

**MATH 495/595 SYLLABUS: SPRING 2011
CALCULUS FOR MIDDLE SCHOOL TEACHERS**

Klay Kruczek Phone: 503-838-8829 Office: MNB 125 Email: kruczekk@wou.edu

OFFICE HOURS & SCHEDULE					
Time	M	T	W	R	F
10:00 – 11:00	<i>Office</i>		<i>Office</i>		
11:00 – 12:00	MTH 358	MTH 358	MTH 358	MTH 358	
12:00 – 1:00	MTH 396	Lunch	MTH 396	Lunch	
1:00 – 2:00		Ind Study			
2:00 – 2:30	Lunch	<i>Office</i>			
2:30 – 3:30	<i>Office</i>				
3:30 – 5:00		MEETINGS		<i>Office</i>	
5:00 – 6:50		MTH 495		MTH 495	

COURSE PREREQUISITE

- Math 111 or 392 (College Algebra for Teachers); with a grade of C- or better.

REQUIRED COURSE MATERIALS

- A TI-83 or TI-84 is highly recommended • Graph paper • Ruler • 3 ring binder & dividers

COURSE OVERVIEW: In this class we will explore the foundational calculus concepts of differentiation and integration, examples of their applications and the relationship between these two processes. Visual and hands-on methods will be emphasized throughout. Readings and exercises will be adapted from a variety of sources.

LEARNING OBJECTIVES AND GOALS: In this course you will

- Build upon and expand your understanding of algebra and how it can be developed into higher mathematical analysis
- Contemplate and reflect on what middle-school learners need to understand in terms of pre-algebraic thinking, be able to do and believe about themselves in the areas of algebra and geometry to be prepared for high school and college level mathematics
- Explore the basic ideas of differential and integral calculus through a series of hands-on and visual explorations of functions and their behavior.
- Develop teaching and learning insights through weekly assignments and explorations

COURSE WEB PAGE: There will be a link for the Math 495/595 webpage where most course items will be posted on my home page: <http://www.wou.edu/~kruczekk>
In particular, the class homework page will be linked to your Math 495/595.

COURSE REQUIREMENTS AND GRADING

Undergraduate Students (Math 495)

1. Attendance & participation (5%)
2. Homework and completion of all class materials (42%)
3. Quizzes (8%)
4. Midterm Exam (20%)
5. Final Exam (25%)

Graduate Students (Math 595)

1. Attendance & participation (3%)
2. Homework (36%)
3. Quizzes (6%)
4. Midterm Exam (20%)
5. Final Exam (25%)
6. Final Project (10%)

Attendance, Participation and Completion of Course Materials

Attendance & Participation in this course means

- Being prepared for class by completing the previously assigned homework
- Sharing your thoughts and strategies both in small groups and with the whole class
- Attentively listening and offering constructive comments to other students in the class during group work and when other students present their ideas to the whole class

Completing Course Materials in this course means

- Carefully answering all questions and problems posed on all course materials
- Being prepared to share your work at any time

Homework Assignments: In this course, each homework question will be collected one class day after the question is assigned and will be carefully graded. Homework due dates will be posted on your course homework page.

Quizzes: Starting the second day of class there will be a quiz at the beginning of each class. Quiz questions will cover material from the previous class (or classes).

Midterm and Final Exam: There will be an in-class midterm exam and final exam in this course. Graduate students will be assigned additional problems on both exams.

Final Project (Graduate only, Math 595): The graduate student final project will be assigned near the end of the term and will consist of creating lesson plans and activities using the ideas from this term and presenting these ideas on the last day of class.

LATE POLICY: Generally 30% deduction per turn-in day (TR).

EXCUSED LATE WORK: Excused late work will only be accepted in the case of documented emergency or a university sanctioned absence from class (e.g., see above). Prior notification and my agreement are required. Ordinary illness of 1 or 2 class days does not count as a documented emergency, even if you have a note from a doctor.

STANDARD GRADING FOR THIS COURSE

CELL PHONE POLICY: Turn off your cell phones before class. DO NOT TEXT IN CLASS!

APPROPRIATE CLASSROOM BEHAVIOR: You are ultimately responsible for your own attendance and performance. Proscribed Conduct for all students is described in the University Catalog. In particular for this course any student found cheating on an exam or copying from another student's exam paper will receive a zero on that exam. See http://www.wou.edu/las/natsci_math/math/academicdishonesty.html for the Academic Dishonesty Policy.

LEARNING DISABILITIES: If you have a documented learning disability, please talk to me during the first few days of class, I will be more than happy to accommodate you in any way that I can. If you have a documented disability which requires any academic accommodations, you must go to the Office of Disability Services (ODS) for appropriate coordination of your accommodations. You can drop by APSC 405 or contact ODS at (503) 838-8250 (V,TTY) to schedule an appointment.

INCOMPLETE POLICY: An Incomplete can only be granted for a student who is passing a class and has a documented emergency that prevents them from completing the course.