• A personal interview with an agricultural education and extension adviser.
• Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476).

LICENSED
To teach agriculture in Minnesota, students need • verification of 2,000 hours of work experience in production agriculture and agribusiness.
• completion of the program’s licensing requirements.
• minimum scores on the Praxis I: Pre-Professional Skills Tests (PPST).

PROGRAM COMPONENTS

Students may begin courses whenever their schedules permit. After completing the one-year core they are recommended for licensure. Students then have the option of working toward an M.Ed. by enrolling in the second year of the program while employed as teachers.

SUGGESTED PROGRAM OF STUDY

The following program is recommended for students who want to study full time. The first year focuses on completing teacher licensure requirements within 12 months.

Summer Session II
Praxis I: Pre-Professional Skills Tests (PPST)
WCFE 5601—Teaching Internship: Introduction (2)

Fall Quarter
AgEd 5028—Teaching Methods in Agricultural Education (5)
AgEd 5042—Agricultural Mechanics (3)
AgEd 5049—Agricultural Education for Adults (3)
EPsy 5119—Learning and Cognitive Foundations of Education (4)
WCFE 5602—Teaching Internship: School Setting (2)

Winter Quarter
AgEd 5061—Program Planning and Evaluation (3)
EPsy 5139—Building a Learning Community (4)
EPsy 5229—Classroom Assessment Methods (2)
WCFE 5603—Teaching Internship: Classroom Setting (2)
WCFE 5300—Philosophy of Vocational Education (3)
WCFE 5330—Coordination Techniques in Cooperative Education (3)

Spring Quarter
AgEd 5041—Workshop: Agricultural Technology (4)
AgEd 5072—Practicum: Agricultural Business and Industry (3)
WCFE 5604—Teaching Internship (8)

Summer Session I
EdPA 5090—School and Society (3)
Kin 5530—Biological and Physical Foundations of Education (2)
PubH 5023*—Basic Concepts in Personal and Community Health (4)

* Does not count toward M.Ed.
AgEd 5081—Current Issues for the Beginning Agriculture Teacher (3)
AgEd 5095—Integrating Paper: Master of Education (3)
Six additional AgEd credits and final written and oral examinations

An extended program of study is recommended for those students wanting to study part time. Students may start the program any quarter.

BUSINESS AND INDUSTRY EDUCATION
M.Ed./initial licensure programs are offered in business and marketing education and industrial education.

BUSINESS AND MARKETING EDUCATION—This program is for individuals who have bachelor's degrees with a business or marketing major who want to become licensed teachers. Each person admitted to this licensure program is also admitted to an M.Ed. program. Students have two choices. They may prepare to teach in secondary business positions that require a standard licensure, or prepare to teach in secondary or postsecondary sales and marketing positions that require a vocational licensure. Through this program, students integrate educational theory with classroom practice. They may attend full or part time.

M.Ed./initial licensure applicants are admitted to the business and marketing education program based on the following:
• In-depth knowledge of business and marketing. Applicants should have completed coursework in economics, business communications, and each of the foundation areas of business: accounting, business organization and management, marketing, business law, industrial relations or personnel, information systems, international business, and entrepreneurship.
• A bachelor's degree earned at an accredited institution with a business or marketing major (e.g., accounting, business administration, office systems management, marketing, retail management, hospitality management) with a 2.80 minimum overall GPA
• A summary of work or volunteer experience with secondary or postsecondary students, including those of diverse cultures and special populations, preferably in a school setting
• Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
• A goal statement addressing why the applicant wants to become a licensed teacher

Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Before completing the program, students must demonstrate competence in specific areas. Business education students must demonstrate competence in advanced keyboarding and microcomputer applications, including word processing, spreadsheets, databases, and business graphics. Marketing education students must demonstrate competence in selling, promotion, pricing, purchasing, marketing, information management, product/service planning, distribution, and financing. Competence may be demonstrated by submitting transcripts verifying prior coursework or by completing appropriate courses identified by the program adviser.

LICENSURE—Candidates successfully completing the required related and major courses in the specified program option and scoring at or above the minimum level on the Praxis I: Pre-Professional Skills Tests (PPST) are recommended for licensure. For business education, the recommendation is for a Minnesota standard teaching license in business education. For marketing education, the recommendation is for a Minnesota vocational teaching license in marketing education. Licensing in both business and marketing education is possible by completing prerequisites and coursework for both options. Interested students should consult with an adviser.

VOCATIONAL LICENSURE—One of the Minnesota state requirements for a vocational teaching license is occupational experience relating to the teaching field. At the time of the license application, candidates are asked to verify related occupational experience sufficient to meet current licensure requirements. Information about related occupational experience requirements may be obtained from a major program adviser.

Minnesota requires vocational licensure to teach in certain business vocational programs at the secondary and postsecondary levels. Information about these special licensure requirements may be obtained from a major program adviser.

Note: Business and marketing education courses are listed under the designator BIE (business and industry education) in the course descriptions section of this bulletin.

FOUNDATION COURSES FOR BUSINESS EDUCATION AND MARKETING EDUCATION (21 credits)
CI 5300—Technology for Teaching and Learning (2)
EPsy 5119—Learning and Cognitive Foundations of Education (4)
**ACADEMIC DEPARTMENTS**

**WORK, COMMUNITY, AND FAMILY EDUCATION**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EPsy 5139</td>
<td>Building a Learning Community</td>
<td>4</td>
</tr>
<tr>
<td>EPsy 5229</td>
<td>Classroom Assessment Methods</td>
<td>2</td>
</tr>
<tr>
<td>EdPA 5090</td>
<td>School and Society</td>
<td>3</td>
</tr>
<tr>
<td>Kin 5530</td>
<td>Biological and Physical Foundations of Education</td>
<td>2</td>
</tr>
<tr>
<td>PubH 5023*</td>
<td>Personal and Community Health</td>
<td>4</td>
</tr>
</tbody>
</table>

* Does not count toward M.Ed.

**Major Courses for Business Education** (36 credits)

- **BIE 5400** — Introduction to Business and Marketing Education (4)
- **BIE 5452** — Methods of Teaching Business Concepts (4)
- **BIE 5457** — Methods of Teaching for Business Employment (4)
- **BIE 5463** — Teaching Keyboarding and Word Processing (3)
- **BIE 5630** — Course Development (3)
- **WCFE 5601** — Teaching Internship: Introduction (2)
- **WCFE 5602** — Teaching Internship: School Setting (2)
- **WCFE 5603** — Teaching Internship: Classroom Setting (2)
- **WCFE 5604** — Teaching Internship (12)

**Courses for Optional Vocational Licensing in Business Education**

- **WCFE 5300** — Philosophy and Practice of Vocational Education (3)*
- **WCFE 5310** — Advising Vocational Student Organizations (2)**
- **WCFE 5330** — Coordination Techniques in Cooperative Education (3)**

* Required course for vocational licensing in business education
** Required course for cooperative education program licensure endorsement

**Major Courses for Marketing Education** (41 credits)

- **BIE 5400** — Introduction to Business and Marketing Education (4)
- **BIE 5452** — Methods of Teaching Business Concepts (4)
- **BIE 5457** — Methods of Teaching for Business Employment (4)
- **BIE 5630** — Course Development (3)
- **WCFE 5300** — Philosophy and Practice of Vocational Education (3)
- **WCFE 5310** — Advising Vocational Student Organizations (2)
- **WCFE 5330** — Coordination Techniques in Cooperative Education (3)
- **WCFE 5601** — Teaching Internship: Introduction (2)
- **WCFE 5602** — Teaching Internship: School Setting (2)
- **WCFE 5603** — Teaching Internship: Classroom Setting (2)
- **WCFE 5604** — Teaching Internship (12)

**Additional Courses to Complete M.Ed.** (12 credits)

- **BIE 5605** — Critical Issues (3)
- **BIE 5700** — Field-Based Projects (6)
- **WCFE 5900** — Using Work, Community, and Family Education Research (3)

Students should apply for the degree before completion and must complete the majority of prerequisite, related, and major coursework before enrolling in the teaching internship.

**INDUSTRIAL EDUCATION** — This program prepares individuals with bachelor's degrees to become licensed teachers for grades 5-12. M.Ed./initial licensure applicants are admitted to the industrial education program based on the following.

- Completion of prerequisite coursework; applicants must make up any deficiencies in undergraduate work using the B.S. in industrial education as the standard (see description in this bulletin)
- A bachelor's degree from an accredited institution with a 2.80 minimum overall GPA
- A summary of work or volunteer experience with students in grades 5-12, including those of diverse cultures and special populations, preferably in a school setting
- Two references who can address questions about the applicant's education-related experience, work style, and personal attributes
- A goal statement addressing why the applicant wants to become a licensed teacher
- Completion of the Praxis I: Pre-Professional Skills Tests (PPST); test information is available from the Educational Testing Service (800/772-9476)

Note: Industrial education courses are listed under the designator BIE (business and industry education) in the course description section of this bulletin.

**Foundations of Industrial Education**

- **BIE 5325** — Foundations of Industrial Education (3)

**Industrial Education Pedagogical Studies**

- **BIE 5365** — Curriculum Development in Technology Education (4)
- **BIE 5630** — Course Development (3)
- **BIE/HRD 5301** — Student and Trainee Evaluation Systems (3)
- **BIE/HRD 5660** — Instructional Methods (3)

**Foundation Courses**

- **CI 5300** — Technology for Teaching and Learning (2)
- **EdPA 5090** — School and Society (3)
- **EPsy 5119** — Learning and Cognitive Foundations of Education (4)
- **EPsy 5139** — Building a Learning Community (4)
- **EPsy 5229** — Classroom Assessment Methods (2)
- **Kin 5530** — Biological and Physical Foundations of Education (2)
- **PubH 5023** — Basic Concepts in Personal and Community Health (4)

* Does not count toward M.Ed.
Clinical Experience
Students must complete foundation courses before taking clinical experience courses.
WCFE 5601—Teaching Internship: Introduction (2)
WCFE 5602—Teaching Internship: School Setting (2)
WCFE 5603—Teaching Internship: Classroom Setting (2)
WCFE 5604—Teaching Internship (12)

Technical and Liberal Education Requirements
Students must complete the 53 technical content credits specified in the general industrial education (pre-industrial technology education) focus of the industrial education undergraduate program. These credits may be completed before or after admission to the M.Ed./initial licensure program. Students must also complete the liberal education courses required for industrial education licensure if that coursework was not completed as a part of undergraduate work. Consult an industrial education adviser for information about these requirements.

Additional Courses
Students should apply for degree before completion.
BIE 5605—Critical Issues (3)
BIE 5700—Field-Based Projects (6-12)
WCFE 5900—Using Work, Community, and Family Education Research (3) or equivalent

Family Education Courses
WCFE 5601—Teaching Internship: Introduction (2)
WCFE 5602—Teaching Internship: School Setting (2)
WCFE 5603—Teaching Internship: Classroom Setting (2)
WCFE 5604—Teaching Internship (12)

M.Ed./In-Service Programs
M.Ed./in-service programs are offered in adult education; agricultural education; business and industry education; family education; and work, community, and family education.
Applicants must have a 2.80 GPA in the undergraduate major and provide a one-page goal statement and a résumé. Admission also depends on availability of advising and teaching resources.
To be applied to an M.Ed., courses must be 5xxx or above and approved by an M.Ed. adviser. Credits applied to the M.Ed. must be completed after earning the bachelor's degree. At least 60 percent of the coursework must be completed after admission to the M.Ed. program. A maximum of 33 percent of program courses may be graded S-N but major courses must be taken A-F. Degree requirements must be completed within seven years.

ADULT EDUCATION—Students can prepare for roles in a wide variety of institutions, organizations, and agencies that offer training and education for adults. Students may develop programs in the general area of adult education or focus on adult literacy education, community education,
continuing education of the professional, continuing education of older adults, or training and development.

An M.Ed. program in adult education is available for those who design, administer, and evaluate educational activities for adults as well as those who teach adults. This Plan II degree program is specifically for persons not required to have teaching licensure as a condition of employment.

**Course Requirements (45 credits minimum)**


AdEd 5205—Field Experience in Adult Education (4-8)

AdEd 5301—Designing the Adult Education Program (3)

AdEd 5401—Adult Learning and Development Through the Life Span (3)

AdEd 5411—Strategies for Teaching Adults (3)

HRD 5760—Organization Development (3-4)

WCFE 5900—Using Work, Community, and Family Education Research (3)

6 credits from outside the department

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


AdEd 5301—Designing the Adult Education Program (3)

AdEd 5401—Adult Learning and Development Through the Life Span (3)

AdEd 5411—Strategies for Teaching Adults (3)

EdPA 5603—International Education and Development (3)

**Literacy Coursework (9 credits minimum)**

AdEd 5201—Introduction to the Undereducated Adult (3)

AdEd 5202—Adult Literacy: Diagnosis and Prescription (3)

AdEd 5203—Adult Literacy: Methods and Materials (3)

AdEd 5204—Literacy in Work Settings (3)

Three credits minimum from

EPsy 5115—Psychology of Adult Learners (3)

EPsy 5433—Developmental Career Counseling of Women (3)

EPsy 5434—Counseling Adults in Transition (3)

EPsy 5461—Cross-Cultural Counseling (3)

**Field Experience**

8 credits of structured field experience, including at least 4 credits of observation in multicultural settings and 4 credits of teaching adults (if you have less than 180 hours experience teaching adults)

**Additional Requirements**

- **Praxis I:** Pre-Professional Skills Tests (PPST)
- **EPsy 5135:** Workshop in Human Relations (2-6)
- **or a course approved by the State Department of Children, Families, and Learning (a list of approved courses is available from that department)**
- **PubH 3003** or PubH 5003—Fundamentals of Developmental Career Counseling (2)

For more information, contact Rosemarie J. Park, 325L Vocational and Technical Education Building, 1954 Buford Avenue, St. Paul, MN 55108 (612/625-6267).

**Business and Industry Education**

The M.Ed. in business and industry education is a practitioner-based program that can be tailored to meet individual needs. Students may specialize in either business and marketing education or industrial education.

Students specializing in business and marketing education select a program of study emphasizing one of the following:

- advanced professional study for licensed teachers
- preparation for occupations in business and marketing (e.g., midmanagement, entrepreneurship)
Students specializing in industrial education select a program of study emphasizing one of the following:

• industrial technology education
• vocational-industrial education (e.g., for current or prospective technical college or secondary vocational instructors)
• industrial training

In consultation with an adviser, students choose 45 quarter credits of work that may include coursework, seminars, independent study, workshops, school-based experiences, and an integrative paper. Credits are divided among four categories: foundations, specialization, research, and electives. At least 15 credits must be in business and industry education. A 2.80 GPA is required for graduation.

**Foundation Courses**

BIE 5325—Foundations of Industrial Education (3) and BIE 5605—Critical Issues (3)

or BIE 5400—Introduction to Business and Marketing Education (4)

(6 credits of other BIE courses must be taken if these requirements have already been completed)

**Research Courses**

BIE 5700—Field-Based Project (6) and WCFE 5900—Using Work, Community, and Family Education Research (3) or equivalent

or BIE 5500—Occupational Experience (6)

or HRD 5780—Internship: Human Resource Development (6) (selected with adviser approval)

**Specialization Courses**

Minimum of 15 credits of 5xxx courses consistent with the student's focus area, to be chosen in consultation with an adviser. Note: Six credits of business and industry education instructional courses in areas such as course development, course delivery, or student assessment are required if the undergraduate degree is not in business and industry education or a related area.

**Electives**

Selected in consultation with an adviser.

**Course Requirements—Plans I and II**

(45 credits minimum)

18 credits in family education

6 credits from CEHD outside of family education

15 credits from the College of Human Ecology

6 credits of adviser-approved electives

An oral examination is required.

For information about courses that qualify individuals for family education endorsement or parent educator licensure, contact the family education coordinator, 325 Vocational and Technical Education Building, 1954 Buford Avenue, St. Paul, MN 55108 (612/624-3010).

**FAMILY EDUCATION**

The family education program offers two M.Ed./in-service plans that develop and strengthen professionals' competencies to work with individuals and families to improve family life. Plan I is for licensed teachers who want to further develop their competencies. Requirements for the family education endorsement may be met as part of this degree. Plan II is for nonlicensed professionals who work or want to work with adults, youth, or children in a nonsecondary school setting. Requirements for a parent educator license may be met as part of either Plan I or II.

Students may be admitted any quarter. Admissions requirements include

• Bachelor's degree in an area related to family and consumer sciences
• 2.80 minimum GPA in undergraduate coursework

**Course Requirements—Plans I and II**

Minimum of 18 credits in Plan I and 24 credits in Plan II in WCFE courses. Course requirements vary by specialization. A maximum of 9 credits in field-based projects, problems courses, independent study, and internships may be used in the program.

**COMPREHENSIVE WORK, COMMUNITY, AND FAMILY EDUCATION**

Two options are available. Plan I is for educators seeking licensure in school and college systems. Plan II is for educators seeking professional roles in other settings.

**Course Requirements for Plan I**

WCFE 5200—Program Evaluation (3)

WCFE 5300—Philosophy and Practice of Vocational Education (3)

or WCFE 5400—Education for Work (3)

WCFE 5600—Planning Vocational Education (3)

WCFE 5900—Using Work, Community, and Family Education Research (3)

WCFE 5920—Independent Study (6)

12 credits in WCFE courses

**Course Requirements for Plan II**

All Plan I requirements plus 6 additional credits in WCFE courses for a total of 18 credits. At least one methods of instruction course is required.
EXTENSION EDUCATION
For individuals employed by the Minnesota Extension Service or a similar organization.

Course Requirements
WCFE 5024—Extension History (3)
or WCFE 5300—Philosophy and Practice of Vocational Education (3)
or WCFE 5400—Education for Work (3)
WCFE 5900—Using Work, Community, and Family Education Research (3)
WCFE 5920—Independent Study (6)
12 credits from 3 of the following: administration, educational methods, evaluation, and program development
6 credits from outside the department

HUMAN RESOURCE DEVELOPMENT
For individuals employed in or consulting for human resource development in business and industry or other organizations.

Course Requirements
34 credits in Human Resource Development (HRD) and Adult Education (AdEd), including
AdEd 5411—Strategies for Teaching Adults (3)
HRD 5750—Personnel Training and Development (4)
HRD 5760—Organization Development (4)
HRD 5780—Internship: Human Resource Development (1-8; 6 credits are required and no more than 6 credits count toward the program)
HRD 5790—Strategic Planning in Human Resource Development (4)
WCFE 5900—Using Work, Community, and Family Education Research (3)
6 credits from outside the department

INTERNATIONAL VOCATIONAL EDUCATION AND TRAINING
Prepares educators to administer international vocational education and training programs.

Course Requirements
WCFE 5300—Philosophy and Practice of Vocational Education (3)
or WCFE 5400—Education for Work (3)
WCFE 5900—Using Work, Community, and Family Education Research (3)
WCFE 5920—Independent Study (6)
18 credits, including 10 credits minimum from
AgEd/WCFE 5023—Extension Methods in Developing Countries (3)
AgEd 5055—Methods in Farming Systems Research and Extension (3)
HRD 5781—International Field Study in Human Resource Development (4)
HRD 5793—International Human Resource Development (4)

VOCATIONAL EDUCATION ADMINISTRATION
Includes two plans for individuals in administrative roles in work, community, and family education settings.

Course Requirements for Plan I
CI 5160—Supervision of Elementary, Secondary, and Postsecondary Instruction (3)
WCFE 5200—Program Evaluation (3)
WCFE 5300—Philosophy and Practice of Vocational Education (3)
or WCFE 5400—Education for Work (3) or another WCFE course in philosophy, issues, or problems (3)
WCFE 5340—Principles of Supervisory Management (3)
WCFE 5500—Introduction to Vocational Education Administration (3)
WCFE 5600—Planning Vocational Education (3)
WCFE 5900—Using Work, Community, and Family Education Research (3)
WCFE 5920—Independent Study (6)
Three-credit or more WCFE course in methods of instruction, curriculum design or development, or instructional assessment or evaluation

Course Requirements for Plan II
All Plan I requirements except CI 5160

VOCATIONAL SPECIAL NEEDS
Includes two plans for those who work with special populations. Plan I is for individuals with or seeking vocational special needs licensure. Plan II is for individuals who work in other settings.

Course Requirements for Plan I
WCFE 5300—Philosophy and Practice of Vocational Education (3)
or WCFE 5400—Education for Work (3)
WCFE 5800—Educating Persons with Special Learning Needs (3)
WCFE 5806—Interagency Collaboration for At-Risk Populations (3)
Three credits from
WCFE 5808—Diversity Issues and Practices (3)
or AdEd 5201—Introduction to the Undereducated Adult (3)
or AdEd 5204—Literacy in Work Settings (3)
WCFE 5900—Using Work, Community, and Family Education Research (3)
WCFE 5920—Independent Study (6)
18 credits focused on vocational special needs

Course Requirements for Plan II
Same as Plan I, except that substitution for licensure courses is possible; contact an adviser for more information.
YOUTH DEVELOPMENT LEADERSHIP—This M.Ed., offered jointly with the Department of Educational Policy and Administration, is for those who work with youth in public or private organizations committed to healthy youth development. Students participate as part of a cohort that begins each fall quarter. In addition to meeting program admissions requirements, applicants must have a minimum of two years of experience working with youth and work at least eight hours per week in a youth-serving agency during the program. Students must participate in an ongoing seminar that meets twice each academic term.

**Course Requirements**

WCFE 5410—Experiential Learning: Theory and Practice (3)
WCFE 5420/YS 5100—Youth in the World (3)
WCFE 5430/EdPA 5430—Organizational Approaches to Youth Development (3)
WCFE 5440—Issues: Youth Development in Work, Family, and Community (3)
WCFE 5490/EdPA 5490—Seminar: Youth Development (1-6 Internship
Electives to complete 45 credits, from outside the department

**CERTIFICATE PROGRAMS**

**CERTIFICATE IN HUMAN RESOURCES DEVELOPMENT**—A professional certificate is awarded to adult special students who complete a minimum of 20 credits, including the course requirements listed under the undergraduate focus in human resource development.

**CERTIFICATE IN CONTINUOUS QUALITY IMPROVEMENT**—A professional certificate in continuous quality improvement is offered in conjunction with the Institute of Technology and Carlson School of Management.

**Course Requirements**

Two from

HRD 5795—Human Resource Development Approaches to Quality Improvement (4)
IEOR 5030—Quality Control and Reliability (4)
OMS 3059—Quality Management (4)
OMS 5155—Methods for Quality and Productivity Improvement (4)
OMS 8059—Quality Management (4)

Four courses from the following four areas, with at least one course in each of three of the four areas.

**Statistics**

EPsy 5260—Introductory Statistical Methods (4)
EPsy 8260, 8261, 8262—Statistical Methods (3 each)
EPsy 8263—Design and Analysis of Experiments (3)
IDSc 5055—Statistical Methods for Quality and Productivity Improvement (4)
IEOR 5550, 5551—Design and Analysis of Experiments (4 each)

**Cognitive Psychology**

CgSc 8000—Philosophy of Cognitive Science (4)
CgSc 8001—Proseminar in Cognitive Science (1 each qtr for 3 qtrs)
IDSc 5998—Special Topics: Managerial Decision Making and Policy Formulation (4)
IDSc 8503—Cognitive Science Research and Theory in the Information and Decision Sciences (4)
IDSc 8702—Behavioral Decision Theory (4)
Phil 5609—Philosophy of Science: Philosophical Issues of Perception and Cognition (4)
Psy 5014—Psychology of Human Learning and Memory (4)
Psy 5015—Advanced Learning and Cognitive Processing (4)
Psy 8201—Social Cognition (3)
Soc 5701—Analytical Social Theory (4)

**Systems Theory**

CE 5700—Systems Analysis (4)
IDSc 5998—Special Topics: Managerial Decision Making and Policy Formulation (4)
IEOR 5445—Topics In Management Science: System Dynamics (4)

**Organizational Behavior**

EPsy 8151—Organizational Development and Change (4)
HRD 5760—Organization Development (4)
IR 8004—Organization Theory and Analysis (4)
Mgmt 8012—Organizational Behavior and Management Analysis (4)
Pol 5704—Organizational Theory and Behavior (4)

**MASTER’S AND DOCTORAL PROGRAMS**

The Graduate School also offers M.A. and Ph.D. programs with a major in education with emphasis in work, family, and community education and Ed.D. programs with a major in work, family, and community education. The Ph.D. program is for individuals preparing for positions requiring research. In contrast, the Ed.D. program prepares individuals for positions requiring research application. Specializations within the doctoral programs include adult education; agricultural education; business and marketing education; comprehensive work, community, and family education; extension education; family education; human resource development; industrial education; and international vocational education and training. The M.A. program includes these specializations as well as vocational educational administration and vocational special needs. For more information, see the Graduate School Bulletin.