MATH 5984: RESEARCH IN UNDERGRADUATE MATHEMATICS EDUCATION  spring 2012

Instructor: Dr. Megan Wawro  Email: mwawro@vt.edu
Class Time: Monday 4-7 pm  Office Hours: M 2-3, T 11-12
Class Location: War Memorial 118  Office: McBryde 438 (231-4937)

COURSE DESCRIPTION
This course surveys the body of research on undergraduate mathematics education. Readings will pertain to studies focusing on student understanding of particular concepts from undergraduate math courses, ranging from calculus to abstract algebra. Readings will also focus on mathematical practices in undergraduate mathematics that transcend particular concepts or courses, such as defining and proving.

TEXT AND RESOURCES

Additional readings will be made available on Scholar on an as-needed basis.

ATTENDANCE POLICY
Attendance is mandatory. Your final class grade will be deducted 1/2 of one letter grade for every absence. The only exception is documented emergencies, in which case you are required to contact me. Students are responsible for all missed materials handed out in class.

COURSE ASSIGNMENTS
Weekly Assignments: Each assignment typically consists of readings (book chapters or journal articles) and responding to a set of questions that pertain to summarizing and analyzing the readings. Assignments may also include mathematical problems for you to complete. Your responses to the questions must be typed and turned in at the start the class period on which they are due. All students are to use APA style for all assignments. Late assignments are not accepted.

Final Project: The final project is to design, complete, and analyze a set of problem solving interviews or a mini-teaching experiment with 2-3 college mathematics students. This project is to be informed by the course readings and other relevant research regarding students’ learning of undergraduate mathematics. More information on this will be given as the semester progresses.

EVALUATION
Weekly Assignments 70%
Final Project 30%

Your final grade will adhere to the following scale:

92% - 100% = A  82% - 87% = B  72% - 77% = C  62% - 67% = D
90% - 91% = A-  80% - 81% = B-  70% - 71% = C-  60% - 61% = D-
88% - 89% = B+  78% - 79% = C+  68% - 69% = D+  below 60% = F

ACADEMIC INTEGRITY
There should be no need to worry about academic misconduct in this course (cheating, plagiarism, etc.). University policies concerning academic misconduct apply to this class and can be found at http://www.honorsystem.vt.edu/