

Professional Education

The teacher is a reflective professional who nurtures the potential of individuals through a knowledge of child and adolescent development and who addresses the diversity of student needs in a multicultural society. The teacher has the ability to mesh effectively the methodologies, theories, concepts, and principles upon which the art and science of education are built. Working from a pedagogical and academic knowledge base, the teacher integrates these elements into effective teaching to promote growth in cognitive and affective learning. In addition, the teacher, as a life-long learner, keeps abreast of current trends and research while working with colleagues, administrators, other professionals, and parents to enhance the educational process now and in the future. The model that forms the basis for the programs is fully described in the department's Teacher Education Handbook.

- Science Education, B.S. (Earth and Space Science Specialty (Teacher Licensure)) *major*
- Science Education, B.S. (Life Science Specialty (Teacher Licensure)) *major*
- Science Education, B.S. (Physics Specialty (Teacher Licensure)) *major*
- Social Studies Education, B.S. ((Teacher Licensure)) *major*
- Spanish Education, B.S. ((Teacher Licensure)) *major*

For All Education Majors

General Entry Requirements

A Basic Skills test (MTLE) taken and on file. (If all sections of the test are not passed, a plan for remediation must be completed, filed with the Clinical Experiences Office, and be approved, prior to the completion of ED 3100.)

30 semester credits completed

2.50 GPA

General Exit Requirements

A minimum GPA of 2.50 in professional education, major/minor, and overall course work.

Signed forms by the cooperating teacher and the faculty supervisor that the student has satisfactorily completed student teaching for each licensure sought.

Scores at or above minimums on basic skills tests required by the State of Minnesota or Department of Professional Education.

An acceptable score on standardized professional field competency assessments.

Programs

- Elementary Education, B.S. ((Teacher Licensure)) *major*
- Elementary Education, B.S. (Mathematics Endorsement (Teacher Licensure)) *major*
- Elementary Education, B.S. (Pre-Primary Endorsement (Teacher Licensure)) *major*
- Elementary Education, B.S. (Social Studies Endorsement (Teacher Licensure)) *major*
- English Education, B.S. ((Teacher Licensure)) *major*
- Health Education, B.S. ((Teacher Licensure)) *major*
- Mathematics Education, B.S. ((Teacher Licensure)) *major*
- Music Education, B.S. (Instrumental/ Classroom K-12 Specialization (Teacher Licensure)) *major*
- Music Education, B.S. (Vocal/ Classroom K-12 Specialization (Teacher Licensure)) *major*
- Physical Education, B.S. ((Teacher Licensure)) *major*
- Science Education, B.S. (Chemistry Specialty (Teacher Licensure)) *major*

Career Directions

Adult Educator
Community Education Coordinator
Curriculum Developer
Education Specialist
Preschool, Elementary, Middle School, Secondary Teacher
Training Manager
Youth Program Director
Also: Graduate Study

Preparation

Recommended High School Courses

Science
Psychology
Health
Human Development
Oral and Written Communication
Computer Use
Geography
Mathematics

Recommended Liberal Education Courses

Introductory Psychology
A Speech Course
Ojibwe/American Indian Culture and History
Music Fundamentals (Elementary Education)

Elementary Education, B.S. *major* (Teacher Licensure)

Required Credits: 63
Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE:

- ED 4820 Student Teaching - Elementary (1-12 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)

- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

Elementary Education, B.S. *major* Mathematics Endorsement (Teacher Licensure)

Required Credits: 85
Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)

- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE:

- ED 4820 Student Teaching - Elementary (1-12 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

MATHEMATICS ENDORSEMENT

ENDORSEMENT CORE:

- ED 4737 Content Area Reading (3 credits)
- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4840 Student Teaching - Special Fields (5 credits)

COMPLETE THE FOLLOWING COURSES:

- MATH 3064 Number Concepts for Middle School Teachers (4 credits)
- MATH 3065 Mathematical Foundations for Middle School Teachers (4 credits)
- MATH 3066 Geometry and Technology in the Middle School Mathematics Classroom (4 credits)
- MATH 3067 Data Investigations, Probability, and Statistics for Middle School Teachers (4 credits)

Elementary Education, B.S. *major* Pre-Primary Endorsement (Teacher Licensure)

Required Credits: 84
Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)

- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE:

- ED 4820 Student Teaching - Elementary (1-12 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

PREPRIMARY ENDORSEMENT

COMPLETE THE FOLLOWING COURSES:

- ED 3670 Foundations of Early Childhood Education (3 credits)
- ED 3677 Relations and Management in Early Childhood Education (3 credits)

COMPLETE THE FOLLOWING COURSE, 8 CREDITS:

- ED 4811 Preprimary Student Teaching (3-10 credits)

Elementary Education, B.S. *major* Social Studies Endorsement (Teacher Licensure)

Required Credits: 92
Required GPA: 2.50

I ELEMENTARY EDUCATION FOUNDATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)

- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE THE FOLLOWING COURSE:

- ED 4820 Student Teaching - Elementary (1-12 credits)

II ELEMENTARY EDUCATION MAJOR COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3201 Language Arts I (3 credits)
- ED 3202 Language Arts II (3 credits)
- ED 3203 Language Arts III (3 credits)
- ED 3221 Elementary Math Methods (3 credits)
- ED 3222 Elementary Science Methods (3 credits)
- ED 3240 Social Studies in the Elementary School (3 credits)
- ED 3301 Creative Expressions (3 credits)
- ED 3302 Creative Process Foundations: Patterns (3 credits)
- HLTH 4100 Teaching Elementary School Health (2 credits)
- PHED 4200 Methods of Teaching Elementary Physical Education to Classroom Teachers (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MATH 1011 Mathematics for Elementary School Teachers I (3 credits)

COMPLETE THE FOLLOWING COURSE:

- MATH 1013 Mathematics for Elementary School Teachers II (3 credits)

SOCIAL STUDIES ENDORSEMENT

ENDORSEMENT CORE:

- ED 4737 Content Area Reading (3 credits)
- ED 3417 Teaching and Learning in the Middle School (3 credits)
- ED 4840 Student Teaching - Special Fields (1-12 credits)

COMPLETE THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- HST 1115 United States History II, since 1877 (3 credits)
- HST 2610 Minnesota History (3 credits)
- POL 1200 Introduction to American Politics (3 credits)

English Education, B.S. *major* (Teacher Licensure)

Note: The name that will appear on the licensure is Communication Arts and Literature.

Required Credits: 84
Required GPA: 2.50

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- ENGL 2350 American Literature, to 1865 (3 credits)
- ENGL 2355 American Literature, 1865 to Present (3 credits)

- ENGL 3540 Literature for Young Adults (3 credits)
- ENGL 3580 The English Language (3 credits)
or ML 3430 Linguistics (3 credits)
- ENGL 4420 Shakespeare and His Age (3 credits)
or ENGL 4429 Shakespeare for Teachers (3 credits)
- ENGL 4455 Seminar: Literary Criticism and Theory (3 credits)

SELECT 2 OF THE FOLLOWING COURSES:

- ENGL 2357 British and World Drama (3 credits)
- ENGL 2358 British and World Poetry (3 credits)
- ENGL 2359 British and World Prose (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3155 Professional Writing (3 credits)
- ENGL 3177 Weblogs and Wikis (3 credits)
- ENGL 3179 Elements of Electronic Rhetoric (3 credits)
- ENGL 3530 Teaching Writing with Technology (3 credits)

II REQUIRED ELECTIVES

Select 12 semester credits from the following courses; at least three credits must be at the 4000 level.

The courses may be taken multiple times with different topic subtitles.

- ENGL 3101 Advanced Writing (3 credits)
- ENGL 3183 Topics in Writing or Rhetoric (3 credits)
- ENGL 3600 Author Topics (3 credits)
- ENGL 3606 Culture Topics (3 credits)
- ENGL 3607 Film Topics (3 credits)
- ENGL 3608 Genre Topics (3 credits)
- ENGL 3609 Period Topics (3 credits)
- ENGL 4183 Advanced Topics in Writing or Rhetoric (3 credits)
- ENGL 4700 Advanced Author Topics (3 credits)
- ENGL 4706 Advanced Culture Topics (3 credits)
- ENGL 4707 Advanced Film Topics (3 credits)
- ENGL 4708 Advanced Genre Topics (3 credits)
- ENGL 4709 Advanced Period Topics (3 credits)

III REQUIRED FOR LICENSURE

COMPLETE THE FOLLOWING COURSES:

-NOTE-

ED 4737 IS REQUIRED FOR LICENSURE AND IS LISTED UNDER THE SECONDARY EDUCATION CORE REQUIREMENT

ED 3208 HAS A PREREQUISITE NOT INCLUDED IN THIS MAJOR.

- ED 3208 Developmental Reading in Middle School (3 credits)
- ENGL 3520 Writing for the Secondary School Teacher (3 credits)
- ENGL 3550 Methods of Teaching English and Communication (4 credits)
- MASC 1100 Mass Media and Society (3 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

Health Education, B.S. *major* (Teacher Licensure)

Required Credits: 71

Required GPA: 2.50

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

NOTE: HLTH 3400 IS INCLUDED IN THE REQUIRED PROFESSIONAL EDUCATION COURSES BELOW.

- BIOL 1110 Human Biology (4 credits)
- BIOL 2110 Human Anatomy and Physiology (5 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- HLTH 3300 Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 4206 Secondary School Health (2 credits)
- HLTH 4410 Health Programming (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)

COMPLETE THE FOLLOWING COURSE:

- HLTH 4920 Directed Group Study: Health Seminar (1 credit)

COMPLETE THE FOLLOWING COURSE:

- HLTH 4970 Internship: Community Health (1-12 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)

- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

SUGGESTED SEMESTER SCHEDULE FOR HEALTH EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following is a list of required Health Education Major, B.S. courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- BIOL 1110 Human Biology (4 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- Liberal Education requirements

Sophomore

- BIOL 2110 Human Anatomy and Physiology (5 credits)
- HLTH 3150 Theoretical and Ethical Foundations of Health (3 credits)
- HLTH 3200 Personal and Consumer Health (3 credits)
- Complete Liberal Education requirements
- Take the Minnesota Teacher Licensure Exam (MTLE) Basic Skills test

Junior

- Begin Professional Education Standards of Effective Practice (SEP) courses
- HLTH 3300 Nutrition (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- HLTH 3500 Community Health (3 credits)
- HLTH 3710 Disease Prevention and Epidemiology (3 credits)
- HLTH 4206 Secondary School Health (2 credits)
- HLTH 4970 Internship: Community Health (1-12 credits)

Senior

- HLTH 4410 Health Programming (3 credits)
- HLTH 4920 Directed Group Study: Health Seminar (1 credit)
- PHED 4309 Legal Aspects of Sport, Health, and Fitness (3 credits)
- Complete Professional Education Standards of Effective Practice (SEP) courses
- Student teaching

Mathematics Education, B.S. *major* (Teacher Licensure)

The Mathematics Bachelor of Science (Teacher Licensure) follows the guidelines of the National Council of Teacher of Mathematics for undergraduate programs for teachers of mathematics. Students majoring in this degree should also check the Professional Education requirements found in Professional Education: Secondary.

Note: If the student's high school mathematics courses and/or the Mathematics Placement Test indicate a lack of readiness for calculus, the student will be placed in one of the following precalculus sequences: MATH 1470; or MATH 1170 and MATH 1180; or MATH 1170 and MATH 1470. Students who need to take more than one course in preparation for calculus may not be able to complete this program without exceeding 120 credits.

Required Credits: 76

Required GPA: 2.50

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)

II REQUIRED ELECTIVES

COMPLETE THE FOLLOWING COURSES:

- MATH 3065 Mathematical Foundations for Middle School Teachers (4 credits)
- MATH 3560 Classical and Modern Geometry (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 3067 Data Investigations, Probability, and Statistics for Middle School Teachers (4 credits)
- STAT 2610 Applied Statistics (4 credits)
- STAT 3631 Probability And Statistics I (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 4350 Abstract Algebra (3 credits)
- MATH 4371 Modern Algebra (3 credits)

III REQUIRED CONCENTRATION, SECOND EDUCATION MAJOR OR MIDDLE LEVEL ENDORSEMENT

COMPLETE ONE OF THE FOLLOWING OPTIONS:

Note: If taken under II. above, MATH 3067 or STAT 3631 may be used to meet this requirement.

A. APPLIED MATHEMATICS/ CALCULUS CONCENTRATION

COMPLETE 2 OF THE FOLLOWING COURSES:

- MATH 2490 Differential Equations (4 credits)
- MATH 3710 Mathematical Modeling (3 credits)
- MATH 3720 Numerical Methods (3 credits)
- MATH 4410 Introduction to Analysis (3 credits)
- MATH 4760 Topics in Applied Mathematics (3 credits)

B. COMPUTER SCIENCE CONCENTRATION

COMPLETE 2 OF THE FOLLOWING COURSES:

- CS 2270 Introduction to Web Programming (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)

C. MIDDLE LEVEL MATHEMATICS CONCENTRATION

COMPLETE 2 OF THE FOLLOWING COURSES:

- MATH 3064 Number Concepts for Middle School Teachers (4 credits)
- MATH 3066 Geometry and Technology in the Middle School Mathematics Classroom (4 credits)
- MATH 3067 Data Investigations, Probability, and Statistics for Middle School Teachers (4 credits)

D. STATISTICS CONCENTRATION

COMPLETE 2 OF THE FOLLOWING COURSES:

- STAT 3610 Time Series Analysis (3 credits)
- STAT 3631 Probability And Statistics I (4 credits)

- STAT 3632 Probability And Statistics II (3 credits)

E: COMPLETE A SECONDARY EDUCATION MAJOR (OTHER THAN MATHEMATICS)

F: COMPLETE A MIDDLE LEVEL ENDORSEMENT (OTHER THAN MATHEMATICS)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3440 Mathematics Methods in the Secondary School (4 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

COMPLETE 12 CREDITS OF THE FOLLOWING COURSE

- ED 4830 Student Teaching - Secondary (1-12 credits)

Music Education, B.S. *major* Instrumental/ Classroom K-12 Specialization (Teacher Licensure)

Required Credits: 93

Required GPA: 2.50

(Completion of these courses with a grade of "C" or better is required for all music degrees.)

I REQUIRED MUSIC CORE COURSES

COMPLETE THE FOLLOWING COURSE (REQUIRED 7 TIMES):

- MUS 1800 Performance Laboratory (0 credit)

COMPLETE THE FOLLOWING COURSES:

- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3110 World Music (2 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

COMPLETE THE FOLLOWING COURSES:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

INSTRUMENTAL AND CLASSROOM MUSIC SPECIALIZATION

Note: All music majors are required to register for applied area lessons until the Degree Recital is passed.

REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MUS 1138 Introduction to Voice (1 credit)
- MUS 1348 String Methods (1 credit)
- MUS 1368 High Brass Methods (1 credit)
- MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- MUS 1388 Single Reeds Methods (1 credit)
- MUS 1389 Double Reeds/Flute Methods (1 credit)
- MUS 2607 Music Education I: Introduction (2 credits)
- MUS 3100 Jazz Improvisation (1 credit)
- MUS 3607 Music Education II: Elementary Methods (3 credits)
- MUS 3628 Instrumental Conducting (2 credits)
- MUS 4100 Instrumental Arranging (1 credit)
- MUS 4607 Music Education III: Secondary Methods (2 credits)
- MUS 4737 Instrumental Studies (3 credits)

REQUIRED MAJOR APPLIED AREA - MAJOR INSTRUMENT

SELECT 1 SEMESTER CREDIT AT THE 2000 LEVEL (NUMBERED 2x48, 2x58, 2x68, 2x78) IN ONE OF THE FOLLOWING, DEPENDING ON MAJOR INSTRUMENT: STRINGS, WOODWINDS, BRASS, OR PERCUSSION.

REQUIRED MAJOR APPLIED AREA - MAJOR INSTRUMENT

SELECT 1 SEMESTER CREDIT AT THE 3000 LEVEL (NUMBERED 3x48, 3x58, 3x68, 3x78) IN ONE OF THE FOLLOWING, DEPENDING ON MAJOR INSTRUMENT: STRINGS, WOODWINDS, BRASS, OR PERCUSSION.

REQUIRED INSTRUMENTAL PERFORMING ORGANIZATIONS

SELECT 6 CREDITS FROM THE FOLLOWING COURSES:

Note: All music majors are required to participate in a major ensemble every semester they are enrolled. MUS 4500 and MUS 4710 are by audition only.

Note: Students must be enrolled in MUS 4700, MUS 4703, MUS 4706, or MUS 4707 for at least one semester.

- MUS 4500 Bemidji Symphony Orchestra (1-2 credits)
- MUS 4610 Jazz Band (1-2 credits)
- MUS 4700 Instrumental Ensembles (1 credit)
- MUS 4710 Wind Ensemble (1-2 credits)

SUGGESTED SEMESTER SCHEDULE

INSTRUMENTAL AND CLASSROOM MUSIC (K-12) SPECIALIZATION

Freshman

- MUS 1010 Fundamentals of Music Theory (1 credit)
- MUS 1138 Introduction to Voice (1 credit)
- MUS 1348 String Methods (1 credit)
- or MUS 1368 High Brass Methods (1 credit)
- MUS1349
- or MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- or MUS 1388 Single Reeds Methods (1 credit)
- or MUS 1389 Double Reeds/Flute Methods (1 credit)
- MUS 1800 Performance Laboratory (0 credit)
- MUS2101
- MUS2102
- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2310 Piano Proficiency (0 credit)
- MUS 2xxx Applied Instrument
- MUS 3110 World Music (2 credits)
- MUS 4500 Bemidji Symphony Orchestra (1-2 credits)
- or MUS 4610 Jazz Band (1-2 credits)
- or MUS 4700 Instrumental Ensembles (1 credit)
- or MUS 4710 Wind Ensemble (1-2 credits)
- Liberal Education Courses

Sophomore

- MUS 1800 Performance Laboratory (0 credit)
- MUS 1348 String Methods (1 credit)
- or MUS 1368 High Brass Methods (1 credit)
- MUS1349
- or MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- or MUS 1388 Single Reeds Methods (1 credit)
- or MUS 1389 Double Reeds/Flute Methods (1 credit)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 2607 Music Education I: Introduction (2 credits)
- MUS 2xxx Applied Instrument
- MUS 3100 Jazz Improvisation (1 credit)
- MUS3101
- MUS3102
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)
- MUS 3xxx Applied Instrument
- MUS 4500 Bemidji Symphony Orchestra (1-2 credits)
- or MUS 4610 Jazz Band (1-2 credits)
- or MUS 4700 Instrumental Ensembles (1 credit)
- or MUS 4710 Wind Ensemble (1-2 credits)
- Liberal Education Courses

Junior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 2xxx Secondary Instrument
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3628 Instrumental Conducting (2 credits)
- MUS 3898 Degree Recital (0 credit)
- MUS 3xxx Applied Instrument
- MUS 4500 Bemidji Symphony Orchestra (1-2 credits)
- or MUS 4610 Jazz Band (1-2 credits)
- or MUS 4700 Instrumental Ensembles (1 credit)
- or MUS 4710 Wind Ensemble (1-2 credits)
- Professional Education Courses
- Liberal Education Courses

Senior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 3607 Music Education II: Elementary Methods (3 credits)
- MUS 4100 Instrumental Arranging (1 credit)
- MUS 4607 Music Education III: Secondary Methods (2 credits)
- MUS 4737 Instrumental Studies (3 credits)
- Professional Education Courses
- Liberal Education Courses
- Student Teaching Semester

Music Education, B.S. *major* Vocal/ Classroom K-12 Specialization (Teacher Licensure)

Required Credits: 93

Required GPA: 2.50

(Completion of these courses with a grade of "C" or better is required for all music degrees.)

I REQUIRED MUSIC CORE COURSES

COMPLETE THE FOLLOWING COURSE (REQUIRED 7 TIMES):

- MUS 1800 Performance Laboratory (0 credit)

COMPLETE THE FOLLOWING COURSES:

- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 3110 World Music (2 credits)
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3202 Music Theory and Musicianship IV (4 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)

COMPLETE THE FOLLOWING COURSES:

- MUS 2310 Piano Proficiency (0 credit)
- MUS 3898 Degree Recital (0 credit)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

VOCAL AND CLASSROOM MUSIC

REQUIRED CORE COURSES

NOTE: Piano majors replace MUS 3417 with MUS 4106, Piano Pedagogy I (2 credits). MUS 4106 requires consent of instructor.

Select two of the following methods courses(2 credits):

- MUS 1348 String Methods (1 credit)
- MUS 1368 High Brass Methods (1 credit)
- MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- MUS 1388 Single Reeds Methods (1 credit)
- MUS 1389 Double Reeds/Flute Methods (1 credit)

COMPLETE THE FOLLOWING COURSES:

Note: Piano majors replace MUS 2417 with MUS 4106, which requires consent of instructor.

- MUS 2417 Diction For Singers I (2 credits)
- MUS 2418 Diction for Singers II (2 credits)
- MUS 2607 Music Education I: Introduction (2 credits)
- MUS 3300 Piano Accompanying (2 credits)
- MUS 3400 Vocal Techniques (1 credit)
- MUS 3607 Music Education II: Elementary Methods (3 credits)
- MUS 3638 Choral Conducting (2 credits)
- MUS 4607 Music Education III: Secondary Methods (2 credits)
- MUS 4811 Choral Notation and Arranging (1 credit)
- MUS 4812 Choral Studies (2 credits)

REQUIRED MAJOR APPLIED AREA

NOTE: All music majors are required to register for applied area lessons until the Degree Recital is passed.

COMPLETE THE FOLLOWING COURSE:

- MUS 2138 Voice, Level II (1 credit)

COMPLETE THE FOLLOWING COURSE:

- MUS 3138 Voice, Level III (1 credit)

REQUIRED VOCAL PERFORMING ORGANIZATIONS

NOTE: All music majors are required to participate in a major ensemble every semester they are enrolled. MUS 4800 and 4810 are by audition only.

Select 6 semester credits from the following courses:

- MUS 3800 Varsity Singers (1-2 credits)
- MUS 4800 Bemidji Choir (1-2 credits)
- MUS 4810 Chamber Singers (1-2 credits)

SUGGESTED SEMESTER SCHEDULE

INSTRUMENTAL AND CLASSROOM MUSIC (K-12) SPECIALIZATION

Freshman

- MUS 1010 Fundamentals of Music Theory (1 credit)
- MUS 1138 Introduction to Voice (1 credit)
- MUS 1348 String Methods (1 credit)
- or MUS 1368 High Brass Methods (1 credit)
- MUS1349
- or MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- or MUS 1388 Single Reeds Methods (1 credit)
- or MUS 1389 Double Reeds/Flute Methods (1 credit)
- MUS 1800 Performance Laboratory (0 credit)
- MUS2101
- MUS2102
- MUS 2201 Music Theory and Musicianship I (5 credits)
- MUS 2310 Piano Proficiency (0 credit)
- MUS 2xxx Applied Instrument
- MUS 3110 World Music (2 credits)
- MUS 4500 Bemidji Symphony Orchestra (1-2 credits)
- or MUS 4610 Jazz Band (1-2 credits)
- or MUS 4700 Instrumental Ensembles (1 credit)
- or MUS 4710 Wind Ensemble (1-2 credits)
- Liberal Education Courses

Sophomore

- MUS 1800 Performance Laboratory (0 credit)
- MUS 1348 String Methods (1 credit)
- or MUS 1368 High Brass Methods (1 credit)
- MUS1349
- or MUS 1369 Low Brass Methods (1 credit)
- MUS 1378 Percussion Methods (1 credit)
- or MUS 1388 Single Reeds Methods (1 credit)
- or MUS 1389 Double Reeds/Flute Methods (1 credit)
- MUS 2202 Music Theory and Musicianship II (5 credits)
- MUS 2607 Music Education I: Introduction (2 credits)
- MUS 2xxx Applied Instrument
- MUS 3100 Jazz Improvisation (1 credit)
- MUS3101
- MUS3102
- MUS 3201 Music Theory and Musicianship III (5 credits)
- MUS 3501 Music Technology I (2 credits)
- MUS 3801 History and Literature of Music I (3 credits)
- MUS 3802 History and Literature of Music II (3 credits)
- MUS 3xxx Applied Instrument
- MUS 4500 Bemidji Symphony Orchestra (1-2 credits)
- or MUS 4610 Jazz Band (1-2 credits)
- or MUS 4700 Instrumental Ensembles (1 credit)
- or MUS 4710 Wind Ensemble (1-2 credits)
- Liberal Education Courses

Junior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 2xxx Secondary Instrument
- MUS 3202 Music Theory and Musicianship IV (4 credits)

- MUS 3618 Conducting Fundamentals (2 credits)
- MUS 3628 Instrumental Conducting (2 credits)
- MUS 3898 Degree Recital (0 credit)
- MUS 3xxx Applied Instrument
- MUS 4500 Bemidji Symphony Orchestra (1-2 credits)
- or MUS 4610 Jazz Band (1-2 credits)
- or MUS 4700 Instrumental Ensembles (1 credit)
- or MUS 4710 Wind Ensemble (1-2 credits)
- Professional Education Courses
- Liberal Education Courses

Senior

- MUS 1800 Performance Laboratory (0 credit)
- MUS 3607 Music Education II: Elementary Methods (3 credits)
- MUS 4100 Instrumental Arranging (1 credit)
- MUS 4607 Music Education III: Secondary Methods (2 credits)
- MUS 4737 Instrumental Studies (3 credits)
- Professional Education Courses
- Liberal Education Courses
- Student Teaching Semester

Physical Education, B.S. *major* (Teacher Licensure)

Required Credits: 80

Required GPA: 2.50

I REQUIRED COURSES

SELECT 1 OF THE FOLLOWING COURSES:

- BIOL 1110 Human Biology (4 credits)
- BIOL 1211 Introductory Biology I (4 credits)

COMPLETE THE FOLLOWING COURSES:

- BIOL 2110 Human Anatomy and Physiology (5 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 3505 Teaching Elementary Physical Education (2 credits)
- PHED 3604 Teaching Team Sports (2 credits)
- PHED 3605 Teaching Individual Sports (2 credits)
- PHED 3607 Teaching Fitness (2 credits)
- PHED 4400 Curriculum and Assessment in Physical Education (3 credits)
- PHED 4500 Inclusive Physical Education (3 credits)

COMPLETE THE FOLLOWING COURSE:

- PHED 4920 Directed Group Study (1 credit)

COMPLETE THE FOLLOWING COURSE: PHED 4970 - 1 credit

II REQUIRED AQUATICS ELECTIVES

SELECT 1 OF THE FOLLOWING COURSES:

- PHED 1116 Advanced Swimming (1 credit)
- PHED 2630 Lifeguard Training (3 credits)
- PHED 2640 Water Safety Instructor (3 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

SUGGESTED SEMESTER SCHEDULE FOR PHYSICAL EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

Students are encouraged to take the required Physical Education, B.S. courses in approximate numerical order. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions. Students are encouraged to consult the course descriptions for prerequisites.

Freshman

- BIOL 1110 Human Biology (4 credits)
- PHED 2100 Foundations of Physical Education, Exercise Science, and Sport (3 credits)
- Liberal Education requirements

Sophomore

- BIOL 2110 Human Anatomy and Physiology (5 credits)
- HLTH 2100 First Aid and CPR/AED (1 credit)
- PHED 3100 Motor Development (2 credits)
- PHED 3110 Motor Learning (2 credits)
- PHED 3120 Psychology of Sport (2 credits)
- PHED 3200 Introduction to Sport Biomechanics (3 credits)
- PHED 3300 Physiology of Exercise and Nutrition (3 credits)
- Required Electives in Major
- Liberal Education requirements
- Take the Pre-professional Skills Test

Junior

- Begin Professional Education Courses
- PHED 3449 Socio-Culture and Ethical Issues in Sport (3 credits)
- PHED 3504 Teaching Rhythms and Dance (2 credits)
- PHED 3505 Teaching Elementary Physical Education (2 credits)
- PHED 3604 Teaching Team Sports (2 credits)
- PHED 3605 Teaching Individual Sports (2 credits)
- PHED 3607 Teaching Fitness (2 credits)
- Required Electives in Major
- Liberal Education requirements

Senior

- PHED 4400 Curriculum and Assessment in Physical Education (3 credits)

- PHED 4500 Inclusive Physical Education (3 credits)
- PHED 4920 Directed Group Study (1 credit)
- PHED 4970 Internship (1-12 credits)
- Complete Professional Education Courses including student teaching

Science Education, B.S. *major* Chemistry Specialty (Teacher Licensure)

Required Credits: 83

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (5 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

CHEMISTRY SPECIALTY

COMPLETE THE FOLLOWING COURSES:

- CHEM 3110 Laboratory Management and Safety (2 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 3980 Research (1 credit)

SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR CHEMISTRY SPECIALTY, SCIENCE EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following is a list of required Science (Chemistry) Major, B.S. courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your Chemistry academic advisor as to the proper courses and sequence of courses needed for graduation.

Freshman

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- Liberal Education requirements

Sophomore

- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- GEOL 1110 Physical Geology (4 credits)
- or GEOL 1120 Historical Geology (4 credits)
- PHYS 1101 General Physics I (4 credits)
- or PHYS 2101 Physics I (5 credits)
- Liberal Education requirements

Junior

- CHEM 4411 Biochemistry I (3 credits)
- or CHEM 4811 Advanced Inorganic Chemistry I (3 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
- Other Professional Education requirements
- Liberal Education requirements

Senior

- CHEM 3110 Laboratory Management and Safety (2 credits)
- Chemistry Electives numbered 3100 or above
- Complete Professional Education requirements including one semester of student teaching
- Complete Liberal Education requirements

Science Education, B.S. *major* Earth and Space Science Specialty (Teacher Licensure)

This program is designed to meet the requirements for Science teacher licensure with a specialty in Earth and Space Science in the State of Minnesota. Students who complete this major will be eligible for teacher certification in Earth and Space Science in grades 9-12 and for teaching all sciences in grades 5-8. Students should consult their academic advisor in Earth Science prior to developing their program.

Students should complete the science core courses listed below prior to beginning the Earth and Space Science specialty. Consult with your academic adviser if you wish to have an alternative method of satisfying this requirement considered or wish to begin a specialty prior to completion of the science core courses.

Required Credits: 91

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (5 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

EARTH AND SPACE SCIENCE SPECIALTY

COMPLETE THE FOLLOWING COURSES:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- SCI 2100 Astronomy (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 3211 Environmental Hydrology (3 credits)
- ENVR 4050 Geochemistry (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 4970 Internship (3 credits)

- GEOL 4980 Research (3 credits)

SELECT 1 OF THE FOLLOWING COURSES NOT TAKEN IN THE CORE:

- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)

Science Education, B.S. *major* Life Science Specialty (Teacher Licensure)

Required Credits: 88

Required GPA: 2.50

Core Courses for Science Teaching in Grades 5-8

COMPLETE THE FOLLOWING COURSES:

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 Physics I (5 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

LIFE SCIENCE SPECIALTY

A. REQUIRED BIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 2620 Field and Laboratory Projects in Ecological Research (2 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4620 Organic Evolution (3 credits)

- BIOL 3720 Plant Form and Function (4 credits)
or BIOL 3830 Aquatic Plants (4 credits)

B. REQUIRED BIOLOGY ELECTIVE

SELECT 1 OF THE FOLLOWING COURSES:

- BIOL 3150 Animal Behavior (3 credits)
- BIOL 3310 Entomology (4 credits)
- BIOL 3510 Ornithology (4 credits)
- BIOL 4520 Mammalogy (4 credits)
- BIOL 4534 Ichthyology (4 credits)

SUGGESTED SEMESTER SCHEDULE FOR LIFE SCIENCE SPECIALTY, SCIENCE EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following is a list of required Science (Life Science) Major, B.S. courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your Biology academic advisor as to the proper courses and sequence of courses needed for graduation. It is possible, in some circumstances, that courses in a student's Liberal Education program may be used in his or her academic major.

Freshman

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- Liberal Education requirements

Sophomore

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- BIOL 2620 Field and Laboratory Projects in Ecological Research (2 credits)
- BIOL 3720 Plant Form and Function (4 credits)
- GEOL 1110 Physical Geology (4 credits)
- or GEOL 1120 Historical Geology (4 credits)
- PHYS 1101 General Physics I (4 credits)
- or PHYS 2101 Physics I (5 credits)
- Consider starting Professional Education sequence
- Liberal Education requirements

Junior

- BIOL 3710 Microbiology (4 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
- Other Professional Education requirements
- Liberal Education requirements

Senior

- Biology Elective (BIOL 3150, 3310, 3510, 4520, or 4534)
- BIOL 4620 Organic Evolution (3 credits)
- Complete Professional Education requirements, including one semester of student teaching
- Complete liberal education requirements

Science Education, B.S. *major*

Physics Specialty (Teacher Licensure)

Required Credits: 90

Required GPA: 2.50

CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 1212 Introductory Biology II (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- PHYS 2101 Physics I (5 credits)
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- GEOL 1110 Physical Geology (4 credits)
- GEOL 1120 Historical Geology (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

PHYSICS SPECIALTY

COMPLETE THE FOLLOWING COURSES:

(Select PHYS 2101 from the core for this specialty)

- MATH 2471 Calculus I (5 credits)
- PHYS 2102 Physics II (5 credits)
- PHYS 2500 Electronics I (4 credits)
- PHYS 3600 Modern Physics (4 credits)
- PHYS 4580 Optics (4 credits)

COMPLETE THE FOLLOWING COURSE:

- PHYS 4980 Research (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR PHYSICS SPECIALTY, SCIENCE EDUCATION MAJOR, B.S. (TEACHER LICENSURE)

The following suggested schedule includes the courses required in the Science (Physics) Major, B.S., arranged by year. There is some flexibility, but because of the sequential nature of Physics courses, it is very important that Calculus I and Physics I be taken as early as possible.

Freshman

- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- PHYS 2101 Physics I (5 credits)
- PHYS 2102 Physics II (5 credits)
- Liberal Education requirements
- *Students not scoring sufficiently high on the Mathematics Placement Exam should complete Precalculus (MATH 1470) before taking Calculus I and Physics I. This may delay taking other required Physics courses. Consult your Physics advisor.

Sophomore

- PHYS 2500 Electronics I (4 credits)
- PHYS 3600 Modern Physics (4 credits)
- Required Biology, Chemistry, or Geology core courses
- Liberal Education requirements

Junior

- PHYS 4580 Optics (4 credits)
- PHYS 4980 Research (3 credits)
- Required Biology, Chemistry, or Geology core courses
- Liberal Education requirements

Senior

- Physics courses not completed previously
- SCI 3100 Integrative Science for Teachers (4 credits)
- SCI 3450 Science Methods For Grades 5-8 (4 credits)
- Liberal Education requirements
- Complete Professional Education requirements

Social Studies Education, B.S. *major*

(Teacher Licensure)

Required Credits: 86

Required GPA: 2.50

Note: Students must have a minimum overall 2.50 GPA in the major. No grade below a "C" may be used to meet program requirements. A minimum of 22 of the 53 Social Studies program credits must be completed at BSU.

I ECONOMICS COURSES

COMPLETE THE FOLLOWING COURSES:

- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

II GEOGRAPHY COURSES

COMPLETE THE FOLLOWING COURSES:

- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 3410 Geography of North America (3 credits)

III HISTORY COURSES

COMPLETE THE FOLLOWING COURSES:

- HST 1114 United States History I, to 1877 (3 credits)
- HST 1115 United States History II, since 1877 (3 credits)

- HST 1304 World History I, Prehistory-1500 (3 credits)
- HST 1305 World History II, 1500-Present (3 credits)
- HST 2610 Minnesota History (3 credits)

IV POLITICAL SCIENCE COURSES

COMPLETE THE FOLLOWING COURSES

- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)

SELECT 1 OF THE FOLLOWING COURSES (3 CREDITS MINIMUM):

- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3140 Canadian Politics (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
- POL 3180 International Law and Organization (3 credits)
- POL 3190 International Political Economy (3 credits)
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3230 Environmental Politics (3 credits)
- POL 3410 Legislative and Executive Relations (3 credits)
- POL 3420 Campaigns and Elections (3 credits)
- POL 4200 Constitutional Law (3 credits)

V PSYCHOLOGY COURSE

COMPLETE THE FOLLOWING COURSE:

- PSY 1100 Introductory Psychology (4 credits)

VI SOCIOLOGY COURSES

COMPLETE THE FOLLOWING COURSES:

- SOC 1104 Society and Social Issues (3 credits)
- SOC 3010 Social Theory (3 credits)
- *or* SOC 3050 Environmental Sociology (3 credits)

VII SOCIAL STUDIES METHODS COURSE

COMPLETE THE FOLLOWING COURSE:

- GEOG 3460 Teaching of Middle and Secondary School Social Studies (4 credits)

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

Spanish Education, B.S. *major* (Teacher Licensure)

Required Credits: 64

Required GPA: 2.50

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- ML 3470 Methods Of Teaching Modern Languages (4 credits)
- ML 3430 Linguistics (3 credits)
- SPAN 3311 Composition and Conversation (3 credits)
- SPAN 3312 Advanced Readings and Conversation (3 credits)
- SPAN 4430 Spanish Grammar and Linguistics (1 credit)

SELECT 11 SEMESTER CREDITS FROM SPANISH COURSES NUMBERED 3300 OR ABOVE:

II REQUIRED ELECTIVES

SELECT 6 SEMESTER CREDITS WITH CONSENT OF ADVISOR

REQUIRED PROFESSIONAL EDUCATION COURSES

COMPLETE THE FOLLOWING COURSES:

- ED 3100 Introduction to the Foundations of Public School Education (3 credits)
- ED 3110 Educational Psychology (3 credits)
- ED 3140 Human Relations In Education (3 credits)
- ED 3350 Pedagogy: Planning for Instruction (3 credits)
- ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)
- ED 4737 Content Area Reading (3 credits)
- ED 4799 The Professional Teacher (1 credit)
- HLTH 3400 Health and Drugs in Society (2 credits)

Complete 12 credits of student teaching:

- ED 4830 Student Teaching - Secondary (1-12 credits)

Courses

Warning: Invalid argument supplied for foreach() in /data/web/deploy/catalog/releases/production/2014-03-17-86d336d/pdf/views/area.php on line 104

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
 1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
 1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
 1940, 2940, 3940, 4940 IN-SERVICE COURSE
 1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
 1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS

Professional Education Courses

ED 1111 American Sign Language 1 (3 credits)

In this introductory course, students learn basic sign vocabulary, grammatical structure, and fingerspelling. Introduction to the Deaf community as a linguistic and cultural minority in the United States. Explores differences in hearing and Deaf cultures throughout the world. Liberal Education Goal Area 8

ED 1112 American Sign Language 2 (3 credits)

In this introductory course, students continue to learn basic sign vocabulary, grammatical structure, and fingerspelling. Students deepen their knowledge of the Deaf community as a linguistic and cultural minority in the United States. Explores differences in hearing and Deaf cultures throughout the world. Prerequisite: ED 1111 or ML 1111. Liberal Education Goal Area 8

ED 2007 Anatomy of Hate (3 credits)

Exploration of the mentality and culture of various hate groups, with connections between historical and contemporary events. Discussion of dissemination of sensitive material in the K-12 environment. Liberal Education Goal Areas 7 & 9

ED 2100 Child Development and Learning (3 credits)

Child development and learning from prenatal through eight years of age. Emphasis on developmental domains and learning: physical (including health practices), cognitive, language, emotional, social (includes cultural), and creative. Assessment of development and learning. Field experiences required for child observation and assessment. Prerequisite: 2.50 GPA.

ED 2925 People and the Environment - Education Perspective (3 credits)

This course will survey the philosophical, historical, and ecological basis for environmental education within the context of K-12 educational institutions. Environmental issues of a local, state, federal, and global nature will be investigated. The role of pedagogy as a basis for changing societal attitudes relative to environment will be explored. Liberal Education Goal Area 10.

ED 3000 Introduction to FasTrack (3 credits)

This course provides a comprehensive evaluation of the professional and academic experiences of aspiring teacher candidates. Transcripts and professional data are reviewed. Once the evaluation is completed, the student will work with the instructor to create an individualized program plan that leads to teacher licensure. Students are introduced to the concept of professional reflection based on the Standards of Effective practice. Student concerns and questions are addressed as well as an introduction to D2L and online learning. Discussions around the four components of the Professional Education Conceptual Framework in the areas of environmental awareness, technology, proficiency in teaching and collaboration occur via D2L. An introduction to TaskStream and its relation to the documenting of the Standards of Effective practice is provided. The cost for reviewing transcripts is waived for candidates who enroll in this course. This course is required before taking any other courses in the FasTrack program. Prerequisite: An earned bachelor's degree.

ED 3100 Introduction to the Foundations of Public School Education (3 credits)

Introduction to the historical, social, and political foundations of public school education. Introduction to the roles, functions, and responsibilities of an elementary or secondary public school teacher; a practicum experience. Prerequisites: Completion of PPST, 2.5 GPA, and 30 credits.

ED 3110 Educational Psychology (3 credits)

A study of the teaching and learning process: teaching with emphasis on planning effective instruction, management, and assessment; learning from behavioral, information processing, and constructivist views focusing on how learning is influenced by cognitive, personal, social, and moral development, and by teaching approaches, motivation, and other factors. Prerequisites: 2.50 overall GPA; Corequisite: ED 3100.

ED 3140 Human Relations In Education (3 credits)

Study of the causes and psychological dynamics of racism, sexism, and other forms of human oppression. Focus on building teacher/family relationships as a strategy in anti-bias teaching. Prerequisite or Corequisite: ED 3100 and ED 3110.

ED 3160 Philosophy and Organization of the Middle School (2 credits)

Specific information and skills relative to the development of a philosophy and rationale for a middle school. Emphasis on the relationship between the middle school student, the middle school teacher, and the philosophy, organization (including interdisciplinary planning, advisor/advisee plan, etc.), and program of the middle school.

ED 3170 Education of the American Indian (3 credits)

Survey of traditional and western models used in the education of American Indians from colonial times to the present.

ED 3201 Language Arts I (3 credits)

A survey of various approaches and an investigation of the multiplicity of tasks involved in the teaching of elementary school reading. Focuses on emerging literacy development as well as assessment in the early years of learning to read. Corequisites: ED 3100 and ED 3110.

ED 3202 Language Arts II (3 credits)

Focuses on the use of children's literature in the elementary and middle schools and the role of literature in a balanced literacy program and continued language development. A balanced literacy program includes the integration of reading, writing, spelling, listening, speaking, and viewing skills meeting the needs of diverse learners. Prerequisites: ED 3201 for Elementary Education licensure candidates.

ED 3203 Language Arts III (3 credits)

Focuses on literacy components of the elementary and the middle school reading program. Special emphasis is given to the development of literacy skills in writing, listening, speaking, media literacy, and presenting and viewing as a part of a holistic view of language and communication. Prerequisites: ED 3202 for Elementary Education licensure candidates.

ED 3207 Reading in the Primary Grades (3 credits)

Methods and materials used in the teaching of reading in the primary grades with an emphasis on instructional problems methodology, and materials.

ED 3208 Developmental Reading in Middle School (3 credits)

Intensive study of reading in the middle school grades with an emphasis on instructional problems, methodology, and materials. Prerequisite: ED 3201.

ED 3217 Curriculum Enrichment through Media Resources (3 credits)

Designed to develop activities, projects, and units with a focus on the integration of the language arts throughout the elementary school curriculum. Various media resources are explored with an emphasis on technology. Prerequisite or Corequisite: ED 3201

ED 3218 Laboratory Experiences in Reading (2 credits)

Designed to provide students with actual teaching experiences in the area of reading. Time arranged.

ED 3221 Elementary Math Methods (3 credits)

Objectives, materials and methods of teaching modern mathematics. Requires visits to elementary schools. Prerequisites: ED 3100, MATH 1011 and Math 1013.

ED 3222 Elementary Science Methods (3 credits)

Consists of 1) a process science component covering physical, earth, and life science as related to Piagetian learning theory, and 2) an environmental education component including the philosophy, objectives, methods, and materials of environmental education. Prerequisites: ED 3100 and ED 3110.

ED 3240 Social Studies in the Elementary School (3 credits)

Objectives, strategies, and materials related to teaching social studies in the elementary school. Prerequisites: ED 3110, and ED 3140.

ED 3257 Introduction to Environmental Education and Interpretation (3 credits)

Objectives, program ideas, methods, and materials of outdoor education. General and specific techniques of implementing a program of environmental education and interpretation. Might not be offered every year.

ED 3258 Environmental Interpretation (3 credits)

Introduces the student to the profession of interpretation. Students gain an understanding of the principles of interpretation and their application in interpretative services in a wide variety of setting including museums, zoological gardens, industrial sites, and parks. Might not be offered every year.

ED 3301 Creative Expressions (3 credits)

Designed to help pre-service teacher education majors learn how to integrate literature, art, drama, dance/movement, and music throughout the curriculum by providing a basic arts knowledge base, clear reasons for integration, and specific arts integration principles. Emphasis is on teaching with, about, in, and through the arts. Prerequisites: ED 3100 and ED 3110.

ED 3302 Creative Process Foundations: Patterns (3 credits)

A comprehensive and holistic approach to arts education designed to provide pre-service teachers with a set of tools and strategies to teach the arts and incorporate them with other core disciplines. It provides the tools and resources to prepare teachers and students to create knowledge--emphasis on "create."

ED 3350 Pedagogy: Planning for Instruction (3 credits)

Introduction to the elements of designing effective instruction: learners, goals and objectives, teaching strategies, instructional technologies, and assessment, with special attention to the learners. Concepts from educational psychology and human relations are applied to the development of appropriate educational materials for diverse learners. Prerequisites: ED 3100 and ED 3110.

ED 3410 Middle School Science Methods (2 credits)

Introduces methods and materials for teaching science for grades 5-9. Discusses the teaching of science through a hands-on process methodology. These methods are practiced through a required practicum with public school students. Various process oriented science curriculum materials are used during class. Prerequisite: ED 3110.

ED 3417 Teaching and Learning in the Middle School (3 credits)

Course provides comprehensive preparation for teaching in the middle school. Topics of study include young adolescent development, the family's impact on the middle school learner; middle school philosophy and content, instruction, and assessment at the middle school level. Study is given to the impact of technology on middle school teaching and learning. Course is project-focused, meaning content is organized around projects completed by students individually and in teams. Field experience is required.

ED 3440 Mathematics Methods in the Secondary School (4 credits)

NCTM Standards, lesson planning, Minnesota Frameworks, Graduation Rule, objectives, methods, and materials. Prerequisites: ED 3110 or consent of instructor.

ED 3480 Methods of Teaching Industrial Technology, Vocational Education (2 credits)

Approaches to teaching industrial technology education including philosophy, innovative approaches, classroom and laboratory strategies and methodology. Includes program visitation, evaluation and micro-teaching. Prerequisites: IT 3850, IT junior or senior status, and ED 3110.

ED 3490 Physical Education Methods in Secondary School (1 credit)

Methods and class organizational procedures in secondary physical education. Prerequisites: ED 3110.

ED 3500 Young Children with Special Needs (3 credits)

Introduction to teaching young children with special needs. Includes discussion of important aspects of education for young children in special education and mainstreamed settings. Students interrelate experiences working with young children with special needs to developing an educational philosophy. Prerequisite: ED 3110 or consent of instructor.

ED 3508 Parent/Professional Teams in Early Childhood (3 credits)

Emphasizes cooperative and coordinated educational programming with parents of normally and atypically developing infants, toddlers, and preschool age children. Models of early intervention and parent-teacher educational programs are presented and adapted for use with parents. First is interagency staffing patterns and cooperation among agencies and second is geographic, economic and social factors and related problems. Prerequisite: ED 3670/5670 or ED 3500/5500.

ED 3601 Assistive Technology (3 credits)

An overview of assistive technology for use by individuals with disabilities will be covered. Five types of devices will be examined and their uses discussed. They include environmental control devices simple augmentative communication devices; switches, modules, and mounting systems; computer adapted input devices; and special needs software. This course provides a format via e-mail for discussion regarding application and analysis of assistive technology devices. In addition, students will synthesize and evaluate information on disabilities and assistive technology devices found on the Internet.

ED 3608 Mathematics for Learners with Special Needs (2 credits)

Study of the problems that students who have learning difficulties exhibit in mathematics. Diagnostic, remedial, and instructional activities are developed. Requires an approved elementary (K-4) clinical experience. Prerequisites: ED 3221 and SPED 3600.

ED 3670 Foundations of Early Childhood Education (3 credits)

Social, psychological, historical, and educational foundations of kindergarten and prekindergarten programming are explored. Emphasis is placed on efforts of modern programs to adapt curriculum and instruction to the developmental levels and experience backgrounds of young children. Content will be geared toward teaching at the kindergarten and prekindergarten levels. Requires visitations at level of professional interest.

ED 3677 Relations and Management in Early Childhood Education (3 credits)

Study and development of skills in relations with young children, parents, and co-workers. Guidance and group management techniques are addressed for working effectively with prekindergarten and young school aged children. Experience in prekindergarten or kindergarten settings is a part of the class.

ED 3715 Learning Experiences for Infants and Toddlers (4 credits)

Students study and build skills in relation to developmentally appropriate and nurturing communication techniques, relationships, environments, and learning activities for infants and toddlers. Collaborative and culturally responsive relationships with families and co-workers are emphasized. Fifteen-hour field experience is required. (Might not be offered every year)

ED 3780 Adaptation and Management: Designing the Learning Environment (3 credits)

Focuses on designing and managing the learning environment to meet needs for growth in all learners in affective, cognitive, psychomotor, and social domains. Theories of individual behavior, diverse learners, group dynamics, communication, behavioral interventions, and classroom management presented and applied in simulations. Research on related topics is undertaken. Prerequisites: ED 3100, ED 3110, ED 3140, and ED 3350.

ED 3931 Experimental Course (3 credits)

A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

ED 4605 Infant and Toddler Student Teaching (5 credits)

Students integrate theory and practice through working as a member of a teaching team with placement in an infant and/or toddler classroom. Students complete portfolio-based student teaching experience, focusing on selected INTASC and BOT indicators. Weekly seminars. 3 hours of lab per week per credit. Prerequisite or Corequisite: ED 3715.

ED 4700 Developmentally Appropriate Preprimary Education (3 credits)

Course studies developmentally appropriate curriculum and methods for young learners. The use of learning centers, thematic instruction, culturally sensitive teaching techniques, emergent literacy and numeracy, and constructivist educational theory are explored. This is the culminating seminar in early childhood programs and includes a practicum in prekindergarten or kindergarten classroom. Prerequisite: ED 3670.

ED 4737 Content Area Reading (3 credits)

Intensive study of content area reading issues. Assessment techniques and instructional strategies appropriate for grades four through twelve. Literacy requirements addressed include application competencies that take into account classroom experiences related to various disciplines. Prerequisites: ED 3100 and ED 3110.

ED 4740 Methods of using Instructional Technology (4 credits)

Fundamentals of theory and practice in using instructional technology in teaching. Explores current and future methods of teaching with technology. Assists teachers and prospective teachers in utilizing various instructional technologies in their teaching.

ED 4747 Curriculum Development And Instructional Technology (4 credits)

How to modify existing curriculum to incorporate instructional technology into the educational program. Focuses on curriculum development processes that link advanced multi-media technologies to the curriculum.

ED 4750 Family, School, Community Relations (3 credits)

Course focuses on family involvement as essential in the successful education of the prekindergarten-12th grade learner. Study is given to family dynamics, trends in family-school relations, problems that inhibit parent involvement, and strategies for productive family involvement. Community and cultural considerations in family-school-community relations are examined. Pertinent field activities are required. Prerequisites: ED 3110, and ED 3140.

ED 4757 Philosophy and Methods of Parent Education (3 credits)

Historical, cultural, social, and psychological foundations in the philosophy of parent education are explored. Methods in the education of adults in the context of the family are studied. Models of parent/family education are examined. Visitations to early childhood family education programs are required. Prerequisites: ED 3500, ED 3670, and ED 3677.

ED 4758 Teaching the Learner at Risk: An Ecological Perspective (2 credits)

The course explores family and school factors that put the learner at risk for academic and social failure. Strategies are developed for addressing these factors, including collaborative efforts within and outside of the classroom. Prerequisite or Corequisite: ED 3110 and ED 3140.

ED 4760 Vocal Music Consultant in the Elementary School (1 credit)

Music resources, films, records, song literature, and community resources; demonstration and observation lessons; workshops, staff relations, purchase and maintenance of materials and equipment.

ED 4770 Organization and Administration of Environmental Education & Interpretation (2 credits)

The organization and administration of environmental education and interpretation experiences in varying lengths, and the acquisition, development, and maintenance of outdoor education facilities and programs. Prerequisite: ED 3257. Might not be offered every year.

ED 4777 Field Experiences in Environmental Education and Interpretation (3 credits)

An interdisciplinary field oriented course designed to provide the student with basic knowledge of the natural environment and its relationship to the total school curriculum. Each student will design and execute an environmental or outdoor education project related to their major field of study. Arrangements will be made to test out the activity on an appropriate group (e.g. school children, adults, etc.) Prerequisite: ED 3257. Might not be offered every year.

ED 4799 The Professional Teacher (1 credit)

Students study the role of the student teacher in planning for full-time teaching. Reviews classroom procedures, organization, planning, and technologies, and covers student teacher and beginning teacher procedures, general background, introduction to the classroom, teaching strategies, language, thinking, evaluation, employment (including letters of application, resume writing, and interviews), and continued professional growth. The course must be taken the semester before student teaching. Note: Elementary majors must successfully complete all methods courses prior to student teaching; secondary majors must successfully complete all methods courses and 80 percent of their content courses prior to student teaching. Prerequisites: ED 3100, ED 3110, ED 3140, ED 3350, and ED 3780; ECE majors are exempt from ED 3350 and ED 3780.

ED 4811 Preprimary Student Teaching (3-10 credits)

Students integrate theory and practice through working as a member of a teaching team in a split prekindergarten and kindergarten placement. Includes application of content and methods from ED 3670 and ED 3677, as well as portfolio documentation of attainment of BOT outcomes as specified in the syllabus. Prerequisites or Corequisites: ED 3670 and ED 3677.

ED 4817 Practicum in Young Child and Family Setting (3 credits)

Students work in a child and family prekindergarten setting that may be in part home-based. Students assist cooperating teacher/home visitor in conduct of the program including such tasks as assessment, planning, activity implementation, parenting education, and evaluation of activity effectiveness. Requirements: Forty-five (45) clock hours of experience including weekly seminars, for each semester credit.

ED 4818 Field Experience in Instructional Technology (4 credits)

Students teach the use of technology equipment and software in elementary or secondary school settings and complete companion reflection activities and projects. Prerequisites: ED 4740 and ED 4747.

ED 4820 Student Teaching - Elementary (1-12 credits)

Full-time teaching with guidance and supervision by University supervisors and assigned school personnel. Graded Satisfactory/Unsatisfactory only. Prerequisites: ED 3100, ED 3110, ED 3140, ED 3350, ED 3780, and ED 4799.

ED 4827 Primary Student Teaching (1-12 credits)

Students work as a member of a teaching team in a public school primary grade classroom. Students complete portfolio-based student teaching experience, focusing on selected INTASC, BOT, and Graduation Standards outcomes. Weekly seminars. University selected and approved classroom placement. Three contact hours per week per credit, including seminar. Taken at end of Early Childhood Licensure program.

ED 4830 Student Teaching - Secondary (1-12 credits)

Full-time teaching with guidance and supervision by University supervisors and assigned school personnel. Graded Satisfactory/Unsatisfactory only. Prerequisites: ED 3110 and ED 4799.

ED 4840 Student Teaching - Special Fields (1-12 credits)

Full-time teaching with guidance and supervision by University supervisors and assigned school personnel (visual arts, business education, industrial arts education, instrumental music, vocal music, health and physical education.) Graded Satisfactory/Unsatisfactory only. Prerequisites: ED 3100, ED 3110, ED 3140, ED 3350, ED 3780, and ED 4799.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS