Courses

Focuses on integrating science, technology, engineering principles, and mathematics using both modeling and an inquiry approach. Engineering and scientific practices drive both the instructional planning, and inquiry-oriented curricula and assessment. The practice of engineering, along with the difference between science and engineering is addressed. Prerequisite(s): two courses from SCI ED 1200 (820:032), SCI ED 1300 (820:031), and SCI ED 1100 (820:033) OR approval of the instructor; junior standing. (Even Falls)

Focus on skills needed to organize and manage appropriate instruction in the elementary classroom. Prerequisite(s): ELEMECML 4150 (210:152g); junior standing. Registration requires full admission to the Teacher Education Program. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. (Fall and Spring)

Procedures for developing home-community-school relationships to promote the education of each child in reaching her/his maximum potential. Emphasis on preschool-kindergarten level. Prerequisite(s): Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course; junior standing. (Fall and Spring)

ELEMECML 3159. Integrating STEM in Elementary Classrooms — 3 hrs.
Integrating STEM in Elementary Classrooms

Investigation of current textbook series, trends, teaching materials, and appropriate instructional strategies for contemporary elementary school science programs. Prerequisite(s): ELEMECML 4150 (210:152g) or ELEMECML 4151/5151 (210:151g); junior standing. Registration requires full admission to the Teacher Education Program. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. (Fall and Spring)

Basic methods and materials for teaching the knowledge, skills, attitudes and values in history, geography, political science/civic literacy, economics and behavioral sciences. Prerequisite(s): ELEMECML 4150 (210:152g) or ELEMECML 4151/5151 (210:151g); junior standing. Registration requires full admission to the Teacher Education Program. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. (Fall and Spring)

Methods of implementing appropriate curriculum for and guidance of very young children, including children with diverse needs in inclusive group settings. Includes a required 15 hours field experience. Prerequisite(s) or corequisite(s): EDPSYCH 3109; EDPSYCH 3148 (200:148); TEACHING 3128; junior standing. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. (Fall and Spring)

Introduction, exploration and application of various methods for teaching and assessing visual and performing arts integration with content across the elementary curriculum. Prerequisite(s): junior standing. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. (Fall and Spring)

ELEMECML 4130/5130 (210:130g). Guidance and Instruction in Early Childhood Education — 3 hrs.
Discussion of the role of the teacher in guiding young children in their learning activities. Emphasis on planning and implementing early childhood programs. Prerequisite(s): ELEMECML 4151/5151 (210:151g); junior standing. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. Corequisite(s): ELEMECML 4192/5192 (210:192g). (Fall and Spring)

ELEMECML 4135/5135 (210:135g). Middle Level Instruction, Differentiation, and Assessment — 3 hrs.
Strategies for instruction, differentiation, and assessment for addressing the cognitive characteristics and needs of young adolescents in grades five through eight. Prerequisite(s): EDPSYCH 3148 (200:148); EDPSYCH 4152/5152 (200:152g); junior standing. Prerequisite(s) or corequisite(s): ELEMECML 4152/5152 (210:150g) or equivalent. Registration requires full admission to the Teacher Education Program. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. (Fall and Spring)

ELEMECML 4141/5141 (210:141g). Integrated Activities in Elementary School STEM — 3 hrs.
Pedagogy that facilitates the development of cross-cutting concepts and habits of inquiry within STEM (science, technology, engineering, and mathematics) through authentic, meaningful, and integrative investigations in elementary classrooms. Prerequisite(s): for undergraduate students: junior standing. Prerequisites for graduate students: admission to the Elementary Education Master's Program (MAE) or consent of instructor. (Spring)

ELEMECML 4142/5142 (210:142g). Sustainability Applications in Elementary STEM — 3 hrs.
Resources, content background, materials, and methods in elementary STEM (Science, Technology, Engineering, and Mathematics) with emphasis on sustainability applications. Special attention to integrating theory and practice with techniques, materials, and equipment. Stresses interrelations between the various sciences and application of skill subjects. Prerequisite(s): junior standing. (Variable)

ELEMECML 4143/5143 (210:143g). Applications/Content in Elementary Social Studies — 3 hrs.
Applying knowledge of current trends, resources, and content as a means of developing, enriching, and expanding the social studies curriculum. Prerequisite(s): ELEMECML 3164 (210:164); junior
Elementary, Early Childhood and Middle Level Education Courses (ELEMECML)

standing. Registration requires full admission to the Teacher Education Program. (Fall)

**ELEMECML 4150 (210:152g). Elementary Curriculum — 3 hrs.**
Recent trends in the curriculum for children in grades K-6. Prerequisite(s): completion of Level I of the Professional Education Requirements - Elementary Education. Prerequisite(s) or corequisite(s): Level II of the Professional Education Requirements. Registration requires full admission to the Teacher Education Program. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. (Fall and Spring)

**ELEMECML 4151/5151 (210:151g). Early Childhood Curriculum Development and Organization — 3 hrs.**
Current trends in curriculum for preschool and primary children. Includes a 15 hour field experience. Prerequisite(s): EDPSYCH 3109; must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course; junior standing. Prerequisite(s) or corequisite(s): EDPSYCH 3148 (200:148); TEACHING 3128. (Fall and Spring)

**ELEMECML 4152/5152 (210:150g). Middle Level Curriculum — 2 hrs.**
Examination of middle school design, programs, and practices for meeting the needs of young adolescents in grades 5-8, including middle school philosophy, history, interdisciplinary instruction and teaming, core curriculum, exploratory courses, and advisory programs. Students must be available for a Tuesday field experience. Prerequisite(s): TEACHING 3128; junior standing. Prerequisite(s) or corequisite(s): Level II of the Professional Education Requirements. Registration requires full admission to the Teacher Education Program. Must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. Students must be available for a 10-hour field experience. (Fall and Spring)

**ELEMECML 4154/5154. The Gifted and Talented — 3 hrs.**
Educational needs of gifted and talented children and youth. Emphasis on characteristics, identification/assessment, special populations, counseling, parenting, and program intervention. Prerequisite(s): full admission to teacher education; junior standing. (Variable)

**ELEMECML 4156/5156. Educational Strategies for Gifted and Talented — 3 hrs.**
Current trends in educational programming for the gifted and talented. Prescription, implementation, and evaluation of differentiated curriculum/educational strategies used in the comprehensive program. Prerequisite(s): ELEMECML 4154/5154 or consent of instructor; junior standing. (Variable)

**ELEMECML 4157/5157. Coordinating Programs for the Gifted and Talented — 3 hrs.**
Methods/procedures for coordinating/directing school district PK-12 programs for the gifted and talented. Emphasis on program planning, management, supervision, and evaluation. Prerequisite(s): ELEMECML 4154/5154; ELEMECML 4156/5156; or consent of instructor; junior standing. (Variable)

**ELEMECML 4158/5158. Practicum in Education of the Gifted — 3 hrs.**
Practicum in which curriculum and instructional methods for Education of the Gifted are used with preK-12 students. Prerequisite(s): ELEMECML 4154/5154; 4156; 4157; junior standing. (Variable)

**ELEMECML 4160/5160. Administration of Programs in Early Childhood — 1 hr.**
Overview of knowledge and skills necessary for designing, planning, implementing, assessing, managing, and leading integrated, developmentally appropriate programs for children of diverse backgrounds and abilities, ages birth-8 years. Prerequisite(s): Must have full admission to the Teacher Education Program; must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course; junior standing. (Fall and Spring)

**ELEMECML 4192/5192 (210:192g). Experience — 2-4 hrs.**
May be offered in various specialized fields as indicated in Schedule of Classes, but may be taken only twice for credit in the same area. Prerequisite(s): ELEMECML 4121/5121 (210:121g); junior standing; must have a cumulative and UNI GPA of 2.50 or higher to enroll in this course. Corequisite(s): ELEMECML 4130/5130 (210:130g). (Fall and Spring)

**ELEMECML 6201 (210:201). Issues and Trends in Curriculum — 3 hrs.**
Current ideas influencing the planning and implementation of curriculum. Prerequisite(s): consent of department. (Variable)

**ELEMECML 6205. Technology in Early Childhood Education — 2 hrs.**
Examination of policies, expert recommendations, and developmentally appropriate practices for using technology and digital media as learning tools for young children. Prerequisite(s): consent of department. (Variable)

**ELEMECML 6210. Diversity in Early Childhood Education: Theory and Practice — 3 hrs.**
Current theory and practical strategies for planning and implementing appropriate experiences for young children and families. Students will learn current understandings re: race, ethnicity, culture, socio-economic status, and inclusion of children with special needs. Prerequisite(s): ELEMECML 6201 (210:201). (Variable)

**ELEMECML 6214 (210:214). Recent Research in Early Childhood Education — 3 hrs.**
Review of implications of research to gain techniques for improving instruction and programs for young children. Prerequisite(s): ELEMECML 4151/5151 (210:151g) or equivalent. (Variable)

**ELEMECML 6221 (210:221). Analysis and Design of Curriculum for Young Children — 2 hrs.**
Basic assumptions underlying curriculum for young children to prepare students to improve teaching practices, and provide direction to future decision making on programs and materials. (Variable)

**ELEMECML 6236. Assessment in Early Childhood — 2 hrs.**
Uses and interpretations of formal and informal measures to assess physical, social, intellectual and emotional development in young children, including English language learners and children with special needs. Program evaluation will be addressed. Prerequisite(s): ELEMECML 6201 (210:201). (Variable)

**ELEMECML 6242 (210:242). Analysis and Improvement of Science Instruction in the Elementary School — 3 hrs.**
Application of current research and national standards regarding attitudes, process skills, inquiry, and essential knowledge to the analysis and improvement of science curriculum including the learning cycle, unifying themes, creativity, and differentiated instruction. Prerequisite(s): admission to the Elementary Education Master’s Program M.A.E.) or consent of instructor. (Variable)

**ELEMECML 6243 (210:243). Analysis and Improvement of Social Studies Instruction in the Elementary School — 3 hrs.**
Assists teacher in exploring historical and current practices in social studies to create new approaches by using available resources and
Ideas. Prerequisite(s): ELEMECML 4143/5143 (210:143g) or ELEMECML 4150 (210:152g) or consent of department. (Variable)

ELEMECML 6285 (210:285). Readings in Education — 1-3 hrs. (Fall, Spring, Summer)

ELEMECML 6289 (210:289). Seminar in Education — 3 hrs. Special topics listed in Schedule of Classes. May be repeated to a maximum of 6 hours. (Fall, Spring, Summer)

ELEMECML 6297 (210:297). Practicum — 2-3 hrs. (Fall, Spring, Summer)

ELEMECML 6299 (210:299). Research — 1-6 hrs. Prerequisite(s): consent of department. (Fall, Spring, Summer)

Assists the advanced graduate student in viewing, analyzing, and interpreting the curriculum and instruction program of an educational institution and in developing skills for implementing change. (Variable)

Exploration of systems for program evaluation and revision and the dynamics of change processes. (Variable)

Intensive study and seminar presentations of current issues, trends, procedures, and obstacles to change in curriculum and instructional practice. May be repeated to a maximum of 12 hours. Prerequisite(s): doctoral status or consent of department. (Variable)

ELEMECML 7397 (210:397). Practicum in Curriculum and Instruction — 2-4 hrs.
Supervised practice in working as a co-facilitator and/or as a facilitator in program evaluation and revision and/or instructional design and improvement in an educational setting. May be repeated for maximum of 4 hours. Prerequisite(s): ELEMECML 7352 (210:352); and consent of instructor. (Fall, Spring, Summer)