

EDUCATION

Program options

Embark on a new career in teaching through the Master of Arts in Education program at St. Catherine University. There are a number of options for obtaining a master's degree.

Initial Licensure Programs

The MAED Initial Licensure program is carefully designed as a way for students who have already earned a bachelor's degree to meet the requirements for a teaching license, earn a master's degree, and gain skills to transform the world around them as a teacher.

Initial Licensure program options are primarily offered on the St. Paul campus. Nearly all courses are available in an evening/weekend/hybrid format throughout the calendar year, making it possible for busy adults to pursue a degree. Our K-6 Elementary with Montessori Elementary Credential program courses are offered on the St. Paul campus as well as the Montessori Center of Minnesota.

There are a number of options for obtaining a master's degree and teaching license: elementary, secondary, and K-12. Secondary and K-12 option students can choose from a number of subject specific specialization. Time to completion varies according to the teaching license the student is pursuing and her or his prior college coursework. St. Kate's advisors will work with each student to evaluate her or his transcripts and develop a program of study to meet the student's professional goals.

Montessori programs

St. Catherine University Advanced Montessori Programs, a 30-year institution, has prepared many of the Montessori teachers in the Twin Cities' public Montessori schools. We are one of the few Montessori training centers across the country affiliated with a college or university, and we're proud that women and men from around the world begin or advance careers in Montessori education here. Montessori fields of study include:

- AM2 - a one year program that includes a three-day face-to-face learning experience followed by a nine-month, web based course of study
- Elementary (ages 6-12 years)
- Primary (2.5-6 years)

Post-Licensure Programs

MAED: Curriculum and Instruction

The MAED Curriculum and Instruction program provides relevant and challenging advanced-level studies for currently licensed teachers. The program utilizes online learning so teachers in the field can balance graduate study with their teaching responsibilities.

The Curriculum and Instruction program, open to both women and men, is based on action research. Using this model, classroom teachers identify a problem in their classrooms and then conduct evidenced-based research to solve it. The program focuses strongly on assessment strategies to improve the teaching-learning cycle and drives results that are relevant and applicable to our students' immediate classroom settings.

MAED: Technology Integration

The MAED Technology Integration program is designed for licensed teachers interested in expanding their capacity to meet diverse student needs in a digital learning environment and invested in preparing their students for 21st Century citizenship and career opportunities.

The MAED Technology Integration program will improve teacher efficacy through: modeling effective technology integration; developing knowledge of computer programming languages; fostering ethical leadership practices related to digital integration; and, improving the capacity of graduates to lead dialogues around ethical practices in information generation, analysis and circulation.

MAED: STEM

In conjunction with St. Catherine University's National Center for STEM Elementary Education teachers may earn a master's degree with a STEM focus. Coursework provides classroom teachers with the tools to creatively and effectively address state and national standards in Science, Technology, Engineering and Math and the ability to integrate STEM concepts throughout their K-8 curriculum.

Master's

- Master of Arts in Education - Initial Licensure (<http://catalog.stkate.edu/graduate/business-professional-studies/education/initial-licensure>)
- Master of Arts in Education - Curriculum and Instruction (for licensed teachers) (<http://catalog.stkate.edu/graduate/business-professional-studies/education/post-licensure/curr-instr>)
- Master of Arts in Education - STEM (for licensed teachers) (<http://catalog.stkate.edu/graduate/business-professional-studies/education/post-licensure/stem>)
- Master of Arts in Education - Technology Integration (for licensed teachers) (<http://catalog.stkate.edu/graduate/business-professional-studies/education/post-licensure/tech-integ>)
- Master of Arts in Education - Montessori Programs (<http://catalog.stkate.edu/graduate/business-professional-studies/education/montessori>)

Certificates

- Academic Technology Integration - Certificate (<http://catalog.stkate.edu/graduate/business-professional-studies/education/certificates/tech-integ>)
- STEM - Certificate (<http://catalog.stkate.edu/graduate/business-professional-studies/education/certificates/stem>)

EDUC 5010 Physics and Engineering for Educators – 3 credits

Most of the world we experience everyday is human made or engineered. Engineers create products from indoor plumbing to airplanes that make our lives more comfortable and convenient. This course is an introduction to the engineering concepts associated with products in your everyday life, including structures, machines and mechanisms, fluids, and electricity.

EDUC 5030 Earth and Space Science for Educators – 3 credits

Earth and space science is an integral part of the K-8 Minnesota State Standards and Next Generation Science Standards. This course focuses on a hands-on, discovery learning approach to teaching and learning. Topics include understanding the nature of science, Earth's place in the Universe, Earth structures and processes, interdependence in Earth systems, and human interactions with Earth systems. The course will also focus on the pedagogy or teaching of science content to children.

Prerequisite: Admission to graduate education initial licensure program.

EDUC 5070 Teachers as Leaders for a Changing Society – 4 credits

In this writing-intensive course, students will examine historical and emerging issues that impact experiences of children, families, and teachers in U.S. public elementary or secondary schools. Students will learn about promoting social justice in school settings and teaching as a career choice. Graduate students synthesize literature from multiple theoretical perspectives to comment on current issues in education. Fieldwork required. Check the class schedule for hours required. Prerequisite for all education courses. Required for elementary, secondary and K-12 licensure. Must pass with a C- or above.

EDUC 5090 General Methods: K-12 and Secondary – 4 credits

A general methods course focusing on five areas: planning for instruction, strategies for implementing instruction, evaluating and reporting techniques, classroom management and instructional technology. Micro-teaching in individual student's discipline. Required for secondary and K-12 licensure. Fieldwork required. Check the class schedule for hours required.

Prerequisite with concurrency: EDUC 5070.

EDUC 5100 Early Childhood Practical Life – 1 credit

The goals of coordination of movement, independence, concentration and development of the sense of order as approached through Montessori practical life pedagogy. Emphasis on the cycle of activity and its process, and the analysis of movement involved in the area of practical life.

EDUC 5110 Foundations and Theories in Early Childhood Education – 2 credits

A study of the historical roots and contemporary manifestations of early childhood education theories and practices. The research of educators and child psychologists who have made significant contributions to the current understanding of the young child are studied in relation to contemporary practices in developing programs for the nurturing and education of the child. Theories regarding the learning modes and stages of development in the typical and atypical young child are presented, and practical applications of these theories are examined in contemporary inclusive child-care programs. Contemporary issues in child care, parent education and policies relating to children are also examined. Required for preprimary endorsement. Fieldwork required. Check the class schedule for hours required.

EDUC 5150 Early Childhood Sensorial Education – 1 credit

Rationale and techniques necessary to ensure development of sensory growth. Introduction of materials in sequential order with emphasis on refinement of sensory perception, repetition, control of error and language (three period lesson). Distinct training in presentation techniques.

EDUC 5190 Methods and Materials in Elementary Social Studies and History – 2 credits

Social studies includes exposure to geography and history from the Montessori perspective of Cosmic Education. An integrated, holistic approach of giving the child the universe through stories and studies of human beings and the environment is emphasized.

EDUC 5220 Early Childhood Music and Movement – 1 credit

The study of early childhood music and movement is presented as a developmental process of absorption, exploration and self-expression, with an emphasis on various present and historical cultures. Physical education is presented as movement, which may include the development of the body through exploration, cooperative play, rhythms and dance.

EDUC 5260 Early Childhood Art – 1 credit

Art is presented as exploration of media and a means to self-expression with an emphasis on variety. The process of an art activity rather than the product is emphasized. A cultural and historical component is included.

EDUC 5270 Early Childhood Science – 1 credit

Observation of scientific phenomena through simple experiments that involve children and their intrinsic interests. The study of biology also is introduced, including a division into botany and zoology.

EDUC 5290 Methods and Materials in Elementary Music and Movement – 1 credit

The study of music and movement is presented as a developmental process of exploration, absorption and self-expression, with an emphasis on various present and historical cultures. Montessori materials and theory are utilized. Movement includes the development of the body through exploration, games, cooperative play, rhythms and dance.

EDUC 5360 Early Childhood Mathematics – 2 credits

Presenting the basic skills of mathematics using developmental materials. Emphasis on process: from the numbers 1-10 through the decimal system, the operations of arithmetic and memorization of basic facts. Includes supervised practice with materials.

EDUC 5370 Early Childhood Language Arts and Literacy – 2 credits

Analysis of language as spoken and written communication. Rationale for the sensory-motor involvement with emphasis on the sequence of skills to be developed to assist the child's natural growth toward effective spoken and written communication. Oral language, phonetic analysis, initial writing, handwriting skills, early literacy and beginning grammar skills are taught as a foundation for total reading.

EDUC 5380 Early Childhood Social Studies – 1 credit

Social studies includes exposure to geography and history from the Montessori perspective. An emphasis is placed on the holistic approach.

EDUC 5420 Methods and Materials in Elementary Art – 1 credit

The study of art is presented as a developmental process of exploration, absorption and self-expression, using an approach emphasizing various present and historical cultures.

EDUC 5440 Methods and Materials in Elementary Mathematics I – 2 credits

Teaching of the basic skills and nomenclature of mathematics, including arithmetic and geometry, using the Montessori materials. Includes a study of numbers, the decimal system, the four operations, fractions, some algebra, a sensorial introduction to shape, a thorough study of geometric shapes, especially plane and other topics accompanied by theory and rationale. Emphasis is on curriculum development, materials, methodology and the development of mathematical literacy.

EDUC 5470 Methods and Materials in Elementary Biology I – 1 credit

This course provides thorough coverage of the Montessori biology curriculum including a division into botany and zoology, and the methods and materials for teaching. Emphasis is on curriculum development, materials, methodology and understanding of biology.

EDUC 5490 School Health and Chemical Health – 1 credit

A two-module online course for prospective teachers, pre-primary through grade 12, that considers student health issues in the classroom; the teacher's role in observing, responding, referring and reporting; support services in the school; alcohol, tobacco and other drug use in society; approaches to and resources for chemical health promotion and positive youth development; and legal considerations for teachers.

EDUC 5540 Methods and Materials in Language Arts and Literacy I – 2 credits

This course explores the Montessori curriculum, materials and methodology for language arts and literacy. The course includes an analysis of language as spoken and written communication. Reading, writing, grammar and speaking skills are taught in a developmental sequence.

EDUC 5561 Inclusion of Special Needs Students in the Classroom – 3 credits

This course is designed to enable teachers to work successfully in classrooms that include learners who have special physical, emotional and/or learning needs. The teacher will learn to identify characteristics of special needs students, become familiar with legal requirements and acquire strategies for differential instruction and assessment.

EDUC 5620 Early Childhood Student Teaching Practicum I – 2 credits

Supervised internship practicum in approved sites as specified in the American Montessori Society accreditation guidelines. A University supervisor will make a minimum of three visits to each student during the nine-month practicum. Attendance is required at a supervised weekly practicum seminar with materials, including spontaneous problem solving and support sessions once per week throughout the school year. (Out-of-town students must arrange supervised practice and seminar each week with their supervising teacher.) Practicum seminar includes Montessori materials and problem-solving sessions. These courses may be repeated. Students who are doing their practicum away from the University pay all additional costs of observation by the practicum coordinator. NOTE: An alternative self-directed, internship- practicum model can be completed in two years.

EDUC 5630 Early Childhood Student Teaching Practicum II – 2 credits

Supervised internship practicum in approved sites as specified in the American Montessori Society accreditation guidelines. A University supervisor will make a minimum of three visits to each student during the nine month practicum. Attendance is required at a supervised weekly practicum seminar with materials, including spontaneous problem solving and support sessions once per week throughout the school year. (Out-of-town students must arrange supervised practice and seminar each week with their supervising teacher.) Practicum seminar includes utilizing Montessori materials and problem-solving sessions. These courses may be repeated. Students who are doing their practicum at a distance from the University pay all additional costs of observation by the practicum coordinator. NOTE: An alternative self directed internship- practicum model can be completed in two years.

EDUC 5640 Early Childhood Student Teaching Practicum III – 2 credits

Supervised internship practicum in approved sites as specified in the American Montessori Society accreditation guidelines. A University supervisor will make a minimum of three visits to each student during the nine-month practicum. Attendance is required at a supervised weekly practicum seminar with materials, including spontaneous problem solving and support sessions once per week throughout the school year. (Out-of-town students must arrange supervised practice and seminar each week with their supervising teacher.) Practicum seminar includes Montessori materials and problem-solving sessions. These courses may be repeated. Students who are doing their practicum away from the University pay all additional costs of observation by the practicum coordinator. NOTE: An alternative self-directed, internship- practicum model can be completed in two years.

EDUC 5710 Early Childhood Projects I – 1 credit

Individualized work on preparing assigned Montessori albums and materials in the areas of practical life, mathematics, sensorial, language, geography and others as assigned.

EDUC 5720 Early Childhood Projects II – 1 credit

Individualized work on preparing assigned Montessori albums and materials in the areas of practical life, mathematics, sensorial, language, geography and others as assigned.

EDUC 5730 Early Childhood Projects III – 1 credit

Individualized work on preparing assigned Montessori albums and materials in the areas of practical life, mathematics, sensorial, language, geography and others as assigned.

EDUC 5740 Elementary Observation – 1 credit

Observation is an essential skill for guiding a Montessori Environment. Observing classes of children of different ages and looking for specific elements common to all children, but varying in manifestation with the particular age, develop these skills. The emphasis in training the ability to observe is twofold: first to develop the skill itself of observation, and second to use the skill in implementing practices that correspond to meeting the needs of the developing elementary child. During the first academic year (following the first summer of the course), students will observe in pre-selected AMI classrooms. Students will observe full time for two consecutive weeks.

EDUC 5741 Early Childhood Observations – 1 credit

Observation is an essential skill for guiding a Montessori Environment. Observing classes of children of different ages and looking for specific elements common to all children, but varying in manifestation with the particular age, develop these skills. The emphasis in training the ability to observe is twofold: first to develop the skill itself of observation, and second to use the skill in implementing practices that correspond to meeting the needs of the developing elementary child. During the first academic year (following the first summer of the course), students will observe in pre-selected AMI classrooms. Students will observe full time for two consecutive weeks.

EDUC 5750 Elementary Observation – 1 credit

Observation is an essential skill for guiding a Montessori Environment. Observing children of different ages and looking for specific elements common to all children, but varying in manifestation with the particular age, develop these skills. The ability to observe is twofold: first to develop the skill of observation, and second to use the skill in implementing practices that correspond to meeting the needs of the developing elementary child.

EDUC 5751 Early Childhood Observation – 1 credit

Observation is an essential skill for guiding a Montessori Environment. Observing classes of children of different ages and looking for specific elements common to all children, but varying in manifestation with the particular age, develop these skills. The emphasis in training the ability to observe is twofold: first to develop the skill itself of observation, and second to use the skill in implementing practices that correspond to meeting the needs of the developing elementary child. During the first academic year (following the first summer of the course), students will observe in pre-selected AMI classrooms. Students will observe full time for two consecutive weeks.

EDUC 5761 Early Childhood Observation – 1 credit

Observation is an essential skill for guiding a Montessori Environment. Observing classes of children of different ages and looking for specific elements common to all children, but varying in manifestation with the particular age, develop these skills. The emphasis in training the ability to observe is twofold: first to develop the skill itself of observation, and second to use the skill in implementing practices that correspond to meeting the needs of the developing elementary child. During the first academic year (following the first summer of the course), students will observe in pre-selected AMI classrooms. Students will observe full time for two consecutive weeks.

EDUC 5771 Early Childhood Observations – 1 credit

Observation is an essential skill for guiding a Montessori Environment. Observing classes of children of different ages and looking for specific elements common to all children, but varying in manifestation with the particular age, develop these skills. The emphasis in training the ability to observe is twofold: first to develop the skill itself of observation, and second to use the skill in implementing practices that correspond to meeting the needs of the developing elementary child. During the first academic year (following the first summer of the course), students will observe in pre-selected AMI classrooms. Students will observe full time for two consecutive weeks.

EDUC 5800 General Methods: Elementary – 2 credits

In General Methods, students focus on essential elements in standards based classrooms: planning, instructional strategies, differentiated instruction, assessment and grading. This is the foundation course in educational methods. Fieldwork required. Check the class schedule for hours required.

Prerequisite with concurrency: EDUC 5070.

EDUC 5840 Elementary Supervised Practice Lab – 2 credits

Weekly supervised practice lab with materials, including spontaneous problem solving and support sessions throughout the school year. Required attendance. (Out-of-town students must arrange supervised practice each week.) This course also includes individualized work on preparing assigned Montessori albums and materials in the areas of practical life, arithmetic, geometry, language, biology, social studies and others as assigned.

EDUC 5841 Supervised Practice Lab: Early Childhood – 2 credits

Weekly supervised practice lab with materials, including spontaneous problem solving and support sessions throughout the school year. Required attendance. (Out-of-town students must arrange supervised practice each week.) This course also includes individualized work on preparing assigned Montessori albums and materials in the areas of practical life, arithmetic, geometry, language, biology, social studies and others as assigned.

EDUC 5860 Elementary Supervised Practice Lab – 2 credits

Weekly supervised practice lab with materials, including spontaneous problem solving and support sessions throughout the school year. Required attendance. (Out-of-town students must arrange supervised practice each week.) This course also includes individualized work on preparing assigned Montessori albums and materials in the areas of practical life, arithmetic, geometry, language, biology, social studies and others as assigned.

EDUC 5863 Supervised Practice Lab: Early Childhood – 3 credits

Individualized work on preparing assigned Montessori albums and materials in the areas of practical life, mathematics, sensorial, language, geography and others as assigned to use for weekly supervised practice lab with materials. Practice lab includes spontaneous problem solving and support sessions throughout the school year. Required attendance. (Out-of-town students must arrange supervised practice each week.)

Prerequisite: Admission to Montessori program.

EDUC 5880 Elementary Supervised Practice Lab – 2 credits

Weekly supervised practice lab with materials, including spontaneous problem solving and support sessions throughout the school year. Required attendance. (Out-of-town students must arrange supervised practice each week.) This course also includes individualized work on preparing assigned Montessori albums and materials in the areas of practical life, arithmetic, geometry, language, biology, social studies and others as assigned.

EDUC 5991 Topics – 1 credit

Content varies from year to year but does not duplicate existing courses.

EDUC 5992 Topics – 2 credits

Content varies from year to year but does not duplicate existing courses.

EDUC 5993 Topics – 3 credits

Content varies from year to year but does not duplicate existing courses.

EDUC 5994 Topics – 4 credits

Content varies from year to year but does not duplicate existing courses.

EDUC 6000 Becoming Scholars: Evidence-Based Best Practice – 3 credits

We begin this course on campus at St. Catherine University in St. Paul. Teachers come from all over to meet one another, and their instructors, face to face. This campus orientation helps students succeed with all elements of the program. In this course, teachers reflect on strengths and areas for growth in their classroom, with input from colleagues, students and administrators which leads into academic writing of best practices related to any area identified for growth. Based on their own conclusions, students identify focus areas for their program of study—ensuring that improved student outcomes becomes a tangible product of their graduate work. Additionally, teachers familiarize themselves with graduate level reading, writing and scholarship practices. Students begin working with the core principles of the National Board of Teaching Standards.

Prerequisite: Enrollment in a post-licensure MAED program.

EDUC 6040 Classroom Technology – 3 credits

This course is designed to provide the necessary technical, media, and computer skills required for today's teacher. Emphasis is placed on the relationship between learning theory and classroom technology. This course introduces participants to the Internet as a research tool, and to other technology-based tools and media that support instruction, extend communication outside the classroom, enhance classroom management, perform administrative routines more effectively, and increase productivity in daily tasks. Participants will also gain an awareness of the ethical and legal issues that may arise when using technology in the classroom.

EDUC 6110 Best Practices in 1:1 – 3 credits

Teachers wanting to improve their efficacy in a setting where each child has access to her or his own computer or tablet will benefit from this course. Learn best practices for designing, delivering, and assessing student learning in this unique type of setting. Research demonstrates improved student learning outcomes when teachers are able to harness the power of students' access to digital materials for differentiating instruction and assessment. Build on the opportunities and avoid the pitfalls of connected learners with this online course.

EDUC 6123 Making Data Meaningful – 3 credits

Analyzing data is an important, and often under-used, skill within education. The ability to comfortably understand and analyze data is extraordinarily valuable in our world, and teachers who possess these skills become even more valuable members of our school communities. At the end of this course, students will be able to: 1) Think critically about data in education, as well as the appropriate use of that data, 2) Understand basic statistical concepts as they apply to the educational environment, and 3) Apply statistics correctly as a means of improving their own teaching and communicating with others about student outcomes. Through assigned reading, collaborative discussion, and learning activities, students will learn about statistical measures and how to use them. Throughout the course, each student will also create a portfolio analyzing data from their own classroom and school, to help guide their teaching and guide future actions (including action research) within their classroom and school.

Prerequisite: Admission to one of the three post-licensure graduate programs.

EDUC 6141 Theories of Montessori Education – 2 credits

This course provides the historical and philosophical foundations for understanding Montessori's view of human life and development: physical, intellectual, emotional, social and spiritual, with emphasis on the child from ages 6-12. The course includes the aspects of Cosmic Education and child development from birth through adulthood.

EDUC 6142 Practical Aspects of Montessori Education – 2 credits

The course includes the aspects of Cosmic Education with the practicalities of Montessori classroom management, based on freedoms and responsibilities; the prepared environment; going out; and the preparation of the adult. This course also includes the submission of final curriculum albums for the cultural areas, namely geography, biology, and history.

EDUC 6210 Analysis of Contemporary Issues in Education and Montessori I – 3 credits

The critical examination of problems and issues that relate to the present and future of education, including Montessori, are at the core of this course. The course brings together experience and Montessori methodology to address issues and problems that can relate to the roles of course participants. Responsiveness to variable subject matter, issues and purposes is incorporated in a framework of interwoven modes of thinking. This course explores some of today's educational issues which may include intelligent design and evolution, standardized curriculum, testing, charter and home schools, zero-tolerance policies, religion and schools, compulsory attendance, multiculturalism, public Montessori, inclusion, mixed-age grouping and looping and class size.

Prerequisite: Admission to MAED AM2 program.

EDUC 6215 Montessori Renewal: The Story of the Universe – 3 credits

This course is an examination of Montessori best practices for the head, heart and hand. Renewal is essential to developing and maintaining ourselves as healthy guides for our students. This course will enlighten and lift up students' Montessori sensibilities and lesson delivery, update lesson content and renew students: mind, body and soul. Mornings will be spent in the Montessori prepared environment participating in lessons that connect to all Montessori subject areas, with a particular emphasis on the science and stories of the first Great Lesson from atom formation to black holes, a wanderer on the silk road to poetry performances - all in a context that simulates the style of a Montessori classroom and allows students to experience Montessori in the same way that children experience it. Afternoon sessions will feature 'salons' where students will analyze, illuminate, and discuss the principles of high quality Montessori practice. Each day will include a renewal element - visualization, meditation, and other exercises that integrate the mind and body.

EDUC 6220 Professional Growth of the Montessori Guide – 3 credits

This class explores professional development strategies for teachers. Like young students, teachers move through different stages of professional development, using reflective methods of actively conceptualizing, applying, analyzing, synthesizing and/or evaluating. Students will also discuss and understand five major aspects of teachers' professional growth - intellectual, physical, didactic, moral, and spiritual.

Prerequisite: Admission to MAED AM2 program.

EDUC 6225 Literacy through STEM: Using Reading, Writing, Listening and Speaking as Tools in STEM – 3 credits

This course is designed for in-service teachers to deepen their understanding of the role of literacy (reading, writing, listening and speaking) in the teaching and learning of Science, Technology, Engineering and Math. Through readings, discussion, class activities, writing, and inquiry projects, participants in this workshop will learn about discipline-specific Literacy practices in STEM-focused subject areas. The class will also extend teachers' understanding of the role vocabulary plays in supporting learning in STEM, and explore the impact that teaching Academic Language has on students' successful acquisition of STEM-related content knowledge.

EDUC 6230 Classroom Management and Leadership – 3 credits

Students will integrate foundational principles and strategies for leadership in the classroom, based on universal intellectual values that transcend subject matter divisions. Specific areas addressed include management of the environment, work, time, behavior and records. Students also will learn to establish classroom rules and procedures, and to enlist parent support for their leadership-management efforts. A framework for fostering cooperation, social skills and a sense of community in the classroom is generated, and guidelines for peace education are included – with an emphasis on never thinking simplistically about complicated issues and always considering the rights and needs of others.

Prerequisite: Admission to MAED AM2 program.

EDUC 6300 Native Americans: Building Respectful Pedagogy and Curriculum – 3 credits

This course is designed for in-service teachers to deepen their understandings of Minnesota Native American history, language and culture in contexts of material selection and curriculum design. Through Minnesota Native American background readings, critical journals, online discussions, classroom material evaluation and a digital artifact creation, teachers will acquire concepts, tools and strategies to effectively implement Native content into the classroom. The course will also extend teachers' understanding of Native American representations in elements such as: academic standards and sovereignty connected to contemporary issues.

Prerequisite: Admission to one of the masters for practicing teachers programs.

EDUC 6420 Technology Integration Fundamentals – 3 credits

The focus of this course is on emerging research and practices around academic technology integration in K-12 face-to-face instructional settings. Strategies to differentiate and engage learners with effective use of free online tools are emphasized. At the conclusion of this course, teachers demonstrate their competencies in the five core ISTE Standards through development of dynamic online materials for their own classrooms and by participating in a digital service learning project.

Prerequisite: This course is designed for practicing teachers. If you are seeking licensure this is not an appropriate course for your program.

EDUC 6440 Methods and Materials in Mathematics II – 2 credits

Students will learn elementary skills, ideas and nomenclature of mathematics using the advanced Montessori elementary materials, which includes a thorough study of numbers, the decimal system, the four operations, fractions, some algebra, geometric equivalence, area, volume and other topics accompanied by theory and rationale. Emphasis is on curriculum development, materials, methodology and the development of mathematical literacy.

Prerequisites: EDUC 5440, EDUC 6141.

EDUC 6450 Literacy and Learning Redefined in the Digital Era – 3 credits

Literacy, as a social practice, is in the state of continuous change. New texts and tools define the ways in which students engage within our schools and within their lives outside of schools. Students in this course will examine research on the unique demands of reading and writing online, design applications of new literacies through the use of new tools and new texts for K-12 classrooms, and empower students through the development of participatory practices in the classroom. By the end of this course, students will evaluate popular literacy and technology uses in classrooms and develop their own strategies for enacting principles of new literacies for future ready teaching and learning.

Prerequisite: Admission to a post-licensure graduate program or the academic technology integration graduate certificate program.

EDUC 6460 Differentiation in a Digitally-Mediated Environment – 3 credits

This course examines current curricular approaches to meeting the needs of academically, racially and socioeconomically diverse learners. Students will examine research on assessments, learning strategies, and communication needs within the school community. With a strong emphasis on technology, learner diversity will be explored and strategies identified which create learner-responsive classrooms. Differentiation of instruction will be addressed in-depth. Participants will explore strategies, formats and classroom structures that increase the likelihood of student success in learning.

EDUC 6470 Methods and Materials in Elementary Science – 1 credit

Topics from chemistry, physics, astronomy and earth sciences is included and approached with an emphasis on the integration of subject matter with the Montessori materials. Human geography and our many interconnections and interdependencies will be covered.

Prerequisites: EDUC 5470, EDUC 6141.

EDUC 6530 Formative and Standards Based Assessment – 3 credits

This course fosters teacher effectiveness in developing advanced formative and summative assessments. Teachers apply an assessment design process to develop strategies for a curricular unit, which aligns learning goals to assessment methods. Teachers explore current grading practices and examine new methods for designing assessments for learning. Teachers self-select and conduct a research project on either formative assessment or standards-based assessment.

EDUC 6540 Methods and Materials in Elementary Language Arts and Literacy II – 2 credits

Advanced analysis of spoken and written language. Grammar, literacy, literature and writing skills are taught in a developmental sequence with a grammatical emphasis.

Prerequisites: EDUC 5540, EDUC 6141.

EDUC 6550 Best Practices with Informational Texts K-12 – 3 credits

Effective instruction in content-rich nonfiction plays an exceptionally important role in preparing students to be college and career ready. In this course, teachers will examine their current teaching practices while learning best practices with informational text. Through course readings, discussions, and assignments, teachers will critique, improve, and create learning activities to improve their own practice. The course is designed to enable teachers to create units of study with informational text consistent with best practice learning theories explored to share with their peers, administrators, course participants, and faculty.

EDUC 6560 Classrooms by Design – 3 credits

In this course, students will research critical thinking skills and creative expression models, with a special focus on arts integration techniques as practical solutions to enhance student learning and achievement. Student research will converge on two topical "arts" paths, in the areas of literary/literacy arts and visual/performing arts, and that research knowledge will be used to design an enhancement to an existing lesson, unit or learning segment in the student's current teaching assignment. Students will be encouraged to venture into curricular areas that may be new to them, thus affording them an opportunity to expand their learning units and lessons, with the potential to increase the engagement of their students. The course is technology rich and topical investigations will be demonstrated through innovative instructional models that can be applied directly to classroom learning. The successful completion of the learning modules and evidence of final project will be worth three credits.

Prerequisite: Enrollment in MAED curriculum and instruction program.

EDUC 6600 Pathways to Equity Project – 3 credits

In this hybrid course, initial licensure students will evaluate their practicum or student teaching experiences to identify pedagogical opportunities for improving their students' or families' access to equitable education. Students will use information from educational literature to guide their development of a project to address the equity issue you identify. Examples of projects students might develop include (but are not limited to): a comprehensive plan for restorative justice classroom management, researching and evaluating innovative strategies for connecting families and educators, or creating literacy centers to promote equitable learning opportunities for students with accelerated academic needs. After developing her or his project, the student will complete a formal paper, which will include a description of the equity issue, a literature review, and an explanation of how her or his work will promote transformational educational experiences for children and families. The course culminates in a public sharing of the student's project in a professional setting.

EDUC 6670 Introduction to Action Research – 3 credits

This is the first course in the action research sequence. Students identify critical elements of the action research process and then shape their own research project. Having identified an area for improvement in their own practice, students conduct a literature review, formulate a research question, design an intervention that aligns with findings in their literature review, and determine methods for collecting data to analyze outcomes from their intervention. Students design and submit their research proposals to the Institutional Review Board for consideration after an iterative review process with their course instructor and advisor.

Prerequisite: Enrollment in a post-licensure MAED program or the AM2 program.

EDUC 6680 Elementary Teaching Practicum I – 3 credits

Practice Teaching affords the student opportunities to work with children using the Montessori approach and apparatus. Through these opportunities students are able to assess first-hand their abilities to work with children of this particular age group. During the second academic year (following the second summer of the course) and the required periods of observation, students will practice teach in pre-selected AMI classrooms. Students will spend two consecutive weeks at two sites, for a total of four weeks. The student will work full-time at the assigned and approved sites, so as to fulfill the required minimum of 120 hours of practice teaching.

Prerequisites: Elementary Observations I and II. Students must meet their Observation requirement before they begin their teaching practice. Additionally, a student's course work must be at a satisfactory level in order to be placed for student teaching.

EDUC 6690 Elementary Teaching Practicum II – 3 credits

Practice Teaching affords the student opportunities to work with children using the Montessori approach and apparatus. Through these opportunities students are able to assess first-hand their abilities to work with children of this particular age group. During the second academic year (following the second summer of the course) and the required periods of observation, students will practice teach in pre-selected AMI classrooms. Students will spend two consecutive weeks at two sites, for a total of four weeks. The student will work full-time at the assigned and approved sites, so as to fulfill the required minimum of 120 hours of practice teaching.

Prerequisites: Elementary Observations I and II. Students must meet their Observation requirement before they begin their teaching practice. Additionally, a student's course work must be at a satisfactory level in order to be placed for student teaching.

EDUC 6710 Introduction to Computational Thinking and Coding – 3 credits

This course is designed for media specialists and licensed teachers interested in bringing computational thinking and computer coding into elementary and middle school settings. By learning the basic concepts and thinking strategies endemic to computer programs, students will begin to identify parallel structures and practices in their existing curriculum. Hands-on activities with tools designed for prototyping and introductory level programming will facilitate an applied understanding of integrated STEM concepts.

Prerequisite: Code.org levels 1 and 2, or 2 and 3 completed.

EDUC 6720 Digital Video for K-12 Classroom Settings – 3 credits

This course will provide overview of and instruction in the craft of digital video production in primary and secondary schools. Students will receive a crash course in both the theories behind film and video production as well as create their own videos. Students will storyboard, direct, shoot, edit, and publish original material to be used as models for future teaching tools. Materials necessary for this course include high speed internet access and a digital recording device for filming and editing.

Prerequisite: EDUC 6420 or EDUC 6110.

EDUC 6730 Physical Computing: Introduction to Arduinos – 3 credits

Graduate students will further develop their ability to write in a computer programming language. Hands-on activities with low-cost micro-controllers with increased complexity will be explored within the context of required standards in teachers' assigned content areas/grade levels. Graduate students will use materials with learners and analyze student outcomes in basic frameworks of computational thinking, problem solving, and STEM integration.

Prerequisite: EDUC 6710.

EDUC 6750 Introduction to Educational Research – 3 credits

This course provides the fundamental concepts, principles and methods for understanding, evaluating, and conducting educational research. Successful students will gain mastery of the conceptual foundations of educational research, critically read exemplars of published research in several research traditions, and learn aspects of writing literature reviews. The goals of the course are to enable students to become literate in the concepts, principles, and techniques of educational research; appreciate the underlying cognitive processes involved in conducting educational research as a form of thinking and problem solving; acquire the skills associated with the critical reading and evaluation of the educational research literature; use discipline-based writing to communicate with immediate and wider professional community; and develop an understanding of how research is used to inform significant issues in education.

EDUC 6760 Integration Seminar – 3 credits

This is the second course in the action research sequence. Students review strategies for analyzing and interpreting their collected data. Each week students write a first draft of a chapter for their final report, and submit for feedback to course instructor. Advisors give feedback on copies that have already been reviewed by the instructor. Completing the action research project report and determining appropriate "actions" from the research are foci of this course.

Prerequisite: Enrollment in a post-licensure MAED program, the AM2 program, or the Montessori diploma program.

EDUC 6805 The Outdoor Classroom – 3 credits

A hands-on course focusing on the use of the outdoors for learning. The environment can be a powerful context for learning. This course helps teachers use nature as a classroom in which to teach science, engineering and math, using technology and tools to better understand the environment. Teachers also learn connect nature to other disciplines including language arts and social studies. The result is a powerful learning experience which keeps children engaged and interested. Safety, liability, and classroom management are all addressed as well. Students will submit a final project consisting of a fully-developed plan for using nature as a classroom within their district or setting. The project will include a literature review, lesson plans and resources which cross curricular areas, and which correlate to state or national standards. Students will share this work by evidence of submission to at least one educational journal and a public sharing of the work.

EDUC 6812 Foundations of Environmental Chemistry – 3 credits

This course is designed for in-service teachers to deepen their understanding of foundational chemistry concepts as they connect to environmental issues of our day. Through hands-on demonstrations, models and integrated-STEM activities participants will develop knowledge in the "microscopic story" of atomic structures and thermodynamics as a vehicle to deepen their understanding of the macroscopic stories of ozone depletion, greenhouse gases, carbon emissions and alternative energy technologies. A core theme in the course is the creation and critique of various models representing the sub-microscopic and microscopic world. Participants will be supported in the use of their knowledge to design high quality STEM-learning experiences for their students.

EDUC 6815 The Art of STEM – 3 credits

This course provides opportunities for students to explore the natural links that join visual art, design and STEM. Although these links have always existed, students will research professional articles and electronic resources that demonstrate contemporary connections that exist between artists, scientists, technologists, engineers and mathematicians. Through hands-on experiments and creative exercises, students will gain a deeper understanding of how integrating foundational knowledge concepts from art-while preserving the intrinsic value of each curricular area-enhances student engagement, comprehension, and retention. This course provides opportunities for students to explore the natural links that join visual art, design and STEM. Although these links have always existed, students will research professional articles and electronic resources that demonstrate contemporary connections that exist between artists, scientists, technologists, engineers and mathematicians. Through hands-on experiments and creative exercises students will gain a deeper understanding of how integrating foundational knowledge concepts from art-while preserving the intrinsic value of each curricular area -enhances student engagement, comprehension, and retention.

EDUC 6820 Engineering Basics – 3 credits

The purpose of this course is to provide all teachers a foundational understanding of the field of engineering in order to integrate the engineering principles and habits of mind into their curricula. More specifically, the course looks at the evolution of engineering as a human endeavor, the nature of the work performed in different fields of engineering, the approaches engineers use to design solutions to problems, and the role engineering plays in the human-made world. Students will experience and examine contemporary engineering curricula and exemplar activities, as well as create curriculum products based on the specific needs of their own classroom.

EDUC 6825 Citizen Science as Service Learning in the Natural World – 3 credits

Citizen Science as Service Learning in the Natural World is designed for in-service teachers to deepen their understanding of science through studying the outdoor environment and engaging in citizen science or service learning projects. Service-learning is a form of experiential teaching that combines classroom learning with participation within the broader community. Citizen science is defined as citizens collecting and recording data for scientific research. The scientific research may be generated by a formalized scientific study, individual student research, or a longstanding school-based study. Participants will engage in the practice of science by collecting data relevant to ongoing science projects with a focus on outdoor environmental science projects. Participants will explore ways students can also participate in citizen science projects during the school year. Many of these projects can be adapted to service learning opportunities.

EDUC 6827 SySTEMic Integration - Transforming K-6 Education through STEM Instruction – 3 credits

STEM Integrated instruction transforms the way students learn by making instruction relevant through real-world, interdisciplinary, problem-solving curriculum. This course examines strategies for transitioning K-6 classrooms from single-focused, discipline-based instruction models towards integrated, multi-disciplinary STEM units. Teacher participants will sample STEM integrated lessons and identify their underlying structures, and also examine approaches to embedding content within the lesson. Teachers will finally design their own STEM lessons and units aligned to 21st Century Skills, NGSS and State of Minnesota (or their state's) Mathematics and Science Academic Standards using a template that guides them in the instructional planning process.

EDUC 6835 Engineering and Mathematics – 3 credits

The purpose of this course is to introduce engineering and the engineering design process as a context to study math concepts and skills. Specifically, engineering ways of thinking will be utilized in concert with specific mathematics and science concepts and skills and to solve problems. Students will experience existing best practice activities, as well as develop their own curricula based in the specific needs of their own classroom.

EDUC 6855 Hands on STEM: Basic Engineering and Alternative Energy – 3 credits

A study of engineering gives students both an opportunity and a lens to look critically at the designed world and to make informed decisions about technological developments. This course is an introduction to basic engineering concepts, the engineering design process, and ways to engage children in engineering. An alternative energy focus is used to explore the basic concepts of energy, mechanisms, materials, and structure while designing wind turbines that can lift weights or create electricity. Experience how engineering, as an integrated component of STEM, facilitates the 21st century skills of creativity, problem-solving and collaboration.

EDUC 6860 Elementary Earth Science - Understanding the Ground Upon Which We Stand – 3 credits

A focus on hands-on understanding of earth science concepts. Topics include rock and water cycles, soils, scientific method. Work begins with the discussions and activities about the nature of scientific inquiry, in particular the use and practice of observation as a foundational scientific tool. A variety of tools and materials will be used to illustrate the importance of collecting, organizing, and interpreting data, the rock and water cycles, erosion, transport and deposition of sediment. Discovering concepts through investigations using simulations, modeling and scientific inquiry, to make the study of our natural world and its phenomena an enjoyable experience.

EDUC 6880 Teacher as Educational Leader – 3 credits

Definitions of teacher leadership and their implications for the classroom are examined. Teachers examine their roles as leaders and draft a grant that may be based on outcomes from their action research project. Opportunities for professional scholarship and service via conference presentations are highlighted.

Prerequisite: Enrollment in MAED curriculum and instruction or technology integration program.

EDUC 6953 Independent Study – 3 credits**EDUC 7015 Methods and Materials in Mathematics – 4 credits**

Elementary teachers are responsible for providing a learning experience in a classroom that enables students to engage in meaningful tasks in mathematics instruction. There are many facets to this learning environment of which an elementary teacher must be aware – knowledge of the discipline, planning the lesson, assessment, follow-up. This course is designed to give students an opportunity to read, discuss and design activities to enhance student learning. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the major, MATH 2500.

EDUC 7025 Ethics in the Information Age – 3 credits

By exploring ethical theories and evaluating topics of concern related to technology integration in schools and media centers, this class will hone student critical thinking skills. Students will explore deeply one of the following topics and learn key issues in the other areas: privacy, confidentiality, piracy, intellectual property, accountability, transparency, policy making, censorship, citizenship. Students will develop frameworks for analyzing current and future information age issues, using the Catholic intellectual tradition as one of our lenses, and prepare for leadership in their settings around this issue.

Prerequisites: EDUC 6000 for MAED Technology Integration students. EDUC 6420 and at least one other Technology Integration certificate course for certificate students.

EDUC 7030 Methods and Materials in Science – 2 credits

In this course students will learn the basic framework of instructional skills, techniques, and methods for effective science teaching, and they will explore material resources for use in the elementary science classroom. Throughout the course, students will engage in scientific inquiry and engineering practices. Additionally, students will participate in authentic elementary classroom experiences during the fieldwork portion of the course. Students will prepare and teach science lessons in their fieldwork experiences, implementing the Minnesota State Science Standards, formative assessment, academic language, and the 5E's. Check the course schedule for fieldwork hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5800.

EDUC 7050 Methods and Materials in Social Studies – 2 credits

The goals for this course correspond with the licensure requirements for all elementary teachers in social studies with the explicit purpose of providing students with opportunities to apply fundamental social studies concepts and the connections among them in course assignments. The course content and learning activities focus on experiences designed to prepare students with competencies and skills related to tools of inquiry and problem solving. Students will use social studies as an integrating concept through an understanding of how to use the sciences, social sciences, mathematics, arts and communication in the exploration of environmental, cultural and social issues and topics. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5800.

EDUC 7080 Methods and Materials in Art for Elementary Teachers – 2 credits

EDUC 7080 Methods and Materials in Art for Elementary Teachers is an important component of the elementary curriculum. In this course, students will learn the basic framework of instructional skills, techniques and methods of teaching and integrating art in an elementary classroom setting. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5800.

EDUC 7110 Methods and Materials in Music – 1 credit

Teachers in elementary schools must be prepared to teach music to their young learners. In this course, students will learn the basic framework of instructional skills, techniques and methods of teaching and integrating music in an elementary classroom setting. Students will create an individualized project related to current research around music instruction. Fieldwork required. Check the class schedule for hours required.

Prerequisite: Admission to the Education Department.

EDUC 7130 Methods and Materials in Physical Education – 1 credit

Developing healthy physical habits is a lifelong disposition. In this course, students will learn the basic framework of instructional skills, techniques and methods of teaching and integrating physical education in an elementary classroom setting. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5800.

EDUC 7250 Focus Studies In Elementary Art Education – 2 credits

To prepare for a position as a K-12 visual arts teacher, students will examine the historical base for art education and investigate specific theories and philosophies of teaching and learning as these apply to elementary art education. Students will examine how artistic learning occurs, explore motivational and evaluative strategies and classroom management techniques. This course meets the state standards for K-12 licensure for teachers of art and is a requirement for all art education majors seeking K-12 licensure. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5090.

EDUC 7290 Methods and Materials in Kindergarten Education – 2 credits

In this methods course students will study early childhood growth and development with an emphasis on the five- and six-year-old child. Students will study the child in relation to modes of learning, appropriate management and guidance strategies, and program scheduling. Students will build competency in these areas through observations and experiences that expand and make practical the knowledge and understandings gained from lectures, discussions, class assignments and fieldwork. Criteria for developing effective kindergarten programs is based on these learnings and experiences. Fieldwork required. Check the class schedule for hours required.

Prerequisite: Admission to the Education Department.

EDUC 7450 Literature for Young Adults – 2 credits

This course focuses on the study of literature in a variety of genres for young adults in grades 7-12 based on their development and interests. Students will be acquainted with and will critically evaluate YA literature as well as transition literature and contemporary adult literature that young adults read. Readers' advisory, reader response, and a student's right to read will be emphasized with regard to free reading. Required for the communication arts/literature endorsement.

Prerequisite: Admission to the Education Department.

EDUC 7490 Literacy Methods for Teaching the Intermediate Grades – 4 credits

Literacy Methods for Teaching the Intermediate Grades is a course that explores theories, methods, and materials used to develop children's literacy, with an emphasis on reading, writing, and speaking in grades 3 through 6. The course assumes that effective teachers of language arts are knowledgeable, literate and curious people who develop and maintain a classroom community in which they and their students learn together. Throughout the term, in traditional class meetings as well as in the field-based Literacy Lab, the learning emphasis is placed on assisting students to use listening, speaking, reading and writing for acquiring information, developing understandings, constructing responses to texts in various forms, thinking critically about language, participating in self-assessment, and developing social interactions that support learning.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5800, INDI 5440.

Corequisite: EDUC 7550.

EDUC 7540 Classroom Management and Assessment Techniques – 4 credits

This course is designed to give teacher candidates a broad overview of classroom leadership and management related to creating and sustaining positive, productive learning environments. It also explores assessment practices that contribute to effective management of instruction and behavior. Recognizing the connection between assessment-informed instruction and effective classroom management, this course also explores current practices and principles of assessment across the K-6 curriculum. The characteristics and uses of both formal and informal assessment tools and strategies will be studied with an emphasis on formative assessment.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5800.

EDUC 7550 Literacy in the Content Areas: Elementary – 2 credits

This class is designed to provide opportunities for pre-service teachers to investigate the role of literacy (reading, writing, listening and speaking) across the curriculum. Through readings, discussion, online activities, writing, and inquiry projects, students will learn about the discipline-specific demands of literacy in the content areas, in particular, how academic language supports reading comprehension and effective written communication. The course will also explore academic, personal, and social considerations that are particular to students in the upper elementary grades, including the roles of motivation, comprehension, critical thinking and assessment in teaching and learning. Required for elementary education licensure.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5800, INDI 5440.

Corequisite: EDUC 7490.

EDUC 7551 Literacy in the Content Areas: Secondary – 2 credits

Literacy in the Content Areas is designed to introduce teacher candidates to theories and research-based practices that support K-12 students' literacy development across the curriculum. The emphasis of the course is on helping teacher candidates use literacy (reading, writing, listening and speaking) as a tool to support students' learning in every discipline, while exploring the academic, personal, and social considerations that are particular to adolescents, especially the roles of motivation, comprehension, critical thinking and assessment in teaching and learning. To this end, students in EDUC 7551 learn about basic literacy development, adolescent English language learners, effective vocabulary instruction, the role of academic language in successful reading comprehension and effective written communication, and how to integrate high-quality texts from a variety of media to create engaging, relevant learning experiences for all learners. Throughout the semester, teacher candidates study the Literacy Design Collaborative framework and create a module, based on a topic in their content area, that uses literacy as the foundation for discipline-based learning. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5090.

EDUC 7650 Student Teaching Seminar – 2 credits

During student teaching, students meet to share ideas from their classrooms and extend their course learning. Particular focus is placed on developing teacher leadership. In addition, information, support and guidance in the completion of the edTPA will be provided. Taken concurrently with student teaching.

Prerequisite: Admission to the Education Department.

EDUC 7690 Hands on STEM: Maker Space in the K-8 Setting – 3 credits

In this online graduate course educators will experience what it means to be a maker while exploring the resources and tools that are available in order to bring this experience to their own students. They will gain an understanding of the history, contexts and concepts of the diy/maker movement in education. They will engage with their classmates through a connected learning community and share their own regular reflections with each other as they design and create three projects. The projects include designing a 3D model, creating a paper circuits and a making a "choose your own" final creation (with instructor guidance).

EDUC 7750 Secondary Communication Arts and Literature Methods – 2 credits

This course examines best practice teaching techniques and methods for the secondary communication arts and literature classroom. Secondary Communication Arts and Literature Methods will address current trends and issues related to the discipline of language arts. It will help students identify relevant content and utilize engaging teaching strategies to promote learning in communication arts and literature. The course includes a field experience that will provide the opportunity to apply some of the strategies learned in the course. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5090.

EDUC 7751 Secondary Mathematics Methods – 2 credits

This course examines best practice teaching techniques and methods for the secondary mathematics classroom. Secondary Mathematics Methods will address current trends and issues related to the discipline of mathematics. It will help students identify relevant content and utilize engaging teaching strategies to promote learning in mathematics. The course includes a field experience that will provide the opportunity to apply some of the strategies learned in the course. Fieldwork required. Check the class schedule for hours required.

Prerequisite: Admission to the Education Department, EDUC 5070, EDUC 5090.

EDUC 7752 Secondary Science Methods – 2 credits

This course examines best practice teaching techniques and methods for the secondary science classroom. Secondary Science Methods will address current trends and issues related to the discipline of science. It will help students identify relevant content and utilize engaging teaching strategies to promote learning in science. The course includes a field experience that will provide the opportunity to apply some of the strategies learned in the course. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5090.

EDUC 7753 Secondary Social Studies Methods – 2 credits

This course examines best practice teaching techniques and methods for the secondary social studies classroom. Secondary Social Studies Methods will address current trends and issues related to the broad discipline of social studies. It will help students identify relevant content and utilize engaging teaching strategies to promote learning in social studies. The course includes a field experience that will provide the opportunity to apply some of the strategies learned in the course. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5090.

EDUC 7754 Secondary Family and Consumer Science Methods – 2 credits

This course examines best practice teaching techniques and methods for the secondary family and consumer science classroom. Secondary Family and Consumer Science Methods will address current trends and issues related to the broad discipline of family and consumer science. It will help students identify relevant content and utilize engaging teaching strategies to promote learning in family and consumer science. The course includes a field experience that will provide the opportunity to apply some of the strategies learned in the course. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5090.

EDUC 7760 Secondary Visual Arts Methods – 2 credits

Students will gain a basic framework of instructional strategies, curriculum designs and assessment models within the discipline of visual arts, including evaluation of print and non-print resources and materials. Fieldwork required. Check the class schedule for hours required.

Prerequisites: Admission to the Education Department, EDUC 5070, EDUC 5090, EDUC 7250.

EDUC 7780 Advanced Secondary Methods – 2 credits

This course provides advanced preparation for teaching in secondary schools. Advanced Secondary Methods will build on previous concepts and skills related to best practices for teaching and will focus on secondary level instructional strategies, classroom assessment and classroom management. Graduate students are expected to frame their selection of appropriate strategies within the context of Educational research and are required to consistently use APA guidelines to cite the studies that support their choices. Graduate students are expected to consistently demonstrate critical thinking and provide thoughtful and constructive feedback to peers in classroom and online discussions. Peer engagement is central to the learning experience and graduate students are expected to challenge and extend the thinking of their peers. This course includes a field experience that will allow students the opportunity to apply classroom practices learned throughout the course. There are many performance tasks sprinkled throughout the term that will bridge theory and research into practice.

Prerequisites: EDUC 5070, EDUC 5090.

EDUC 7812 Student Teaching Elementary – 12 credits

Student teaching is the culminating experience in students' preparation to become a teacher. Students will be assigned to an elementary classroom for fourteen weeks. Their responsibilities will include lesson design and presentation, evaluation of student learning and management of daily classroom routines. Through conferences with a University supervisor and cooperating teachers in the school students will be provided with feedback and guidance about their professional progress. Seminars facilitated by the University supervising instructor will provide students with additional information as needed and appropriate.

EDUC 7840 Student Teaching and Seminar in Physical Education: Elementary – 6 credits

Directed observation/participation in opening-of-school activities, full-day teaching experiences for six weeks in cooperating metropolitan area schools; conferences with cooperating teachers and University supervisor; seminars arranged by the education department.

Prerequisites: All course work with a minimum 3.0 GPA, PPST test.

Prerequisite with concurrency: EDUC 7650.

EDUC 7860 Student Teaching and Seminar in Physical Education: Secondary – 6 credits

Directed observation/participation in opening-of-school activities, full-day teaching experiences for six weeks in cooperating metropolitan area schools; conferences with cooperating teachers and University supervisor; seminars arranged by the St. Catherine's Department of Education.

Prerequisites: All course work with a minimum 3.0 GPA, PPST test.

Prerequisite with concurrency: EDUC 7650.

EDUC 7890 Student Teaching and Seminar in Art: Secondary – 6 credits

Directed observation/participation in opening-of-school activities, full-day teaching experiences for six weeks in cooperating metropolitan area schools; conferences with cooperating teachers and University supervisor; seminars arranged by education department.

Prerequisites: All course work with a minimum 3.0 GPA, PPST test.

Prerequisite with concurrency: EDUC 7650.

EDUC 7900 Student Teaching and Seminar in Art: Elementary – 6 credits

EDUC 7900 Student Teaching and Seminar in Art: Elementary – 6 credits
Directed observation/participation in opening-of-school activities, full-day teaching experiences for six weeks in cooperating metropolitan area schools; conferences with cooperating teachers and University supervisor; seminars arranged by the education department.

Prerequisites: All course work with a minimum 3.0 GPA, PPST test.

Prerequisite with concurrency: EDUC 7650.

EDUC 7910 Student Teaching and Seminar: Middle Level – 4 credits

Directed observation/participation in opening-of-school activities, full-day teaching experiences for four weeks in cooperating metropolitan area schools; conferences with cooperating teachers and University supervisor; seminars arranged by education department.

Prerequisites: All course work with a minimum 3.0 GPA, PPST test.

Prerequisite with concurrency: EDUC 7650.

EDUC 7912 Student Teaching Secondary – 12 credits

Student teaching is the culminating experience in students' preparation to become a teacher. Students will be assigned to a secondary classroom for fourteen weeks. Their responsibilities will include lesson design and presentation, evaluation of student learning and management of daily classroom routines. Through conferences with a University supervisor and cooperating teachers in the school students will be provided with feedback and guidance about their professional progress. Seminars facilitated by the University supervising instructor will provide you with additional information as needed and appropriate.

EDUC 7920 Student Teaching and Seminar in World Languages:**Elementary – 6 credits**

Directed observation/participation in opening-of-school activities, full-day teaching experiences for six weeks in cooperating metropolitan area schools; conferences with cooperating teachers and University supervisor; seminars arranged by the education department.

Prerequisites: All course work with a minimum 3.0 GPA, PPST test.

Prerequisite with concurrency: EDUC 7650.

EDUC 7930 Student Teaching and Seminar in World Languages:**Secondary – 6 credits**

Directed observation/participation in opening-of-school activities, full-day teaching experiences for six weeks in cooperating metropolitan area schools; conferences with cooperating teachers and University supervisor; seminars arranged by the education department.

Prerequisites: All course work with a minimum 3.0 GPA, PPST test.

Prerequisite with concurrency: EDUC 7650.

EDUC 7993 Montessori Certification Credit – 3 credits

Credit awarded to students in the Acknowledging Montessori for a Master's (AM2) degree program who have earned a Montessori credential in a Montessori school setting. Credit is awarded by the program director upon review of the student's credential.

EDUC 7999 Montessori Certification Credit – 9 credits

Credit awarded to students in the Acknowledging Montessori for a Master's (AM2) degree program who have earned a Montessori credential in a Montessori school setting. Credit is awarded by the program director upon review of the student's credential.

EDUC 8920 Action Research Project – 1 credit

Taken concurrently with EDUC 6760, students work with their advisor to complete their action research project, present their findings to a group of colleagues, and complete revisions on their assembled projects.