Program in Mathematics Education

College of Natural Science

430 History of Mathematics
Spring. 3(3-0) P: MTH 133 and MTH 301
SA: SME 430
Development of mathematical thought from ancient times to the present, selected from Egyptian, Babylonian, Mayan, Greek, Indian, and Arab contributions to mathematics and to the context of today’s school mathematics curriculum.

800 Problems in Mathematics for Teachers
Fall, Spring. Summer. 1 to 5 credits. A student may earn a maximum of 15 credits in all enrollments for this course. R: Open to graduate students in the Mathematics Education Major. Approval of department. Supervised study of problems or issues in mathematics education.

840 Critical Content of School Mathematics: Numbers and Operations
Spring of odd years. 3(3-0) R: Open to graduate students. SA: SME 840

841 Critical Content of School Mathematics: Algebra
Fall of odd years. 3(3-0) R: MTH 310 and MTH 320 R: Open to graduate students. SA: SME 841

842 Critical Content of School Mathematics: Geometry
Spring of even years. 3(3-0) R: MTH 330 or MTH 432 R: Open to graduate students. SA: SME 842

879 Teaching College Mathematics
Fall of even years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Teacher Education. Administered by Mathematics Education. RB: Past or concurrent mathematics teaching experience. SA: SME 879
Curriculum materials, case studies, approaches to teaching and student learning of particular mathematics topics.

890 Independent Study
Fall, Spring. Summer. 1 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open to masters students. SA: SME 890
Individualized study for master’s level students.

899 Master’s Thesis Research
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to masters students in the Mathematics Education Major. Approval of department. Master’s thesis research.

926 Proseminar in Mathematics Education I
Fall of odd years. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Teacher Education. Administered by Mathematics Education. SA: SME 926
Research on the learning and teaching of mathematics. Focus on curriculum, discourse, equity and teacher education.

927 Proseminar in Mathematics Education II
Fall of even years. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Teacher Education. Administered by Mathematics Education. SA: SME 927
Research on the learning and teaching of mathematics. Focus on teaching, student learning, assessment and policy.

954 Design and Methods in Mathematics Education Research
Fall. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Teacher Education. Administered by Mathematics Education. RB: (MTH 927) and at least one approved research methods course. SA: SME 954
History, current trends, and issues pertaining to research design and methods in mathematics education research. Mathematics education research in the areas of policy, teaching, teacher learning, and student learning with particular attention to how research design influence research findings.

990 Independent Study
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open to doctoral students. SA: SME 990
Individualized study for doctoral level students.

995 Research Practicum
Spring. 3 credits. RB: MTH 954 R: Open to graduate students in the Mathematics Education Major. Approval of department. Supervised research practicum. Design, execution, analysis, presentation, critique, and revision of research projects.

997 Special Topics in Mathematics Education
Fall, Spring, Summer. 3 to 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course. SA: MTH 997, SME 997
Advanced topics in mathematics education.

999 Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 30 credits in all enrollments for this course. RB: MTHE 926 and MTHE 927 and MTHE 954 SA: SME 999
Doctoral dissertation research.