Secondary Education (SEED)

Courses

SEED 5003. Introduction to Teaching Secondary Science (Su). 3 Hours.
Study of the methods and materials for teaching science. Includes philosophical, cognitive, and psychological dimensions of teaching science. The planning of instruction, microteaching, and safety and liability issues, and the development of instructional materials are included. Prerequisite: Admission to the M.A.T. program. May be repeated for up to 6 hours of degree credit.

SEED 5013. Teaching Secondary Science: Theory to Practice (Fa). 3 Hours.
This course is a continuation of SEED 5003, Introduction to Teaching Secondary Science, and is taken concurrently with CIED 528V, Secondary Cohort Teaching Internship. Students will receive instruction in advanced methodologies for teaching science and will reflect on their experiences in their internships. Corequisite: CIED 528V. Prerequisite: SEED 5003.

This course is a continuation of SEED 5013, Advanced Teaching of Secondary Science, and is taken concurrently with CIED 528V, Secondary Cohort Teaching Internship, in the spring semester of the Secondary Education M.A.T. program. Students will receive instruction in advanced methodologies for teaching science and will reflect on their experiences in their teaching internships. Corequisite: CIED 528V. Prerequisite: SEED 5013.

SEED 5103. Methods of Teaching Secondary Social Studies I (Su). 3 Hours.
Study of the methods and materials in social studies. Includes philosophical, cognitive, and psychological dimensions of teaching. The planning of instruction, microteaching, and the development of instructional materials are included. Prerequisite: Admission to the M.A.T. program.

SEED 5113. Teaching History, Government and Economics (Fa). 3 Hours.
Study of the methods and materials in teaching history, government and economics. Includes philosophical, cognitive, and psychological dimensions of teaching, planning of instruction, microteaching, and the development of instructional materials are included. Prerequisite: Admission to the M.A.T. program.

SEED 5122. Teaching Geography, World Cultures, and Religions (Sp). 2 Hours.
Study of the methods and materials in teaching geography, world cultures and comparative religion. Includes philosophical, cognitive, and psychological dimensions of teaching, planning of instruction, microteaching, and the development of instructional materials are included. Prerequisite: Admission to the M.A.T. program. May be repeated for up to 4 hours of degree credit.

SEED 5222. Seminar: Language, Literacy and Culture (Sp). 2 Hours.
This course is designed to examine advanced practices related to teaching English language arts and literacy, broadly defined. Topics, issues, methods, and materials encompassing the philosophical, cognitive, cultural, and social dimensions of teaching English language arts constitute the crux of the course.

SEED 5303. Teaching Secondary Mathematics (Su). 3 Hours.
Study of the methods and materials in teaching middle, junior high, and high school mathematics. Philosophical, cognitive, and psychological dimensions of teaching secondary topics including, but not limited to algebra, geometry, and statistics. The planning of instruction, microteaching, and the development of instructional materials are included. Prerequisite: Admission to the M.A.T. program in Mathematics.

SEED 5313. Theories of Learning Mathematics (Fa). 3 Hours.
Examination of research results related to student learning and achievement in secondary mathematics in the areas of rational numbers, algebraic reasoning, geometric proof, and data and probability. Prerequisite: SEED 5303.

SEED 5322. Integrating Technology and Mathematics (Sp). 2 Hours.
Study of methods for integrating technology into secondary mathematics classrooms including but not limited to the use of graphing calculators, geometric software, and spreadsheet. Prerequisite: SEED 5303 and SEED 5313.

SEED 5403. Methods of Teaching Foreign Language K-12 (Su). 3 Hours.
Study of the theories and methods of teaching foreign language. Includes philosophical, cognitive, and psychological dimensions of teaching, the standards for teaching foreign language, how to plan instruction, microteaching, and the development of instructional materials. Prerequisite: Admission to the M.A.T. program. May be repeated for up to 6 hours of degree credit.

SEED 5413. Instructional Practices in Teaching Foreign Language (Fa). 3 Hours.
The theoretical and practical aspects of methods, techniques, and materials for effective teaching of foreign/second languages in K-12 schools. Prerequisite: Admission to the M.A.T. program.

SEED 5422. Special Issues in Teaching Foreign Language (Sp). 2 Hours.
Instructional strategies that address the needs of diverse language learners, special needs students, heritage speakers, and the use of technology to enhance language learning. Prerequisite: Admission to the M.A.T. program. May be repeated for up to 4 hours of degree credit.

SEED 5503. Teaching Secondary Mathematics and Science (Su). 3 Hours.
Study of the methods and materials for teaching secondary mathematics and science. Includes the philosophical, cognitive, and psychological dimensions of teaching mathematics and science. The planning of instruction, microteaching, and the development of instructional materials are included. Prerequisite: Admission to the M.A.T. program.

SEED 6133. Advanced Methods of Social Studies Instruction (Even years, Sp). 3 Hours.
Advanced exploration and experimentation with research supported methods of teaching social studies. Intended for practicing teachers or those with teaching experience in any of the social sciences.