Instructor: Katie Gedeon
Email: kgedeon@uoregon.edu
Office and Office Hours: Fenton 309, Tu 11:00a-12:00p, Th 2:00p-2:50p, F 11:00a-12:00p and by appointment.
Course Website: http://uoregon.edu/~kgedeon/teaching/wi15_math251.html

Textbook: Calculus, Concepts and Contexts, 4th edition, by Stewart. We will cover roughly Chapter 2, 3, and 4. Students should read Chapter 1 on their own and it should be review for them.

Homework: There will be two different types of homework for this course. One will be assigned from the textbook and my lecture guides, to be written on paper and turned into my Math Department mailbox, typically by 3pm on Fridays. The other will be administered online through WeBWorK, and solutions need to be submitted online no later than 11:59pm on the due date. Details about my expectations with respect to each type of assignment can be found on page 3 of this syllabus – please read!

Prerequisite Quiz: A quiz will be given on Wednesday, January 7 and will cover prerequisite material (Math 111 and 112) to test students’ readiness for calculus. Note that a grade of C- or better in Math 112, or satisfactory placement score, is a prerequisite for the course.

Exams: Three midterm exams and one cumulative final exam will be given this quarter. The midterm exams will be held during regular classtime on the dates listed below. I reserve the right to change the dates of these exams if necessary, and will give advanced notice if this is the case. The final exam is a combined final with all sections of Math 251, at the time listed below (location TBA). Students should bring their UO ID’s to the final exam.

- Midterm Exam 1: Monday, January 26 (Week 4)
- Midterm Exam 2: Monday, February 16 (Week 7)
- Midterm Exam 3: Monday, March 9 (Week 10)
- Final Exam: Tuesday, March 17, 5pm-7pm (Finals Week)

Make-Up Policy: Unless there are documented, extreme circumstances, there will be no make-up quizzes or exams, and no late homework accepted. If such circumstances arise, you must contact me as soon as possible to make arrangements. No quizzes or exams may be made up once they are graded and returned, which is usually the next day of class.

Calculator Policy: You are welcome to use calculators on homework, but no calculators will be allowed on any of the quizzes or exams in this course. Students are expected to be able to perform basic arithmetic operations with fractions and decimals by hand.
Grading: The following grading scheme will be adopted for the course:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework/Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Two lowest Midterm Exams</td>
<td>15% each</td>
</tr>
<tr>
<td>Highest Midterm Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
</tbody>
</table>

Grades will be kept updated on Blackboard throughout the term. There will be a homework bonus added to your homework grade at the end of the term. As of this update to the syllabus, “Quizzes” refers only to the Prerequisite Quiz; I reserve the right to give weekly quizzes in class, should I feel that they are necessary (though I do not anticipate making this change). Students will be notified of such a change in class.

Regarding the assignment of letter grades, in order to uniformize grading standards across the many sections of MA251 we will use the following procedure. All MA251 sections will take the same final exam, which will be graded collectively by the instructors on a scale of 90=A, 80=B, 70=C, 60=D. For any given section, the number of A/B/C/D/F grades given will roughly match the corresponding number of letter grades earned on the final exam. So if a section with 20 students gets 7 As, 6 Bs, 5 Cs, and 2 Ds on the final exam, then the instructor will be allowed to award a maximum of 7 As, 6 Bs, 5 Cs, and 2 Ds for total course grades (with a little leeway allowed for borderline cases). If the instructor only felt that 5 As were appropriate, he or she could roll the extra two As down into the B bracket, and similarly for the other letter grades.

This system removes the unfairness that can result if one instructor is a very easy grader and another instructor is a very difficult grader. Note that the system encourages and rewards strong performances on the final; if 15 students in the same class studied hard and got As on the final, then the instructor could give 15 As for the total course grade. As a last point, in extreme cases instructors might be allowed to deviate from this system in consultation with the lead course instructor.

Approximate Schedule: The following schedule of sections to be covered is approximate, and subject to change. Attend class every day to stay up-to-date with what sections will be covered on homework and quizzes/exams each week.

| Week 1: 2.1-2.4 | Week 6: 4.1, 4.2 |
| Week 2: 2.5-2.7 | Week 7: 4.2, 4.3 |
| Week 3: 2.8-3.2 | Week 8: 4.5, 4.6 |
| Week 4: 3.3-3.5 | Week 9: 4.6      |
| Week 5: 3.7-3.9 | Week 10: 4.7, Review |

Homework Guidelines: Homework assignments and due dates will be listed on the course website. I expect that you regularly check this website for updates. Other important announcements regarding homework may be made during class. Late homework will not be accepted; developing good habits with assignments is crucial. You will have a homework bonus added to your homework grade to offset any missed homework during the term.
• **Hand-In Homework:** Hand-in homework will consist of problems from the textbook and exercises from the lecture guides. There will be a handful of problems from the book which will be graded on accuracy, while the rest (including the exercises from lecture guides) will be graded on completion. Your homework must be presented well, which means that points will be deducted from your assignment if it fails to meet any of the following criteria:

  – Your name, assignment number, and due date are at the top of the front page.
  – Multiple pages are stapled together.
  – Pages are not torn from a spiral notebook (or at least cut off the “scruff”).
  – You have neat and complete solutions to all problems, with final answers clearly marked.
  – Problems are organized in an easy-to-understand fashion. It must be clear, for each problem, what number it is, what section it’s from, and whether it’s from lecture guides or the textbook.

The first homework assignment of this type is due **Friday, Jan. 9**.

• **WeBWorK Assignments:** Answers to WeBWorK problems must be submitted to WeBWorK before 11:59pm on the due date. No work for these assignments needs to be turned in on paper, however I recommend that you keep your work organized for easy reference when studying for exams. Almost all problems have unlimited attempts, and solutions to select problems will be available on WeBWorK after the due date.

The WeBWorK course site is [https://webwork2.uoregon.edu/webwork2/Math251-23684](https://webwork2.uoregon.edu/webwork2/Math251-23684). To log in, use your DuckID and email password. Please make sure, as soon as possible, that you are able to login and that you can see the first few WeBWorK assignments. The WeBWorK Practice is optional, but highly recommended if you are unfamiliar with WeBWorK. The first due assignment is called WeBWorK Review, and it reviews some (but not all) pre-requisite material from Chapter 1. This is due **Wednesday, Jan. 7**. The rest of the assignments are on new material; the first of which is on Sections 2.2-2.3 and due **Friday, Jan. 9**.

**Homework Help:** If you are having trouble with homework (or any material related to the class), I expect that you ask for help. There are several resources available to you. I strongly encourage you to come to my office hours with questions. If you are unable to come to my office during the allotted times, please email me to set up an appointment (which I am happy to do if I have time available). You may also email me questions regarding homework (and can use the “e-mail instructor” button through WebWork). Your classmates are also a great resource; I encourage you to work together on homework, as long as you submit your own work and understand it. Finally, on-campus tutoring and homework help is available through the Teaching and Learning Center (TLC) or at the Math Library (in Fenton Hall).

Please do **not** send an email simply saying “What am I doing wrong on this problem” or “I don’t know what to do” if you need homework help. You should describe how you tried to solve the problem (including some intermediate steps) and/or identify what part of the problem statement is throwing you off and why.
Email Policy: I frequently check my email and make every effort to respond to students’ emails in a timely manner. More likely than not, I will respond to your email within 24 hours. Often it will be within a few hours or so. In the case that I have not responded to your email it is possible that I have decided to address your question during class, or simply that I am not able to do so. I ask that you do not email me with requests for specific assignment scores. If you have concerns about your scores or your overall progress in the course, please talk to me in person.

General Expectations:

• *Attendance for this course is mandatory.* If it is necessary for you to miss a class, it is your responsibility to find out what you missed.

• You must show all work on quizzes and exams. If I do not understand what you have written for a problem, you will not get credit for it.

• Cell phones and other distractions will not be tolerated in class. If you are late to class or must leave early, please sit as close to the door as possible so that you will not disturb other students. Be considerate of your peers.

• The primary means of communication at the University of Oregon is by the email on file with the university. This is how I will contact you with important information about the class. Email is also a great way for you to contact me if you have any questions or concerns. Note that I cannot, and will not, be in contact with any individual other than yourself about your progress in the course (except in certain circumstances, e.g. if you are a student-athlete).

• Calculus is a work-intensive subject. An average, well-prepared student should expect to spend about 12 hours per week on this class, with some variation depending on background and ability.

Suggestions for Successful Study:

• Don’t get behind in your reading, homework, etc.

• Participate in class, ask questions, and make use of my office hours.

• Form a study group with others in the class. Work together on homework - *but everyone must join in and submit their own work.*

• Keep all your old exams, worksheets and quizzes. You’ll find them useful when you’re studying for tests.

• If you think you’d like to make use of it, establish a tutoring plan right away. Check with the Teaching and Learning Center (Room 68 in the Basement of PLC) for free or private tutoring.

• Free homework help is also available in the Math Library Reading Room (across the hall from the math office in Fenton Hall).

It is never too early to be concerned about your grade in the course, or how well you are understanding material. You are the only one who truly knows if you need extra help, and it is up to you to take the first step to obtain it.
**Student Conduct:** I plan to treat every student with respect and, as such, expect my students to show respect for me and for the class as a whole. Violations of the student conduct code results in the incident being included on your student conduct record as well as academic sanctions such as a failing grade on any coursework related to the violation or simply a failing grade in the course. The University of Oregon requires all instances of cheating be reported, no matter how small. Cheating includes, but is not limited to:

- Looking at another student's exam during a test
- Copying the work of another person (student or otherwise) and submitting it as your own
- Using any materials except those explicitly approved during a test-taking situation
- Resubmitting graded work that was altered after being returned
- Cooperating on written work for the course without being explicitly allowed to do so

For a list of other descriptions of cheating, see the Student Conduct Code.

**Learning Outcomes:** The ultimate goal of the course is to teach students to solve a wide class of optimization problems that are accessible to differential calculus. Much of the other material covered in this course is necessary for that objective.

Students successfully completing this course will be able to:

- Find the derivatives of functions built up from polynomials, exponentials, logarithms, and trigonometric functions.
- Sketch graphs of functions (this is necessary to help identify where to search for local/global extrema when trying to optimize).
- Understand some basic facts about limits (this is needed for two reasons: to incorporate an understanding of the geometric interpretation of the derivative as the slope of the tangent line of a graph, and also to aid in sketching graphs of functions exhibiting asymptotic or discontinuous behavior).
- Solve related rates problems.
- Solve calculus-based optimization problems.
- Find the linear approximation to a function at a specific value of the variable, graph the linear approximation and the function on the same pair of axes, and use the linear approximation to find approximations to values of the function near the point at which the approximation is taken.

Weekly homework problems, as well as problems on the midterms and final exam, will provide students with opportunities to demonstrate the level of their abilities relative to the above learning outcomes.
**Special Accommodations:** If you are currently registered with the Accessible Education Center for a documented disability, please present your paperwork to me as close to the beginning of the term as possible so that we can design a plan for you. If you have a disability but are not registered with the AEC, you should contact them as soon as possible. It is much more likely that measures can be taken to provide adequate special accommodation if the organization is done through the AEC.

**Important Dates:** Each of these dates are subject to change.

- Last day to drop without a W ................. January 12th
- Last day to add a class ......................... January 14th
- Midterm Exam 1 ................................. January 26th
- Midterm Exam 2 ................................. February 16th
- Last day to drop — period! ..................... February 22nd
- Midterm Exam 3 ................................. March 9th
- Final Exam ..................................... March 17th

*Last updated: January 2, 2015*