

**MATH 495/595 SYLLABUS: WINTER 2014
CALCULUS FOR MIDDLE SCHOOL TEACHERS**

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**Class meets: TR 5:00 – 6:50 PM in MNB 103
Final Exam: Tuesday, March 18th 5:00-6:50 PM**

Time	Mon	Tue	Wed	Th	Fri
9:00					
10:00					Office
11:00	meeting		Office	meeting	meeting
12:00					
1:00	Office	meeting	meeting	Office	meeting
2:00	346		346	346	346
3:00	403		403		
4:00				Office	
5:00-6:50		495/595		495/595	

Please feel free to drop by my office during my office hours for help. You do not need to make an appointment to come to office hours. At times other than my listed office hours you are welcome and encouraged to call or email me with questions about the course. If you have direct scheduling conflicts with my office hours and would like further help, please let me know.

COURSE PREREQUISITE

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

REQUIRED COURSE MATERIALS

- A 3 ring binder to hold provided course pack materials
- A scientific graphing calculator with at least the capabilities of a T. I. – 83. A T. I. – 83 or 84 is highly recommended.
- Graph paper (wait and buy as needed)
- Ruler
- Quiz Blue Book (8 ½” × 11” required by day 2 of class!)

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; see your course handouts.

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 on my home page where course reference items, homework and due dates will be posted.

COURSE REQUIREMENTS AND GRADING

Undergraduate Students (Math 495)

1. Attendance, Participation, Outreach Activity and Completion of Course Materials (5%)
2. Homework (35%)
3. Quizzes (15%)
4. Midterm Exam (20%)
5. Final Exam (25%)

Graduate Students (Math 595)

1. Attendance, Participation, Outreach Activity and Completion of Course Materials (3%)
2. Homework (27%)
3. Quizzes (15%)
4. Midterm Exam (20%)
5. Final Exam (25%)
6. Final Project (10%)

Attendance, Participation, Outreach Activity and Completion of Course Materials

Attendance & Participation in this course means

- You must attend all classes
- You must be prepared for class by completing the previously assigned homework
- You must share your thoughts and strategies both in small groups and with the whole class
- You must work actively and effectively during all group and all class activities
- You must attentively listen and offer useful and constructive comments to other students in the class during group work and when other students present their ideas to the whole class

- If you miss a class, you are responsible for contacting a classmate or the instructor to find out what you missed, complete the material by the next class period and turn in all assignments on time.

Outreach Activity

- We have the opportunity to participate in the design and running of the Math and Science Night at Ash Creek Elementary school. This event is on Friday Feb. 7th from 6:30-7:30pm (you will need to be there by 6:10). You will plan an activity to use at the event and your attendance that evening is mandatory unless you have a verifiable and reasonable excuse in which case you may make up the assignment another way.

Completing Course Materials in this course means

- You have carefully answered all questions and problems posed on all course materials
- You have organized all course materials carefully in your course notebook and are prepared to share your work at any time
- Your course notebook will be reviewed periodically (usually during an exam) for completeness.

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 our course web page and all homework is due at the **beginning of class**. See the course Homework Policy handout in your course pack for further details. In general, this is a no work, no credit class. You will need time to think about the homework in this course; schedule your study and homework time accordingly. Graduate students may be assigned additional homework. Late homework will not be accepted¹. Your lowest homework score will be dropped.

Quizzes

Starting the second day of class there will be a quiz at the very beginning of each class. If you are late, you will miss the quiz. All quiz work must be done in your **Quiz Bluebook**. Quiz questions will cover material from the previous class (or classes). Quiz questions will be projected up and then, after time to answer the questions, we will trade blue books and grade each other's quizzes. The grader must write their name by the quiz questions they have graded. Blue books will be turned in at the end of class. Please label your Quiz Bluebook with your name and Math 495 (or Math 595 if you are a graduate student). Missed quizzes may not be made up¹. Your lowest quiz score will be dropped.

¹ An exception to this policy may be made in the case of i) a documented emergency filed with the Student Affairs office (see <http://www.wou.edu/student/> and their absence notification form) and my agreement, or ii) a documented University Sanctioned Absence from class which you have reviewed with me, and devised a plan for, in advance of the absence. Ordinary illness of one or two class days does not count as a documented emergency, even if you have a note from a doctor.

Midterm and Final Exam

There will be an in-class midterm exam and an in-class cumulative final exam in this course. Graduate students will be assigned additional problems on both exams. See your course schedule for the date of the midterm. The final is on Wednesday, March 20th 4:00-5:50 pm. Make up exams are generally not given¹.

Final Project (Graduate only, Math 595)

The graduate student final project will be assigned towards 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.

STANDARD GRADING SCALE FOR THIS COURSE

% Range	Grade	% Range	Grade	% Range	Grade
93 – 100	A	80 – 82	B-	60 – 69	D
90 – 92	A-	77 – 79	C+	Below 60	F
87 – 89	B+	73 – 76	C		
83 – 86	B	70 – 72	C-		

YOUR STUDENT WOU EMAIL ACCOUNT

All official university and class business and announcements will be directed to your WOU student email account. If you do not regularly check this account, please log in to this account and FORWARD your WOU email to an account that you do regularly access.

APPROPRIATE CLASSROOM BEHAVIOR

You are ultimately responsible for your own attendance and performance. Disruptive classroom behavior of any kind, such as talking during lecture or consistently coming to class late etc., is not appropriate. Cell phones should be silenced and put away. It is not appropriate to text during class. 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 score on that exam and a report of this activity will be sent to the Student Affairs office.

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 to schedule an appointment.

STUDENT SUCCESS SPECIALIST

Students in this class *may* be referred to the WOU Student Success Specialist (SSS) if the instructor determines their performance in the class is placing them at academic risk. The SSS will offer to work with referred students to address issues and develop a student success strategy. Irrespective of whether a referral has or has not been made, you are ultimately responsible for tracking your own progress in this course.

VETERANS AND ACTIVE MILITARY PERSONNEL with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor.

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.