# MATH 495 SYLLABUS: SPRING 2018 CALCULUS FOR MIDDLE SCHOOL TEACHERS 

Professor: Dr. Cheryl Beaver
Office: MNB 123
Webpage: http://www.wou.edu/~beaverc

Phone: 503-838-8404
Email: beaverc@wou.edu

Class meets: MW 5:00-6:50 PM in MNB 104
Final Exam: Wednesday June 13 $^{\text {th }}$, 4:00-5:50 PM

| Time | Mon | Tue | Wed | Th | Fri |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 9-1 |  | Available | by | Appointment |  |
| $\mathbf{1 : 0 0}$ | Office hour |  |  |  |  |
| $\mathbf{2 : 0 0}$ | Meeting | Office hour | Meeting | Available | Office hour |
| 3:00 | MTH 346 | MTH 346 | MTH 346 | By | MTH 346 |
| 4:00 | Meeting* | Meeting | Office hour | Appointment |  |
| $\mathbf{5 : 0 0 -}$ | MTH 495 |  | MTH 495 |  |  |
| $\mathbf{6 : 5 0}$ |  |  |  |  |  |

*My Monday meeting is every other week. I will generally be in my office before class on the alternate Mondays.

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 is highly recommended.
- Graph paper (wait and buy as needed)
- Quiz Blue Book ( $81 / 2 " \times 11$ " required by day 2 of class!)


## LEARNING OBJECTIVES AND GOALS

- Demonstrate effective use of calculus concepts to represent and solve a variety of quantitative problems.
- Demonstrate effective written communication of mathematical concepts.
- Understand the concepts of derivative and integral and the applications to areas and optimization.


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

## COURSE REQUIREMENTS AND GRADING

1. Attendance, Participation and Completion of Course Materials (deductions only, up to $5 \%)$
2. Homework and other in class work ( $30 \%$ )
3. Daily Quizzes (15\%)
4. Midterm Exams $(2 \times 20=40 \%)$
5. Final Exam (15\%)

## Attendance, Participation 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.


## Deductions

- Missed class ( $-1 \%$ per day if unexcused or not made up to satisfaction of instructor; it is your responsibility to contact the instructor in the event of a missed class and find out how to make up class work)
- Lack of participation (-1\% per day)


## Completing Course Materials in this course means

- You bring your courepack to class each day
- 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


## Deductions

- Your course notebook may be reviewed periodically, without notice, (usually during an exam) for completeness. You will be deducted $1 \%$ for each missing or incomplete section.


## Homework Assignments

In this course, homework will generally be collected one class day after it 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. 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. Late homework will not be accepted ${ }^{1}$. Your lowest homework score will be dropped.

## Daily 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. Blue books will be turned in at the end of class. Missed quizzes may not be made up ${ }^{1}$. Your lowest quiz score will be dropped.

## Midterms and Final Exam

There will be two in-class midterms and an in-class cumulative final exam in this course. The midterms are tentatively scheduled for week 4 and week 7 of the term (subject to change). The final is on Wednesday, June $13^{\mathrm{h}} 4: 00-5: 50 \mathrm{pm}$. Make up exams are generally not given ${ }^{1}$.

## 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- |  |  |  |  |
|  |  |  |  |  |  |  |  |

${ }^{1}$ 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.

## MATH CENTER

The Math Center is an excellent resource available to you for help with your homework. For hours and further information please see wou.edu/mathcenter.

## 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.

## LEARNING DISABILITIES

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Services, APSC 405, or at 503-838-8250, as early as possible in the term. Students needing medical or mental health care can access the Student Health and Counseling Center by calling 503-838-8313, emailing at health@ wou.edu, or by walking in to schedule an appointment.

## STUDENT SUCCESS SPECIALIST

If the instructor determines your performance in this class is placing you at academic risk, you may be referred to a member of the Student Success Team. A student success specialist will offer to work with you to address issues and develop a student success strategy. Regardless of whether a referral has or has not been made, you are ultimately responsible for tracking your own progress in this course. If you would like to meet with a student success specialist regarding any academic struggles you are experiencing, please contact Student Success and Advising at 503-$838-8428$ or at studentsuccess@ wou.edu.

VETERANS AND ACTIVE MILITARY PERSONNEL with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor. For WOU Veteran resources; please see wou.edu/veterans/.

## 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.

