Instructor: Kyla Pohl

Email: kpohl@uoregon.edu

Office Hours:
Monday and Tuesday, 8:30am - 9:45am
Wednesday, 9:15am - 9:45am
and by appointment (all via Zoom)

Class Meeting Time: Mon, Tues, Wed, Fri, 10:00am-10:50am, University Hall 102

Learning Outcomes: A successful student can...

- evaluate limits using the algebraic limit laws,
- identify limits at $\pm\infty$ for rational functions,
- identify limits of rational functions involving cancellation of linear factors from numerator and denominator,
- compute left and right limits for a function (or decide they do not exist), given an expression for the function, identify the points where common functions are continuous and/or differentiable, and the same for functions given graphically,
- identify limits, as well as left and right limits, for functions given graphically,
- state and use the product rule, quotient rule, chain rule, and linearity rules for derivatives,
- state the definition of the derivative in terms of a limit of difference quotients,
- interpret, including units, the derivative as an instantaneous rate of change of a quantity defined in an applied context,
- recognize the derivative as the slope of the tangent line,
- use calculus to approximate the value of a function near a point p, given information about the function and/or its derivatives at p,
- compute derivatives of functions involving polynomials, exponentials, logarithms, and trig functions, using a combination of theorems, differentiation rules, and definitions,
- find the equation for the tangent line of a curve at a given point,
- calculate derivatives via implicit differentiation,
- use the methods of calculus to find asymptotes, local minima/maxima, intervals of concavity, intervals where the function is increasing/decreasing, and inflection points. Relate these properties to the graph of the function,
- find extrema of a function on open and closed intervals,
- solve optimization problems, including word problems,
- solve related rates problems, including word problems, use L'Hopital's rule to evaluate indeterminate forms of limits, including cases requiring multiple applications.

Course Materials:

- Text: *OpenSTAX Calculus Volume I*
  - An electronic edition of this text is available for free at this link.
  - This course covers most of Chapters 2–5. Students are expected to enter the course with the content of Chapter 1 already mastered.
- Calculator: A scientific calculator (e.g. anything in the TI-30X series) is recommended for this course. Graphing calculators will **not** be permitted on exams. If you have a question about whether your calculator will be permitted on an exam, feel free to ask me individually.

Grade Categories and Distribution: We will used a fixed grading scheme for the course.

Category	Portion of Course Grade
Course Engagement	5%
Quizzes	10%
Worksheets	20%
WebWork	25%
Midterm Exam 1	10%
Midterm Exam 2	10%
Final Exam	20%

Course Engagement: Taking an active role in one's own learning is vital to academic success. In light of this, course engagement will be an important facet of this class. Each week, there will be three ways to get engagement credit in this course. Students must satisfactorily complete at least one of the following three options in order to receive course engagement credit in any given week.

1. Every Wednesday in class students will work in small groups to complete worksheets, focused on processing recent material discussed in primary class time. (Please see below for more information about worksheets.) Attending class on these days and engaging earnestly with your group in the discussion of the material, regardless of completion, is generally sufficient for full participation credit. (The instructor is the arbiter of what constitutes full or partial participation.) If the schedule is altered and the worksheet day changes, the instructor will give students advance notice.

2. Students may attend and engage in office hours during the week. If you choose this option be prepared with questions when you attend. Please let the instructor know that you would like participation credit at the time of attendance if you choose this alternative.

3. Students may ask or answer a question in a Canvas discussion. You can find the discussion tab on the left side of the Canvas page. Ask a thoughtful question about course content, ask about a WebWork or worksheet problem that you are struggling with, or answer another student's question. You can receive participation credit for any given week by submitting your discussion post before Friday at midnight in the same week. For more information about this option, please see the "Canvas Discussion Posts: How To" pinned discussion on Canvas.

Concept Quizzes: There will be a quiz each week on Friday administered via Canvas after class. Content covered will be based on the homework (worksheet, WebWork) due the previous Wednesday. Each quiz will have a time limit of 20 minutes. The quiz will remain open from 11pm until midnight. Each student's lowest quiz from the quarter will be dropped from the grade book at the end of the term.

Worksheets: As stated above, each Wednesday in class students will engage in small group work on worksheets. The worksheet can be completed during or after class, to be turned in on or before the following Wednesday at midnight via Canvas. It will be graded for correctness, clarity, and completion. Thus it is necessary to show your thought processes in order to receive credit. Each student's lowest worksheet score will be dropped at the end of the term.

WebWork: Problem sets will be assigned via WebWork each week on Wednesday. They will be due the following Wednesday at midnight. Late WebWork assignments will be accepted for 50% credit up until two days before the next exam. Each WebWork assignment will be scored out of 90% of the points it is worth, so students may earn up to 10% extra credit on each assignment.

Exams: There are two midterms and one final exam in this course. Exams will be cumulative and must be taken during the scheduled class time. Each student's lowest midterm grade will be replaced with the final exam score should it be higher.

Midterm Exam 1 :	April 21
Midterm Exam 2 :	May 12
Final Exam:	June 12

Midterm exam dates are subject to change.

Grading Scheme: The course will be graded according to this scheme. The top and bottom 2% of each letter grade will be plus and minus, respectively. See this document for further specificity of grades.

Percentage	Letter Grade
90% to 100%	A
80% to 90%	B
70% to 80%	C
60% to 70%	D
0% to 60%	F

Important Dates:

April 8	Last day to drop this course (100% refund, no W recorded)
April 12	Last day to switch to or from audit
May 21	Last day to change grading option for this course

See the UO course page for other Spring 2023 deadlines.

Late Work Policy: Late work will not be accepted in this course. This includes WebWork assignments, quizzes, worksheets, etc. Exams must be submitted within the allotted time to receive any credit. Please carefully keep track of due dates/times to avoid losing credit for your work. Due to the university's "reason-neutral" policy effective Fall 2022, I cannot make exceptions for students based on differing circumstances besides university sponsored events, religious exemptions, military service, AEC accommodations, and Dean of Students emergency academic notifications. Students who participate in university-sponsored activities that might cause them to miss class are responsible for providing documentation signed by a university employee verifying their participation in the activity and listing the dates that they might miss class. This should be done during week one of the term.

Attendance Policy: Outside of exam days, attendance is not required in this course. All assignments and quizzes will be available for retrieval and submission on Canvas and WebWork. However, if you choose to gain participation points via option (1) for course engagement, attendance is required on the group work day that week. Attendance is required for all midterm exams for this course and for the final exam.

Accessibility: For students who are currently registered with the Accessible Education Center for a documented disability, please present your paperwork to me during the first week of the term (or earlier) so that we can design a plan for you. Those of you with a disability (or who might) but are not registered with AEC 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 AEC. I have attempted to provide documents that are accessible. Please let me know if you need additional accommodations.

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 work for the course (including exams) without being explicitly allowed to do so.

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

Expected Classroom Behavior: Students are expected to behave respectfully toward each other and toward the instructor during class time. In the wake of the Covid-19 pandemic, this includes not attending class when showing signs of illness. Use of laptops and phones is permitted in this class; however, please choose a seat in the back of the room if you plan to use a laptop during class time as to not distract other students. Similarly, please be sure that your phone is on silent during class time. Please let me know if you feel that you are not being respected at any time during the course of this term in my class.

Prohibited Discrimination and Harassment Reporting: I am a student-directed employee. For information about my reporting obligations as an employee, please see Employee Reporting Obligations. Students experiencing any form of prohibited discrimination or harassment, including sex or gender based violence, may seek information on safe.uoregon.edu, respect.uoregon.edu, titleix.uoregon.edu, or aaeo.uoregon.edu or contact the non-confidential Title IX office (541-346-8136), AAEO office (541-346-3123), or Dean of Students offices (541-346-3216), or call the 24-7 hotline 541-346-SAFE for help. I am also a mandatory reporter of child abuse. Please find more information at Mandatory Reporting of Child Abuse and Neglect.

Student Resources and Support: The following resources are available to you as a student.

- University Health Services or call (541) 346-2770
- University Counseling Center or call (541) 346-3277 or (541) 346-3227 (after hrs.)
- MAP Covid-19 Testing
- Corona Corps or call (541) 346-2292
- Academic Advising or call (541) 346-3211
- Dean of Students or call (541) 346-3216

Tentative Weekly Schedule: The following is a non-binding notion of where we will be and what we will do each week. The actual assignment deadlines will be provided on Canvas.

Week	Textbook Sections	Friday Assessment	WS and WW Due Wednesday
Week 1	2.1, 2.2, 2.3, 2.4	Quiz 0	WW CandC-4E-1-1
Week 2	3.1, 3.2, 3.3	Quiz 1	WS 1; WW1
Week 3	3.4, 4.7, 3.3	Midterm 1	WS 2; WW2
Week 4	3.3, 3.5, 4.7	Quiz 2	WS 3; WW3
Week 5	3.6, 3.8, 3.7	Quiz 3	WS 4; WW4
Week 6	4.7, 4.1	Midterm 2	WS 5; WW5
Week 7	4.3, 4.5, 4.6	Quiz 4	WS 6; WW6
Week 8	4.6, 4.8, 4.4	Quiz 5	WS 7; WW7
Week 9	4.8, 4.10, 6.8	Quiz 6	WS 8; WW8
Week 10	4.5, 4.9, 4.2	Quiz 7	WS 9; WW9, WW10 *(due Friday)*

What will an average week look like?

Monday	Tuesday	Wednesday	Thursday	Friday
Lecture	Lecture	Worksheet		Lecture/Review
		WS and WW due		Quiz

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.
- Read ahead in the book. A little bit of preparation will help the material sink in quicker during class and allow you to ask meaningful questions.
- Keep all your old exams and worksheets. You'll find them useful when you're studying for tests.

Extra Credit:
There are two avenues to get extra credit in this course.

- As stated in the WebWork section above, completing more than 90% of a WebWork assignment results in extra credit in the WebWork category.
- For each lecture day in this class, students will have the opportunity to earn extra credit by posting class notes to the Canvas discussion page for the course. Only the first student to post notes for a given day will earn credit, and submissions need to follow **all** assignment directions in order to be able to earn credit. Please see the pinned Canvas discussion post titled "How to Post Class Notes" for more information.

Please refrain from asking the instructor about extraneous extra credit opportunities.

Showing Work:
To get full credit for homework and (especially) on exams, it will be necessary to show work. This is what lets me know that you understand the process, and assign partial credit where it is due. It will be helpful to you as well, as showing your work means you'll be making less mistakes.

Need help?
You should make use of my office hours whenever possible. Keep in mind that I may ask you questions about how you started the problems and encourage you to contribute to solving it, rather than simply handing you the result. Always feel free to reach out to me via email with questions, but note that I will not always be available to answer questions immediately. Tutoring is another option for getting help in this course. Both the Knight Library and the Math Library have free tutoring available. Links to more information about these resources can be found on the Canvas page for this course.