

Math 485, Mathematics Seminar



Description: Selected topics in mathematics, mathematics education, and applications of mathematics to related fields. With mentoring supervision, student will investigate significant mathematics independently and present findings in oral and written form at a variety of levels and to varying audiences. Student will investigate how topics are situated in the history and development of mathematics as a liberal art, and in the world; and reflect upon the relevance of their own scholarship to their professional goals and values.

Prerequisites: Completion of COR II course, declared major in Mathematics or Mathematics Teaching, and junior or senior standing; or consent of the instructor.

Course Goals: Student will demonstrate:

- capacity to learn significant mathematics independently and present findings effectively in oral and written form at a variety of levels and to varying audiences. Products and presentations will be held to professional standards for: mathematical correctness, appropriate use of accepted mathematical definitions, terminology and notation, and adherence to publication guidelines extracted from the *Handbook for MAA Authors*. Draft revisions and feedback from fellow students and faculty are incorporated into student experience.
- knowledge of the way in which a significant piece of mathematics that they have investigated is situated in the history and development of mathematics as a liberal art.
- knowledge of the ways in which a significant piece of mathematics that they have investigated impacts our world.
- capacity to reflect on their own undergraduate experiences, the individual gifts and capacities they have developed, and the values they have clarified; and to articulate a personal philosophy and mission informed by their experience and this reflection.

Approved February, 2011