

## School of Education

### Teacher Education (EDUC)

Rigoni (chair), Brownstein, Hunter, Nistler, Payne, Reif, Smith, Taylor, Warring

*Note:* The Teacher Education program is presently completing its alignment with state licensure standards. As a result, the actual program requirements may vary slightly from the curricula listed in this catalog. Consult a Teacher Education adviser for the latest information on a particular program.

The University of St. Thomas School of Education offers a full range of undergraduate and graduate elementary/middle level and secondary/middle level teacher licensure programs. These standards-based programs embrace the liberal arts, emphasize ethical practice, and prepare creative, reflective educators dedicated to the success of all learners. They prepare professional educators who can demonstrate appropriate knowledge, skills and dispositions related to:

1. subject matter
2. student learning
3. diverse learners
4. instructional strategies
5. learning environments
6. communication
7. planning for instruction
8. assessment of learning
9. reflection, scholarship, and continuous professional development
10. collaboration, ethics, and relationships

Students who are recommended for licensure through the St. Thomas Teacher Education Department are part of a tradition that goes back over three-quarters of a century. Programs are fully accredited by the National Council for the Accreditation of Teacher Education (NCATE) and the North Central Association of Colleges and Secondary Schools and are designed to meet or exceed Minnesota State Board of Teaching licensure requirements.

Because of the number of required courses and the options available, it is suggested that students considering an education degree contact a department adviser as early as possible in their college career. Recent state licensure rule changes make careful planning particularly important. Handbooks and School of Education catalog supplements outline specific departmental policies and are available in the Teacher Education Department office in Opus Hall.

#### Admission to the Program

Students normally begin their application for admission to the Teacher Education program during their sophomore year, while enrolled in *Block I* (EDUC 210 and 212). Candidates typically complete their application during *Block II* (EDUC 330). Criteria for admission to the education program include:

- cumulative grade point of 2.75 or above;
- positive recommendations from major/co-major adviser, education adviser, and interview team;
- evidence of a positive initial clinical experience;
- completion of the Praxis I – Pre-Professional Basic Skills Test (PPST)

Persons seeking licensure to teach in the state of Minnesota must complete all three components (reading, writing, and mathematics) of the PPST prior to program admission. Students must pass all three components in order to apply for licensure in the State of Minnesota. Contact the department office in Opus Hall for information about test dates and fees.

#### Retention in the Program

Students accepted into the department must maintain a cumulative grade point average of 2.75 and must demonstrate appropriate progress on all required licensure standards in order to be placed for student teaching and recommended for licensure. The department reserves the right to dismiss candidates from the licensure programs based on unprofessional actions or unsatisfactory progress toward meeting state mandated licensure standards.

All courses completed in fulfillment of licensure requirements must have an earned grade of C or better.

#### Program Sequence

##### Elementary (K-6) and Specialist (5-8 or K-8) Licensure

*Block I* – EDUC 210, 211, 212 (concurrent registrations recommended)

*Block II* – EDUC 330, 331, 350 (concurrent registrations recommended)

*Block III* – EDUC 369, 370, 371, 372, 373, 374 (concurrent registrations required)

*Block IV* – EDUC 456, 460, 461 (concurrent registrations required)

##### Secondary/Middle Level (5-12) Licensure and K-12 Licensure

*Block I* – EDUC 210, 211, 212 (concurrent registrations recommended)

*Block II* – EDUC 330, 331

*Block III* – EDUC 380 and 383, or 381 and 382 and 383 (concurrent registrations required)

*Block IV* – EDUC 456, 460, 461 (concurrent registrations required)

**Program Options**

*Plan A*

Elementary/middle level and secondary/middle level education students who complete program requirements and graduate within four years follow *Plan A*.

*Plan B*

Teacher education students who find it difficult to complete their education program in four years may opt for *Plan B*. This allows students to complete licensure at the graduate level after completing their undergraduate degree. Students who seek the *Plan B* option should consult with the department chair at least one semester prior to graduation. Students must be fully admitted to the undergraduate Department of Teacher Education prior to application for *Plan B*. This is not an option for students with majors that do not stand alone, such as physical education, social studies, and SMEE.

**Teacher Licensure in Elementary (K-6) with a Specialty (5-8 or K-8)**

Licensure at the elementary/middle level includes a generalist (K-6) component plus an accompanying middle level specialty (5-8 or K-8) in at least one of the following subject areas:

- Middle Level Communication Arts and Literature (5-8)
- Middle Level Mathematics (5-8)
- Middle Level Science (5-8)
- Middle Level Social Studies (5-8)
- Middle Level World Languages and Cultures (K-8)

**Major in Elementary Education with a 5-8 Specialty in Communication Arts and Literature**

*Block I*

- EDUC 210 Education's Place in Society
- EDUC 211 Field Experience: Introductory (K-12) (0 credit)
- EDUC 212 Human Relations and Multicultural Education

*Block II*

- EDUC 330 Psychology for Teaching and Learning
- EDUC 331 Field Experience: Middle Level (5-8) (0 credit)
- EDUC 350 Language Development, Literacy, and Literature I

*Block III*

- EDUC 369 Field Experience: Primary level (K-4) (0 credit)
- EDUC 370 Language Development, Literacy, and Literature II
- EDUC 371 Teaching Mathematics and Technology
- EDUC 372 Teaching Science and Healthy, Active Living
- EDUC 373 Teaching Social Studies and Fine Arts
- EDUC 374 Seminar in Middle Level Specialty Area (0 credit)

*Block IV*

- EDUC 456 Inclusive School Communities (2 credits)
- EDUC 460 Student Teaching and Seminar (6 credits)
- EDUC 461 The Teacher as Educational Advocate

*Plus:*

- ENGL 111 Critical Reading and Writing I: Fiction and Nonfiction Prose
- ENGL 112 Critical Reading and Writing II: Drama and Poetry

*Note:* Qualified students may substitute 190 plus an additional upper-level course for 111 and 112

*Plus eight credits from two of the following categories:*

- ENGL 211 or 212 British Authors I or II
- ENGL 214 or 215 American Authors I or II
- ENGL 220 or 221 The Classical Tradition or The Modern Tradition
- ENGL 217 or 218 Multicultural Literature or Literature by Women: Critical History

*Plus:*

- MATH 100 Mathematical Sampler
- MATH 121 Structures of Elementary Mathematics

*Plus:*

Two laboratory sciences (one each chosen from two different fields)

*or*

IDSC 150 and one recommended additional lab science

*Plus:*

A second major (which may incorporate courses from the middle level concentration requirements)  
Demonstrated competence on all required state standards

## School of Education

### Major in Elementary Education with a 5-8 Specialty in Mathematics

#### Block I

- EDUC 210 Education's Place in Society  
EDUC 211 Field Experience: Introductory (K-12) (0 credit)  
EDUC 212 Human Relations and Multicultural Education

#### Block II

- EDUC 330 Psychology for Teaching and Learning  
EDUC 331 Field Experience: Middle Level (5-8) (0 credit)  
EDUC 350 Language Development, Literacy, and Literature I

#### Block III

- EDUC 369 Field Experience: Primary Level (K-4) (0 credit)  
EDUC 370 Language Development, Literacy, and Literature II  
EDUC 371 Teaching Mathematics and Technology  
EDUC 372 Teaching Science and Healthy, Active Living  
EDUC 373 Teaching Social Studies and Fine Arts  
EDUC 374 Seminar in Middle Level Specialty Area (0 credit)

#### Block IV

- EDUC 456 Inclusive School Communities (2 credits)  
EDUC 460 Student Teaching and Seminar (6 credits)  
EDUC 461 The Teacher as Educational Advocate

#### Plus:

- MATH 100 Mathematical Sampler  
MATH 113 Calculus I  
MATH 121 Structures of Elementary Mathematics  
MATH 128 Introduction to Discrete Mathematics

#### Plus:

- MATH 259 Elements of Geometry and Statistics

or

- MATH 325 Geometry and QMCS 220 Statistics I

#### Plus:

Two laboratory sciences (one each chosen from two different fields)

or

IDSC 150 and one recommended additional lab science

#### Plus:

A second major (which may incorporate courses from the middle level concentration requirements)

*Note:* The co-major in Science and Mathematics for Elementary Education (SMEE) is designed to fill this need.

Demonstrated competence on all required state standards

### Co-Major in Science and Mathematics for Elementary Education (SMEE)

Werness (QMCS) (director), Verhoeven (BIOL), Hartshorn (CHEM), Lamb (GEOL), Kemper (MATH), Tommet (PHYS)

This major provides an integrated background in science and mathematics appropriate for individuals who will teach in the elementary grades. The SMEE major was designed as a co-major along with elementary education and should be considered by students planning to pursue a degree in elementary education who wish to emphasize science and mathematics. Students should contact the program director, the Department of Teacher Education, or members of program faculty for further information on this major. SMEE is only available as a co-major for those students also majoring in elementary education. The SMEE co-major fulfills the Middle Level Specialty (5-8) in Science.

#### Block I

- EDUC 210 Education's Place in Society  
EDUC 211 Field Experience: Introductory (K-12) (0 credit)  
EDUC 212 Human Relations and Multicultural Education

#### Block II

- EDUC 330 Psychology for Teaching and Learning  
EDUC 331 Field Experience: Middle level (5-8) (0 credit)  
EDUC 350 Language Development, Literacy, and Literature I

#### Block III

- EDUC 369 Field Experience: Primary Level (K-4) (0 credit)  
EDUC 370 Language Development, Literacy, and Literature II  
EDUC 371 Teaching Mathematics and Technology

## Teacher Education

- EDUC 372 Teaching Science and Healthy, Active Living  
EDUC 373 Teaching Social Studies and Fine Arts  
EDUC 374 Seminar in Middle Level Specialty Area (0 credit)

### *Block IV*

- EDUC 456 Inclusive School Communities (2 credits)  
EDUC 460 Student Teaching and Seminar (6 credits)  
EDUC 461 The Teacher as Educational Advocate

### *Plus SMEE co-major requirements:*

- GEOL 111 Introductory Physical Geology or one of GEOL 110, 113, 114, 115  
MATH 100 Mathematical Sampler  
MATH 121 Structures of Elementary Mathematics  
QMCS 120 Computers in Elementary Education and LOGO  
SMEE 181 Science Seminar (0 credit)  
SMEE 182 Science Seminar (0 credit)  
SMEE 359 Integrated Studies in Science and Mathematics

### *Plus either:*

- BIOL 101 General Biology

#### *or the course sequence:*

- BIOL 201 Diversity and Adaptation  
BIOL 202 Genetics and Population Biology  
BIOL 204 Cellular and Molecular Biology

### *Plus either:*

- CHEM 100 Chemistry in Our World

#### *or the course sequence:*

- CHEM 111 General Chemistry I  
CHEM 112 General Chemistry II

### *Plus either:*

- PHYS 101 Physics as a Liberal Art I

#### *or the course sequence:*

- PHYS 109 General Physics I  
PHYS 110 General Physics II

#### *or the course sequence*

- PHYS 111 Introduction to Classical Physics I  
PHYS 112 Introduction to Classical Physics II

### *Plus:*

A *specialization sequence* consists of eight or more additional credits in one department, to be approved by the student's SMEE adviser. These courses will build on the "core courses" above and develop specialized knowledge in one of the areas served by the Division of Science and Mathematics.

### *Plus:*

Demonstrated competence on all required state standards.

### 181 Science Seminar 0 credit

The seminar consists of five one-hour meetings per semester and is offered for SMEE students enrolled in the laboratory science courses. Two semesters of the seminar are required.

### 182 Science Seminar 0 credit

Same as 181. This number is used for the second semester of the seminar.

### 359 Integrated Studies in Science and Mathematics

The capstone course in the SMEE interdisciplinary major. A number of currently important science and mathematics-related topics will be studied in depth, and will emphasize the integration of the natural sciences and mathematics. Consideration will be given to the relevance of the topics to modern society and their potential use in the elementary classroom.

Prerequisites: BIOL 101, CHEM 100, GEOL 111 (or 110, 113, 114, 115), MATH 100 and 121, PHYS 101, QMCS 120. (In certain cases, permission of the adviser may allow a substitution.)

## School of Education

### Major in Elementary Education with a 5-8 Specialty in Science

#### Block I

- EDUC 210 Education's Place in Society  
EDUC 211 Field Experience: Introductory (K-12) (0 credit)  
EDUC 212 Human Relations and Multicultural Education

#### Block II

- EDUC 330 Psychology for Teaching and Learning  
EDUC 331 Field Experience: Middle Level (5-8) (0 credit)  
EDUC 350 Language Development, Literacy, and Literature I

#### Block III

- EDUC 369 Field Experience: Primary Level (K-4) (0 credit)  
EDUC 370 Language Development, Literacy, and Literature II  
EDUC 371 Teaching Mathematics and Technology  
EDUC 372 Teaching Science and Healthy, Active Living  
EDUC 373 Teaching Social Studies and Fine Arts  
EDUC 374 Seminar in Middle Level Specialty Area (0 credit)

#### Block IV

- EDUC 456 Inclusive School Communities (2 credits)  
EDUC 460 Student Teaching and Seminar (6 credits)  
EDUC 461 The Teacher as Educational Advocate

#### Plus:

- GEOL 111 Introductory Physical Geology or one of GEOL 110, 113, 114, 115  
MATH 100 Mathematical Sampler  
MATH 121 Structures of Elementary Mathematics

#### Plus either:

- BIOL 101 General Biology

#### or the course sequence:

- BIOL 201 Diversity and Adaptation  
BIOL 202 Genetics and Population Biology  
BIOL 204 Cellular and Molecular Biology

#### Plus either:

- CHEM 100 Chemistry in Our World

#### or the course sequence:

- CHEM 111 General Chemistry I  
CHEM 112 General Chemistry II

#### Plus either:

- PHYS 101 Physics as a Liberal Art I

#### or the course sequence:

- PHYS 109 General Physics I  
PHYS 110 General Physics II

#### or the course sequence:

- PHYS 111 Introduction to Classical Physics I  
PHYS 112 Introduction to Classical Physics II

#### Plus:

A second major (which may incorporate courses from the middle level concentration requirements)

*Note:* The co-major in Science and Mathematics for Elementary Education (SMEE) is designed to fill this need.

Demonstrated competence on all required state standards

### Major in Elementary Education with a 5-8 Specialty in Social Studies

#### Block I

- EDUC 210 Education's Place in Society  
EDUC 211 Field Experience: Introductory (K-12) (0 credit)  
EDUC 212 Human Relations and Multicultural Education

#### Block II

- EDUC 330 Psychology for Teaching and Learning  
EDUC 331 Field Experience: Middle Level (5-8) (0 credit)  
EDUC 350 Language Development, Literacy, and Literature I

#### Block III

- EDUC 369 Field Experience: Primary Level (K-4)  
EDUC 370 Language Development, Literacy, and Literature II  
EDUC 371 Teaching Mathematics and Technology

## Teacher Education

EDUC 372 Teaching Science and Healthy, Active Living  
EDUC 373 Teaching Social Studies and Fine Arts  
EDUC 374 Seminar in Middle Level Specialty Area (0 credit)

### *Block IV*

EDUC 456 Inclusive School Communities (2 credits)  
EDUC 460 Student Teaching and Seminar (6 credits)  
EDUC 461 The Teacher as Educational Advocate

### *Plus:*

ECON 211 Current Economic Issues  
GEOG 113 World Geography  
HIST 113 Early America in Global Perspective  
MATH 100 Mathematical Sampler  
MATH 121 Structures of Elementary Mathematics  
POL 101 American Government and Politics

### *Plus:*

Two laboratory sciences (one each chosen from two different fields)

*or*

IDSC 150 and one recommended additional lab science

### *Plus:*

A second major (which may incorporate courses from the middle level concentration requirements)  
Demonstrated competence on all required state standards

## **Major in Elementary Education with a K-8 Specialty in World Languages and Cultures**

### *Block I*

EDUC 210 Education's Place in Society  
EDUC 211 Field Experience: Introductory (K-12) (0 credit)  
EDUC 212 Human Relations and Multicultural Education

### *Block II*

EDUC 330 Psychology for Teaching and Learning  
EDUC 331 Field Experience: Middle Level (5-8) (0 credit)  
EDUC 350 Language Development, Literacy, and Literature I

### *Block III*

EDUC 369 Field Experience: Primary Level (K-4) (0 credit)  
EDUC 370 Language Development, Literacy, and Literature II  
EDUC 371 Teaching Mathematics and Technology  
EDUC 372 Teaching Science and Healthy, Active Living  
EDUC 373 Teaching Social Studies and Fine Arts  
EDUC 374 Seminar in Middle Level Specialty Area (0 credit)

### *Block IV*

EDUC 456 Inclusive School Communities (2 credits)  
EDUC 460 Student Teaching and Seminar (6 credits)  
EDUC 461 The Teacher as Educational Advocate

### *Plus:*

Successful completion of a minor or equivalent in one or more of the following languages:

French  
German  
Spanish

### *Plus:*

MATH 100 Mathematical Sampler  
MATH 121 Structures of Elementary Mathematics

### *Plus:*

Two laboratory sciences (one each chosen from two different fields)

*or*

IDSC 150 and one recommended additional lab science

### *Plus:*

A second major (which may incorporate courses from the middle level concentration requirements)  
Demonstrated competence on all required state standards

## School of Education

### Teacher Licensure in Secondary/Middle Level Education

Programs are designed to provide professional preparation for teaching in middle and secondary settings.

Licensure is available in the following areas:

- Communication Arts and Literature (5-12)
- Dance and Theatre Arts with a Theatre Specialization (K-12)
- Health (5-12)
- Mathematics (5-12)
- Music Education
  - Instrumental and Classroom Music (K-12)
  - Vocal and Classroom Music (K-12)
- Physical Education (K-12)
- Science (5-8) plus one of:
  - Chemistry (9-12)
  - Earth and Space Science (9-12)
  - Life Science (9-12)
  - Physics (9-12)
- Social Studies (5-12)
- World Languages and Cultures (K-12)
  - French
  - German
  - Spanish

### Communication Arts and Literature (5-12)

Co-major in Communication Arts and Literature and a Co-major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

#### *Block I*

- EDUC 210 Education's Place in Society
- EDUC 211 Field Experience: Introductory (K-12) (0 credit)
- EDUC 212 Human Relations and Multicultural Education

#### *Block II*

- EDUC 330 Psychology for Teaching and Learning
- EDUC 331 Field Experience: Middle Level (5-8) (0 credit)
- EDUC 345 Adolescent Literature (2 credits)
- EDUC 355 Reading for the 5-12 Teacher

#### *Block III*

- EDUC 381 Curriculum and Methods for Specific Discipline (5-8) (2 credits)
- EDUC 382 Curriculum and Methods for Specific Discipline (9-12) (2 credits)
- EDUC 383 Field Experience: Secondary (9-12) (0 credit)

#### *Block IV*

- EDUC 456 Inclusive School Communities (2 credits)
- EDUC 460 Student Teaching and Seminar (6 credits)
- EDUC 461 The Teacher as Educational Advocate

#### *Plus:*

- COMM 100 Public Speaking
- COMM 120 Communication Theories and Methods
- COMM 140 Rhetorical Criticism
- COMM 160 Electronic Media Production
- COMM 217 Survey of Communication Disorders
- ENGL 111 Critical Reading and Writing I: Fiction and Nonfiction Prose
- ENGL 112 Critical Reading and Writing II: Drama and Poetry

*Note:* Qualified students may substitute 190 plus an additional upper-level course for 111 and 112

- ENGL 300 Theory and Practice of Writing
- ENGL 305 Linguistics: English Language
- ENGL 361 Shakespeare and the Early Modern Period
- ENGL 380 Issues in English Studies

*Plus four credits from each of the following areas:*

- ENGL 211 or 212 British Authors I or II
- ENGL 214 or 215 American Authors I or II
- ENGL 220 or 221 The Classical Tradition or The Modern Tradition
- ENGL 217 or 218 Multicultural Literature or Literature by Women: Critical History

#### *Plus:*

Four additional upper division credits in COMM or ENGL selected in consultation with adviser

*Plus:*

Demonstrated competence on all required state standards

To complete a major in English, the following courses are required:

The "Four additional upper division credits in COMM or ENGL selected in consultation with adviser" would be an upper division ENGL course (COMM 340, 350, or 440 may be substituted)

To complete a major in Communication, the following courses are required:

Twelve additional upper division COMM credits

COMM 480 Capstone Course in Communication

**Dance and Theatre Arts with a Theatre Specialization (K-12)**

Major in Theater and a Co-Major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

*Block I*

EDUC 210 Education's Place in Society

EDUC 211 Field Experience: Introductory (K-12) (0 credit)

EDUC 212 Human Relations and Multicultural Education

*Block II*

EDUC 330 Psychology for Teaching and Learning

EDUC 331 Field Experience: Middle Level (5-8) (0 credit)

*Block III*

EDUC 383 Field Experience: Secondary (9-12)

THR 375 Methods of Teaching Theater and Dance

*Note:* This course substitutes for EDUC 381 and 382

*Block IV*

EDUC 456 Inclusive School Communities (2 credits)

EDUC 460 Student Teaching and Seminar (6 credits)

EDUC 461 The Teacher as Educational Advocate

*Plus:*

THR 105 Stagecraft

THR 214 Beginning Acting

THR 215 Beginning Directing

THR 221 History of Theater I: Classical through 17th Century

THR 222 History of Theater II: 18th Century through Contemporary

THR 223 History of Theater III: American

THR 231 Dance for Musical Theater

THR 253 Creative Dramatics

THR 412 Drama: Theory and Criticism

*Plus:*

Participation in at least two mainstage productions

**Health Education (5-12)**

Major in Health Education 5-12

*Block I*

EDUC 210 Education's Place in Society

EDUC 211 Field Experience: Introductory (K-12) (0 credit)

EDUC 212 Human Relations and Multicultural Education

*Block II*

EDUC 330 Psychology for Teaching and Learning

EDUC 331 Field Experience: Middle Level (5-8) (0 credit)

*Block III*

EDUC 355 Reading for the 5-12 Teacher

EDUC 369 Field Experience: Primary Level (K-4) (0 credit)

HLTH 440 Health Education : 5-12 Curriculum Assessment and Administration

HLTH 450 Health Education: 5-12 Methods, Resources and Partnerships

*Note:* These courses substitute for EDUC 381 and 382

*Block IV*

EDUC 456 Inclusive School Communities (2 credits)

EDUC 460 Student Teaching and Seminar (6 credits)

EDUC 461 The Teacher as Educational Advocate

## School of Education

*Plus:*

BIOL	101	General Biology
HLTH	345	Nutrition for Health and Fitness
HLTH	350	Personal Health and Wellness
HLTH	353	Consumer, Community and Environmental Health
HLTH	375	Lifelong Stress Management (2 credits)
HLTH	400	Epidemiology
HLTH	462	Human Sexuality Education
HLTH	464	Critical Issues in Health Education
PHED	410	Human Anatomy and Physiology

*Plus one of:*

PSY	111	General Psychology
SOC	100	Introduction to Sociology

*Plus one of:*

CHEM	100	Chemistry in our World
CHEM	101	Environmental Chemistry

*Plus one of:*

COMM	100	Public Speaking
COMM	105	Communication in the Workplace

*Recommended:*

PSY	200	Psychology of Infancy and Childhood
PSY	203	Psychology of Adolescence

*Plus:*

Demonstrated competence on all required state standards

### Mathematics 5-12

Major in Mathematics and a Co-major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

*Block I*

EDUC	210	Education's Place in Society
EDUC	211	Field Experience: Introductory (K-12) (0 credit)
EDUC	212	Human Relations and Multicultural Education

*Block II*

EDUC	330	Psychology for Teaching and Learning
EDUC	331	Field Experience: Middle Level (5-8) (0 credit)
EDUC	355	Reading for the 5-12 Teacher

*Block III*

EDUC	381	Curriculum and Methods for Specific Discipline (5-8) (2 credits)
EDUC	382	Curriculum and Methods for Specific Discipline (9-12) (2 credits)
EDUC	383	Field Experience: Secondary (9-12) (0 credit)

*Block IV*

EDUC	456	Inclusive School Communities (2 credits)
EDUC	460	Student Teaching and Seminar (6 credits)
EDUC	461	The Teacher as Educational Advocate

*Plus:*

MATH	113	Calculus I (or 108-109)
MATH	114	Calculus II
MATH	200	Multi-Variable Calculus
MATH	210	Linear Algebra and Differential Equations
MATH	301	Abstract Algebra I
MATH	317	Real Analysis
MATH	325	Geometry
MATH	450	Advanced Mathematics: Exploration and Exposition
QMCS	230	Software Design Using the JAVA Language

*Plus at least one of:*

MATH	302	Abstract Algebra II
MATH	385	Mathematical Methods of Numerical Analysis
MATH	400	Dynamical Systems and Chaos
MATH	419	Complex Variables
MATH	420	Topology

*Plus either:*

MATH 303 Statistics for the Applied Sciences and one additional MATH course numbered 300 or above

*or*

MATH 313 Probability and 314 Mathematical Statistics

*Plus:*

Demonstrated competence on all required state standards

### **Music Education**

#### **Music Education: Instrumental and Classroom Music K-12**

Major in Music Education

##### *Block I*

EDUC 210 Education's Place in Society  
 EDUC 211 Field Experience: Introductory (K-12) (0 credit)  
 EDUC 212 Human Relations and Multicultural Education

##### *Block II*

EDUC 330 Psychology for Teaching and Learning  
 EDUC 331 Field Experience: Middle Level (5-8) (0 credit)

##### *Block III*

EDUC 260 Elementary Classroom Music Pedagogy (2 credits)  
 EDUC 360 Secondary Classroom Music Pedagogy (2 credits)

*Note:* These courses substitute for EDUC 381 and 382

EDUC 369 Field Experience: Primary Level (K-4) (0 credit)

##### *Block IV*

EDUC 456 Inclusive School Communities (2 credits)  
 TEGR 580 Student Teaching and Seminar (6 graduate credits)  
 TEGR 581 The Teacher as Educational Advocate (3 graduate credits)

See note below about completion of licensure in *Plan B*

*Plus:*

EDUC 214 Teaching Techniques Woodwind Instruments I (2 credits)  
 EDUC 216 Teaching Techniques Woodwind Instruments II (2 credits)  
 EDUC 218 Teaching Techniques Brass Instruments (2 credits)  
 EDUC 220 Teaching Techniques Percussion Instruments (2 credits)  
 EDUC 222 Teaching Techniques String Instruments I (2 credits)  
 EDUC 224 Teaching Techniques String Instruments II (2 credits)

*Plus:*

MUSC 112 Introduction to Music (students testing out of 112 take 115)  
 MUSC 113 Theory I  
 MUSC 212 Theory II  
 MUSC 213 Theory III  
 MUSC 312 Theory IV  
 MUSC 351 Introduction to Conducting (2 credits)  
 MUSC 353 Instrumental Conducting  
 MUSC 411 History and Literature of Music I  
 MUSC 412 History and Literature of Music II  
 MUSN See ensemble participation under the Major in Music in the department section of this catalog  
 MUSP 102 or 103 Skills for Piano Proficiency (0 credit)  
 MUSP 2xx Six semesters of performance studies in the same performance medium (12 credits)  
 MUSR 200 Piano Proficiency (0 credit)  
 MUSR 270 Level I Recital (0 credit)  
 MUSR 350 Level II Recital (0 credit)  
 PHYS 105 Musical Acoustics

An additional thirteen credits taken in Graduate Education (*Plan B*) complete licensure. These credits may apply towards a master's degree.

MUS 516 Developing the Child Voice (2 credits)  
 MUS 561 Teaching World Music (2 credits)  
 TEGR 580 Student Teaching and Seminar (6 credits)  
 TEGR 581 The Teacher as Educational Advocate (3 credits)

*Plus:*

Demonstrated competence on all required state standards

## School of Education

### Music Education: Vocal and Classroom Music K-12

Major in Music Education

#### *Block I*

- EDUC 210 Education's Place in Society
- EDUC 211 Field Experience: Introductory (K-12) (0 credit)
- EDUC 212 Human Relations and Multicultural Education

#### *Block II*

- EDUC 330 Psychology for Teaching and Learning
- EDUC 331 Field Experience: Middle Level (5-8) (0 credit)

#### *Block III*

- EDUC 260 Elementary Classroom Music Pedagogy (2 credits)
- EDUC 360 Secondary Classroom Music Pedagogy (2 credits)

*Note:* These courses substitute for EDUC 381 and 382

- EDUC 369 Field Experience: Primary Level (K-4) (0 credit)

#### *Block IV*

- EDUC 456 Inclusive School Communities (2 credits)
- TEGR 580 Student Teaching and Seminar (6 graduate credits)
- TEGR 581 The Teacher as Educational Advocate (3 graduate credits)

See note below about completion of licensure in *Plan B*

#### *Plus:*

- EDUC 226 The Woodwind Family in Classroom Teaching (2 credits)
- EDUC 228 The Brass and Percussion Families in Classroom Teaching (2 credits)
- EDUC 230 The String Family in Classroom Teaching (2 credits)
- EDUC 362 Teaching Techniques for Voice

#### *Plus:*

- MUSC 112 Introduction to Music (students testing out of 112 take 115)
- MUSC 113 Theory I
- MUSC 212 Theory II
- MUSC 213 Theory III
- MUSC 312 Theory IV
- MUSC 351 Introduction to Conducting (2 credits)
- MUSC 352 Choral Conducting
- MUSC 411 History and Literature of Music I
- MUSC 412 History and Literature of Music II
- MUSN 142, 160 Chamber Singers, Concert Choir (minimum of six semesters)
- MUSN 143 Liturgical Choir (maximum of two semesters)
- MUSP 102 or 103 Skills for Piano Proficiency (0 credit)
- MUSP 2xx Six semesters of performance studies in the same performance medium (12 credits)
- MUSR 200 Piano Proficiency (0 credit)
- MUSR 270 Level I Recital (0 credit)
- MUSR 350 Level II Recital (0 credit)
- PHYS 105 Musical Acoustics

#### *Plus:*

Four credits of MUSP 133 (1/2 hour lesson) if voice is not principal instrument

#### *Plus:*

An additional thirteen credits taken in Graduate Education (*Plan B*) complete licensure. These credits may apply towards a master's degree.

- MUS 516 Developing the Child Voice (2 credits)
- MUS 561 Teaching World Music (2 credits)
- TEGR 580 Student Teaching and Seminar (6 credits)
- TEGR 581 The Teacher as Educational Advocate (3 credits)

#### *Plus:*

Demonstrated competence on all required state standards

**Physical Education (K-12)**

Major in Physical Education

*Block I*

- EDUC 210 Education's Place in Society
- EDUC 211 Field Experience: Introductory (K-12) (0 credit)
- EDUC 212 Human Relations and Multicultural Education

*Block II*

- EDUC 330 Psychology for Teaching and Learning
- EDUC 331 Field Experience: Middle Level (5-8) (0 credit)

*Block III*

- EDUC 369 Field Experience: Primary Level (K-4) (0 credit)
- PHED 204 Physical Education Methods for Elementary School
- PHED 304 Physical Education Methods for Middle School
- PHED 404 Physical Education Methods for Secondary School
- PHED 405 Physical Education Methods for Teaching Aquatics/First Aid

*Note:* These courses substitute for EDUC 381 and 382

*Block IV*

- EDUC 456 Inclusive School Communities (2 credits)
- EDUC 460 Student Teaching and Seminar (6 credits)
- EDUC 461 The Teacher as Educational Advocate

*Plus:*

- BIOL 101 General Biology
- HLTH 350 Personal Health and Wellness
- PHED 104 Physical Education Curriculum, Instruction, and Assessment
- PHED 215 Rhythms and Dance (2 credits)
- PHED 311 Motor Development (2 credits)
- PHED 351 Teaching of the Special Needs Student (2 credits)
- PHED 410 Human Anatomy and Physiology
- PHED 420 Kinesiology
- PHED 431 Exercise Physiology (2 credits)
- PSY 111 General Psychology
- SOC 100 Introduction to Sociology

*Plus:*

Demonstrated competence on all required state standards

**Science (5-8) plus Chemistry (9-12)**

Co-major in Science – Chemistry and a Co-major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

*Block I*

- EDUC 210 Education's Place in Society
- EDUC 211 Field Experience: Introductory (K-12) (0 credit)
- EDUC 212 Human Relations and Multicultural Education

*Block II*

- EDUC 330 Psychology for Teaching and Learning
- EDUC 331 Field Experience: Middle Level (5-8) (0 credit)
- EDUC 355 Reading for the 5-12 Teacher

*Block III*

- EDUC 381 Curriculum and Methods for Specific Discipline (5-8) (2 credits)
- EDUC 382 Curriculum and Methods for Specific Discipline (9-12) (2 credits)
- EDUC 383 Field Experience: Secondary (9-12) (0 credit)

*Block IV*

- EDUC 456 Inclusive School Communities (2 credits)
- EDUC 460 Student Teaching and Seminar (6 credits)
- EDUC 461 The Teacher as Educational Advocate

*Plus:*

- BIOL 101 General Biology
- CHEM 111 General Chemistry I
- CHEM 112 General Chemistry II
- CHEM 201 Organic Chemistry I
- CHEM 202 Organic Chemistry II
- CHEM 300 Quantitative Analysis
- CHEM 331 Chemical Thermodynamics and Reaction Dynamics
- CHEM 481 Seminar (1 credit)

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CHEM 484	Seminar (1 credit)
GEOL 111	Introductory Physical Geology or one of GEOL 110, 113, 114, 115
MATH 113	Calculus I
MATH 114	Calculus II
PHYS 104	Astronomy
PHYS 111	Introduction to Classical Physics I
PHYS 112	Introduction to Classical Physics II

*Plus four credits from:*

CHEM 320	Instrumental Analysis
CHEM 332	Quantum Chemistry and Molecular Spectroscopy
CHEM 391	Research (1 credit)
CHEM 440	Biochemistry I

*Plus:*

Demonstrated competence on all required state standards

*To complete a major in Chemistry (B.A.), the following courses are required:*

CHEM 320	Instrumental Analysis
CHEM 482	Seminar (0 credit)
CHEM 483	Seminar (0 credit)

*Plus:*

Eight additional credits from the list above

*or*

Eight credits from the B.A. Major Field Optional Courses List (see Department of Chemistry)

### **Science (5-8) plus Earth and Space Science (9-12)**

Co-Major in Science – Earth and Space Science and a Co-Major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

*Block I*

EDUC 210	Education's Place in Society
EDUC 211	Field Experience: Introductory (K-12) (0 credit)
EDUC 212	Human Relations and Multicultural Education

*Block II*

EDUC 330	Psychology for Teaching and Learning
EDUC 331	Field Experience: Middle Level (5-8) (0 credit)
EDUC 355	Reading for the 5-12 Teacher

*Block III*

EDUC 381	Curriculum and Methods for Specific Discipline (5-8) (2 credits)
EDUC 382	Curriculum and Methods for Specific Discipline (9-12) (2 credits)
EDUC 383	Field Experience: Secondary (9-12) (0 credit)

*Block IV*

EDUC 456	Inclusive School Communities (2 credits)
EDUC 460	Student Teaching and Seminar (6 credits)
EDUC 461	The Teacher as Educational Advocate

*Plus:*

BIOL 201	Diversity and Adaptation
BIOL 202	Genetics and Population Biology
CHEM 111	General Chemistry I
CHEM 112	General Chemistry II
GEOL 111	Introductory Physical Geology
GEOL 130	Earth History
GEOL 15M	Oceanography (at Macalester)
GEOL 211	Mineralogy
GEOL 252	Earth Surface Processes and Geomorphology
GEOL 340	Fundamentals of the Lithosphere I (Petrology)
GEOL 360	Fundamentals of the Lithosphere II (Structural Geology)
GEOL 421	Geophysics
PHYS 104	Astronomy

*Plus one of:*

PHYS 109	General Physics I
PHYS 111	Introduction to Classical Physics I

*Plus:*

Demonstrated competence on all required state standards

*To complete a major in Geology, consult the chair of the department*

**Science (5-8) plus Life Science (9-12)**

Co-Major in Science – Life Science with Co-Major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

*Block I*

- EDUC 210 Education's Place in Society
- EDUC 211 Field Experience: Introductory (K-12) (0 credit)
- EDUC 212 Human Relations and Multicultural Education

*Block II*

- EDUC 330 Psychology for Teaching and Learning
- EDUC 331 Field Experience: Middle Level (5-8) (0 credit)
- EDUC 355 Reading for the 5-12 Teacher

*Block III*

- EDUC 381 Curriculum and Methods for Specific Discipline (5-8) (2 credits)
- EDUC 382 Curriculum and Methods for Specific Discipline (9-12) (2 credits)
- EDUC 383 Field Experience: Secondary (9-12) (0 credit)

*Block IV*

- EDUC 456 Inclusive School Communities (2 credits)
- EDUC 460 Student Teaching and Seminar (6 credits)
- EDUC 461 The Teacher as Educational Advocate

*Plus:*

- BIOL 201 Diversity and Adaptation
- BIOL 202 Genetics and Population Biology
- BIOL 204 Cellular and Molecular Biology
- BIOL 206 Global Ecology (2 credits)
- CHEM 111 General Chemistry I
- CHEM 112 General Chemistry II
- CHEM 201 Organic Chemistry I
- GEOL 111 Introductory Physical Geology or one of GEOL 110, 113, 114, 115
- PHYS 104 Astronomy

*Plus:*

Sixteen additional BIOL credits in courses numbered 200 or above, chosen in consultation with an adviser

*Plus:*

Demonstrated competence on all required state standards

*To complete a major in Biology, the following courses are required:*

Six additional BIOL credits numbered 200 or above

*Plus one of:*

- MATH 303 Statistics for the Applied Sciences
- QMCS 220 Statistics I

*Plus at least two of the following selected in consultation with the departmental adviser:*

- CHEM 202 Organic Chemistry II
- MATH 109 Calculus with Review II or MATH 113 Calculus I
- PHYS 109 General Physics I or PHYS 111 Introduction to Classical Physics I

**Science (5-8) plus Physics (9-12)**

Co-major in Science – Physics plus a Co-Major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

*Block I*

- EDUC 210 Education's Place in Society
- EDUC 211 Field Experience: Introductory (K-12) (0 credit)
- EDUC 212 Human Relations and Multicultural Education

*Block II*

- EDUC 330 Psychology for Teaching and Learning
- EDUC 331 Field Experience: Middle Level (5-8) (0 credit)
- EDUC 355 Reading for the 5-12 Teacher

*Block III*

- EDUC 381 Curriculum and Methods for Specific Discipline (5-8) (2 credits)
- EDUC 382 Curriculum and Methods for Specific Discipline (9-12) (2 credits)
- EDUC 383 Field Experience: Secondary (9-12) (0 credit)

*Block IV*

- EDUC 456 Inclusive School Communities (2 credits)
- EDUC 460 Student Teaching and Seminar (6 credits)
- EDUC 461 The Teacher as Educational Advocate

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*Plus:*

CHEM	111	General Chemistry I
CHEM	112	General Chemistry II
ENGR	350	Introduction to Electronics
GEOL	111	Introductory Physical Geology or one of GEOL 110, 113, 114, 115
MATH	113	Calculus I
MATH	114	Calculus II
MATH	200	Multivariable Calculus
MATH	210	Linear Algebra and Differential Equations
PHYS	104	Astronomy
PHYS	111	Introduction to Classical Physics I
PHYS	112	Introduction to Classical Physics II
PHYS	225	Introduction to Modern Physics I
PHYS	226	Introduction to Modern Physics II
PHYS	323	Methods of Experimental Physics

*Plus:*

Four additional credits in PHYS courses other than 101

*Plus either:*

BIOL	101	General Biology
<i>or the three-course sequence</i>		
BIOL	201	Diversity and Adaptation
BIOL	202	Genetics and Population Biology
BIOL	204	Cellular and Molecular Biology

*Plus:*

Demonstrated competence on all required state standards

*To complete a major in Physics (B.A.), the following courses are required:*

PHYS	300	Physics Seminar I (1 credit)
PHYS	301	Physics Seminar II (1 credit)

*Plus:*

eight credits in courses above PHYS 301

### **Social Studies (5-12)**

Co-Major in Social Studies with a Co-Major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

*Block I*

EDUC	210	Education's Place in Society
EDUC	211	Field Experience: Introductory (K-12) (0 credit)
EDUC	212	Human Relations and Multicultural Education

*Block II*

EDUC	330	Psychology for Teaching and Learning
EDUC	331	Field Experience: Middle Level (5-8) (0 credit)
EDUC	355	Reading for the 5-12 Teacher

*Block III*

EDUC	381	Curriculum and Methods for Specific Discipline (5-8) (2 credits)
EDUC	382	Curriculum and Methods for Specific Discipline (9-12) (2 credits)
EDUC	383	Field Experience: Secondary (9-12) (0 credit)

*Block IV*

EDUC	456	Inclusive School Communities (2 credits)
EDUC	460	Student Teaching and Seminar (6 credits)
EDUC	461	The Teacher as Educational Advocate

*Plus:*

POL	105	Politics and Government in Comparative Perspective
PSY	111	General Psychology
SOC	100	Introduction to Sociology
SOC	301	General Anthropology

*Plus one of:*

ECON	101	The American Economy
ECON	211	Current Economic Issues
ECON	251	Principles of Macroeconomics

*Plus one of:*

- HIST 111 Origins of the Modern World to 1550
- HIST 112 The Modern World Since 1550

*Plus one of:*

- HIST 113 Early America in Global Perspective
- HIST 114 The Modern U.S. in Global Perspective

*Plus one of:*

- HIST 210 Modern Latin America, 1800 to the Present
- HIST 220 Introduction to Japanese History and Culture
- HIST 340 Foundations of Chinese Civilization
- HIST 341 The History of Modern China
- HIST 345 Family and Women in Chinese History
- HIST 347 The Modernization of Taiwan, Hong Kong, and China

*Plus one of:*

- GEOG 111 Human Geography
- GEOG 113 World Regional Geography

*Plus:*

Twenty-four additional credits in courses in any one of the Social Science disciplines (Economics, Geography, History, Political Science, Psychology, Sociology). Choice of these courses are subject to the approval of the department involved. (As part of the student outcomes assessment program at the university, all majors in social studies with a history concentration will be required to take the major field examination in history.)

*Plus:*

Demonstrated competence on all required state standards

*To complete a major in one of the Social Science disciplines, contact the chair of the department.*

### **World Language and Cultures Education (K-12)**

Students wishing to be licensed grades K-12 in World Language and Cultures in the State of Minnesota must achieve a rating of “good” or “superior” by the Language Department of the Teacher Preparation institution in five of the seven competencies defined in the MLA “Qualifications for Secondary School Teachers of Modern Foreign Languages” and at least a minimal rating in the remaining two competencies.

The MLA competencies include aural understanding, speaking, reading, writing, linguistic analysis, culture and pedagogy.

Major in French, German, or Spanish with a Co-Major in Secondary Education

*Note:* A Co-major cannot be a stand-alone major.

*Block I*

- EDUC 210 Education’s Place in Society
- EDUC 211 Field Experience: Introductory (K-12) (0 credit)
- EDUC 212 Human Relations and Multicultural Education

*Block II*

- EDUC 330 Psychology for Teaching and Learning
- EDUC 331 Field Experience: Middle Level (5-8) (0 credit)
- EDUC 355 Reading for the 5-12 Teacher

*Block III*

- EDUC 369 Field Experience: Primary Level (K-4) (0 credit)
- EDUC 380 Curriculum and Methods for Specific Discipline (K-12)

*Block IV*

- EDUC 456 Inclusive School Communities (2 credits)
- EDUC 460 Student Teaching and Seminar (6 credits)
- EDUC 461 The Teacher as Educational Advocate

*Plus one of the languages:*

#### **French**

28 credits numbered FREN 300 and above with a minimum of six credits in each of the following areas:

- Oral and Written Language
- Culture/Civilization
- Literature

#### **German**

28 credits numbered GER 300 and above with a minimum of six credits in each of the following areas:

- Oral and Written Language
- Culture/Civilization
- Literature

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*Plus:*

HIST Four credits in modern European history

**Spanish**

28 credits numbered SPAN 300 and above with a minimum of six credits in each of the following areas:

Oral and Written Language

Culture/Civilization

Literature

*Plus:*

SPAN A course in Hispanic linguistics

*Plus (for all languages):*

Demonstrated competence on all required state standards

**210 Education's Place in Society**

Designed to critically analyze the place of education in today's rapidly changing society. Assists students in recognizing the similarities and differences in the major philosophical positions and evaluating their impact on current educational practice. Focuses on understanding the historic and social perspectives of education.

Prerequisite: Sophomore standing and concurrent registration with 211

**211 Field Experience: Introductory (K-12)**

**0 credit**

This is a 30-hour guided, reflective, in-school field experience intended to allow students to explore the professional realities of schools and education.

**212 Human Relations and Multicultural Education**

Designed to engage teachers in a dialogue concerning the issues of cultural diversity in schools, its impact on the learning process and the construction of human relations. Emphasis will be placed on an education that is multicultural, gender fair, and disability aware. It examines issues such as racism, sexism, oppression, prejudice, and discrimination. The course aims to equip the participants with pedagogic practices and instructional techniques that respond to social conflicts and stresses within the classroom and that will enable them to create productive learning situations for all students. This course fulfills the Human Diversity requirement in the core curriculum.

Prerequisite: Sophomore standing

**214 Teaching Techniques for Woodwind Instruments I**

**2 credits**

The teaching-techniques courses are designed to acquaint the prospective instrumental teacher with the fundamental principles underlying the correct playing of wind, percussion and string instruments. Basic concepts important in teaching others to play these instruments are stressed. The uses and merits of a variety of method books are discussed as they pertain to lesson and unit planning. Solo and ensemble literature also are covered. Students will learn how to select instruments, mouthpieces and other equipment appropriate for elementary and secondary instrumental pupils. Offered fall semester in odd-numbered years.

**216 Teaching Techniques for Woodwind Instruments II**

**2 credits**

Offered spring semester in even-numbered years.

**218 Teaching Techniques for Brass Instruments**

**2 credits**

Offered fall semester in even-numbered years.

**220 Teaching Techniques for Percussion Instruments**

**2 credits**

Offered spring semester in odd-numbered years.

**222 Teaching Techniques for String Instruments I**

**2 credits**

Offered fall semester in odd-numbered years.

**224 Teaching Techniques for String Instruments II**

**2 credits**

Offered spring semester in even-numbered years.

**226 The Woodwind Family in Classroom Teaching**

**2 credits**

The families courses are designed to acquaint the student with the general principles involved in playing and caring for the various instruments. Emphasis is on the application of this information to classroom and choral situations. Students are expected to achieve an elementary level of competence in playing selected instruments. Offered spring semester in odd-numbered years.

**228 The Brass & Percussion Families in Classroom Teaching**

**2 credits**

Offered spring semester in even-numbered years.

**230 The String Family in Classroom Teaching**

**2 credits**

Offered fall semester in even-numbered years.

**260 Elementary Classroom Music Pedagogy** 2 credits  
 This course introduces contemporary elementary music pedagogy to prospective music educators. Both content and method will be addressed in this course as students learn to design a curriculum that includes specific objectives and teaching strategies to help students master those goals. Specific media including the child voice, movement, recorder, and Orff instruments are used to address the diversity of cultures as well as learning styles and developmental stages present in each class. Artistic teaching and learning of culturally sensitive material are stressed at all levels by faculty members who themselves teach children. EDUC 260 and 360 fulfill the Block III requirement. Offered fall semester in odd-numbered years.

**295, 296 Topics** 2 credits  
**297, 298 Topics**  
 The subject matter of these courses, announced in the annual *Class Schedule*, will vary from year to year, but will not duplicate existing courses. See the description of these courses at the beginning of the "Curricula" section of this catalog.

**330 Psychology for Teaching and Learning**  
 This course integrates psychological principles with strategies for effective instruction. Prospective K-12 teachers explore the scientific knowledge base that underlies good teaching practices; they learn to apply the principles of educational psychology to their own learning and future teaching through reading, discussion, classroom simulations, school observations and micro-teaching demonstrations.  
 Prerequisite: 210 and concurrent registration with 331

**331 Field Experience: Middle Level (5-8)** 0 credit  
 This is a 15-hour guided, reflective, in-school field experience intended to introduce students to middle level settings and students. This experience introduces the middle level as a pedagogical bridge between the elementary and the secondary learner.

**345 Adolescent Literature** 2 credits  
 Survey of contemporary literature for adolescents; exploration of ways in which this literature meets the reading interests and needs of adolescents; emphasis on developing familiarity with literature read by adolescents; methods and programs to stimulate reading interests and practices.

**350 Language Development, Literacy, and Literature I**  
 This course is Part I of a two-course literacy block designed to introduce the pre-service teacher to the theory and practice of elementary curriculum and instruction in the areas of reading, language arts, and children's literature. Campus and elementary school experiences will emphasize the importance of teaching in an integrated manner to students of diverse socio-economic backgrounds and cultures. The course will present developmentally appropriate practice for kindergarten, primary, and intermediate grades, the current knowledge base of research, and recommendations for professional development. As the introductory course in literacy, it will focus on language development and literacy processes as a foundation for understanding curricular development in and applications for literacy in the elementary classroom.  
 Prerequisites: 210 and 212

**355 Reading for the 5-12 Teacher**  
 This course is designed to explore how teachers can assist students to more easily deal with content area reading materials to include textbooks, written directions, newspapers, graphs/charts/maps, and manuals; and at the same time to encourage positive attitudes toward reading and writing in content areas.

**360 Secondary Classroom Music Pedagogy** 2 credits  
 Students in this course will learn to design middle- and senior-high-school curricula that include, but are not limited to, performance opportunities. Participation in small ensembles for voices and instruments will be augmented by guitar study as means for developing music literacy. Music literature, history, and theory will be approached from a participatory perspective; students will learn how to use the material as a resource for individual creative work that speaks to the diversity of environments and cultures represented in today's classrooms. EDUC 260 and 360 fulfill the Block III requirement. Offered spring semester in even-numbered years.

**362 Teaching Techniques for Voice** 2 credits  
 Students will study the structure and function of the mouth, the nasopharyngeal cavity, the larynx and the breathing mechanism as these relate to the acoustical principles governing the human voice, including the psychology and the aesthetics involved in singing. The uses and merits of a variety of methods and exercises are discussed as they pertain to studio and classroom use. Solo and ensemble literature appropriate for young singers also are covered. Includes teaching individuals and groups, observation of master teachers, and journaling. Offered fall semester in even-numbered years.

**369 Field Experience: Primary Level (K-4)** 0 credit  
 This is a 100-hour guided, reflective, in-school field experience at the primary level. Intended to serve as a pre-student-teaching experience, it includes lesson design, whole group instruction, classroom management, student assessment, and instructional reflection.

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### 370 Language Development, Literacy, and Literature II

This course is Part II of a two-course literacy block designed to introduce the pre-service teacher to the theory and practice of elementary curriculum and instruction in the areas of reading, language arts, and children's literature. Campus and elementary school experiences will emphasize the importance of teaching in an integrated manner to students of diverse socio-economic backgrounds and cultures. The course will present developmentally appropriate practice for kindergarten, primary, and intermediate grades, the current knowledge base of research and recommendations for professional development. This second course in the literacy block will extend the foundations in language, literacy and children's literature presented in the initial course to classroom applications in composing processes (writer's workshop), assessment/evaluation, content area reading, and interdisciplinary instruction. The course includes field-based experiences.

Prerequisites: 210, 212, 330 and 350 plus unconditional admission to the teacher education program; concurrent registration with 331, 371, 372, 373, and 374

### 371 Teaching Mathematics and Technology

This course is designed to prepare teachers who will effectively engage learners with mathematics and technology. Emphasis is on developmentally appropriate practice for a range of learners in kindergarten, primary and intermediate grades; curriculum content and sources; performance based assessment strategies; connections with community resources; national and state standards; lesson and unit planning; and curriculum and technology integration. The course includes field-based experiences.

Prerequisites: 210, 212, 330 and 350 plus unconditional admission to the teacher education program; concurrent registration with 370, 372, 373, and 374

### 372 Teaching Science and Healthy, Active Living

This course is designed to prepare teachers who will effectively engage learners with science and help them have the skills for lifelong healthy, active living. Emphasis is on developmentally appropriate practice for a range of learners in kindergarten, primary and intermediate grades; curriculum content and sources; instructionally based assessment strategies; connections with community resources; national and state standards; lesson and unit planning; and curriculum and technology integration. The course includes field-based experiences.

Prerequisites: 210, 212, 330 and 350 plus unconditional admission to the teacher education program; concurrent registration with 370, 371, 373, and 374

### 373 Teaching Social Studies and Fine Arts

This course provides an overview of the social studies and fine arts for the elementary teacher that develops a civic and cultural awareness respectful of human diversity. National and state standards, unit and lesson planning, instructional resources and technology, teaching and assessment strategies, and curriculum integration are addressed. The course includes field-based experiences.

Prerequisites: 210, 212, 330 and 350 plus unconditional admission to the teacher education program; concurrent registration with 370, 371, 372, and 374

### 374 Seminar in Middle Level Concentration Area

0 credit

Students will participate in a series of guided classroom and field experiences designed to meet the Minnesota middle level competencies for K-6 pre-service teachers in their chosen 5-8 area of academic concentration. Emphasis is on developmentally appropriate practice for a range of learners in grades 5 through 8, expanding the content, curriculum, and instructional strategies students gain through their K-6 methods courses. Age appropriate performance based assessment strategies; connections with community resources; national and state standards; lesson and unit planning; and curriculum and technology integration will be covered.

Prerequisites: 210, 212, 330 and 350 plus unconditional admission to the teacher education program; concurrent registration with 370, 371, 372, and 373

- 01 Communication Arts and Literature (5-8)
- 02 Mathematics (5-8)
- 03 Science (5-8)
- 04 Social Studies (5-8)
- 05 World Languages and Cultures (K-8)

### 380 Curriculum and Methods for Specific Discipline (K-12)

This course is designed to prepare teachers who will effectively engage learners with the curriculum of a specific licensure area. Emphasis is on developmentally appropriate practice for a range of learners in grades K through 12, curriculum content and sources; performance based assessment strategies; connections with community resources; national and state standards; lesson and unit planning; and curriculum and technology integration. The course includes a clinical experience.

Prerequisites: 210, 212, 330, plus unconditional admission to the teacher education program; concurrent registration with 383

- 381 Curriculum and Methods for Specific Discipline (5-8)** 2 credits  
This course is designed to prepare teachers who will effectively engage learners with the curriculum of a specific licensure area. Emphasis is on developmentally appropriate practice for a range of learners in grades 5 through 8, curriculum content and sources; performance based assessment strategies; connections with community resources; national and state standards; lesson and unit planning; and curriculum and technology integration. The course includes a clinical experience.  
Prerequisites: 210, 212, 330, plus unconditional admission to the teacher education program; concurrent registration with 382 and 383
- 01 Communication Arts and Literature
  - 02 Mathematics
  - 03 Science
  - 04 Social Studies
  - 05 Theater and Dance
- 382 Curriculum and Methods for Specific Discipline (9-12)** 2 credits  
This course is designed to prepare teachers who will effectively engage learners with the curriculum of a specific licensure areas. Emphasis is on developmentally appropriate practice for a range of learners in grades 9 through 12, curriculum content and sources; instructionally based assessment strategies; connections with community resources; national and state standards; lesson and unit planning; and curriculum and technology integration. The course includes a clinical experience.  
Prerequisites: 210, 212, 330, plus unconditional admission to the teacher education program; concurrent registration with 381 and 383
- 01 Communication Arts and Literature
  - 02 Mathematics
  - 03 Science
  - 04 Social Studies
  - 05 Theater and Dance
- 383 Field Experience: Secondary (9-12)** 0 credit  
This is a 30-hour guided, reflective, in-school field experience at the secondary level. Intended to serve as a pre-student-teaching experience, it includes lesson design, whole group instruction, classroom management, student assessment, and instructional reflection.
- 456 Inclusive School Communities** 2 credits  
Provides an overview of students identified as gifted/talented, students with disabilities (learning disabilities, mental retardation, emotional/behavioral disabilities, and sensory and physical impairments), etiology, and appropriate interventions for exceptional students. Also, current issues and research in the field of exceptionality (legal rights, integration, best practices) are also discussed.  
Prerequisite: PPST
- 460 Student Teaching and Seminar** 6 credits  
As the culminating experience of the teacher licensure program, student teaching provides the opportunity for students to apply their knowledge and skills of teaching and learning in a classroom setting. Accompanying seminars assist students to reflect upon the experience and to increase their repertoire of strategies for dealing with topical, relevant issues. Student teaching, along with the companion course Teacher as Educational Advocate, is a full-time, full-semester commitment under the supervision of university and school-based professionals. Students seeking licensure in multiple fields may require additional credits and time in the classroom.  
Prerequisites: Satisfactory completion of all education courses in Blocks I, II, and III, plus unconditional admission to the teacher education program, plus admission to student teaching, senior status; concurrent registration with 456, 461
- 01 (K-8)
  - 02 (5-12)
  - 03 (K-12)
- 461 The Teacher as Educational Advocate**  
A capstone course designed to prepare teachers who will effectively collaborate to advocate for strong educational institutions and for students. The course emphasizes connections with families and communities, including strategies for working with students and families for whom English is not the primary language, and skill development in communication and teacher leadership. Includes a portfolio presentation by each teacher candidate as the culminating experience.  
Prerequisites: Acceptance into Education program; completion of Blocks I, II and III; senior status; concurrent registration with 456, 460

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- 462 Student Teaching and Seminar Dual License Extended Term 10 credits  
This student teaching section is intended for students seeking licensure in multiple fields or grade ranges requiring additional credits and time in the classroom. As the culminating experience of the teacher licensure program, student teaching provides the opportunity for students to apply their knowledge and skills of teaching and learning in a classroom setting. Accompanying seminars assist students to reflect upon the experience and to increase their repertoire of strategies for dealing with topical, relevant issues. Student teaching, along with the companion course Teacher as Educational Advocate, is a full-time, full-semester commitment under the supervision of university and school-based professionals.  
Prerequisites: Satisfactory completion of all education courses in Blocks I, II, and III, plus unconditional admission to the teacher education program, plus admission to student teaching, senior status; concurrent registration with 456, 461
- 475, 476 Experiential Learning 2 credits  
477, 478 Experiential Learning  
See the description of these courses at the beginning of the "Curricula" section of this catalog.
- 483, 484 Seminar 2 credits  
485, 486 Seminar  
See the description of these courses at the beginning of the "Curricula" section of this catalog.
- 487, 488 Topics 2 credits  
489, 490 Topics  
The subject matter of these courses, announced in the annual *Class Schedule*, will vary from year to year, but will not duplicate existing courses. See the description of these courses at the beginning of the "Curricula" section of this catalog.
- 491, 492 Research 2 credits  
493, 494 Research  
See the description of these courses at the beginning of the "Curricula" section of this catalog.
- 495, 496 Individual Study 2 credits  
497, 498 Individual Study  
See the description of these courses at the beginning of the "Curricula" section of this catalog.

## Special Education (SPUG)

M. Brown, director

- 405 Basic Skills Instruction: Mild/Moderate Handicaps (SPED 705)  
Research supported instructional interventions and progress monitoring strategies emphasizing practical knowledge, theoretical foundations and classroom skills for the instruction of students with mild/moderate handicaps in the basic skills: reading, written expression, spelling and mathematics.  
Prerequisite: Permission of the chair
- 414 Collaboration Skills for School Professionals (SPED 714)  
The purpose of this course is to develop an ethic of collaboration and the knowledge and skills needed to effectively collaborate with faculty, administrators, paraprofessionals, students, families, and community members. Students will explore the fundamentals of collaboration; applications of collaboration related to consultation, interagency agreements, team membership, staff development, and co-teaching; and the pragmatic aspects of collaboration. Students will have the opportunity to develop the personal and interpersonal skills necessary to be an effective collaborative partner in meeting diverse students needs.
- 450 Survey of Exceptionality (SPED 750)  
Provides an overview of special education and specific categories of exceptionality. Examines the theories, legal mandates, definitions and terminology related to special education. Characteristics of individuals with exceptionalities are explored. These include but are not limited to: gifted and talented, learning disabilities, emotional and behavioral disorders, developmental disabilities, sensory disabilities, early childhood special education, speech and language disorders.
- 452 Fundamentals of Emotional and Behavioral Disorders (SPED 752)  
Provides an introduction to the dynamics of emotional and behavioral disorders, their effect on students' education, legal responsibilities of schools, and collaboration among schools and other agencies who serve these youth. Theories, definitions, and characteristics within the context of school, family, and community settings will be discussed.

### 453 Fundamentals of Developmental Disabilities (SPED 753)

To learn about students with developmental disabilities. These are students with a broad range of cognitive impairments and deficits in adaptive behavior. Most recently these have been individuals who have been identified as having mental retardation or mental impairments. This course will focus upon definition, etiology, prevention, assessment, characteristics, programming, family issues, inclusion, collaboration, transition and other current issues related to persons with cognitive or developmental disabilities.

### 478 Fundamentals of Preschoolers (SPED 778)

This course is designed to provide a foundation for working with preschoolers and their families in early childhood and early childhood special education programs. Emphasis is placed on early childhood typical and atypical development, developmentally appropriate practice, and developing curriculum that is functional, appropriate, adaptable and fun. Curriculum units are created that enhance child development and are adapted for children with a variety of disabilities.

### 485 Behavior Management (SPED 785)

This course explores the idea of positive behavior support for promoting acceptable behavior in school and other settings where youth learn. This course, grounded in research-based interventions, is designed to assist all who work with students in special and regular education in developing skills to teach and support acceptable behavior that will be demonstrated in home, school and community settings.

### 486 Fundamentals of Learning Disabilities (SPED 786)

Theoretical and practical knowledge about the field of learning disabilities. This course emphasizes school-based definitions, criteria, characteristics, and etiology, as well as community and family support systems. It includes an analysis of current trends at the local, state, and national levels for students with learning disabilities.

