Instructor: Kyla Pohl

Email: kpohl@uoregon.edu

Office Hours:
Monday, Tuesday, Wednesday
10:00am-11:00am
and by appointment (all via Zoom)

Class Meeting Time: Mon, Tues, Wed, Fri, 9:00-9:50, University Hall 102

Learning Outcomes: A successful student can:

- Evaluate functions at numeric or symbolic inputs
- Identify the largest possible domain of functions containing division, radicals, or logarithms
- Compute the average rate of change in functions on an interval (including an interval of arbitrary constants, e.g. the difference quotient)
- Fit linear functions to data
- Fit exponential functions to data
- Find real solutions to exponential and logarithmic equations
- Compute the composition of two functions given formulas, table, or graphs of the functions
- Find the inverse of a function (when it exists)
- Interpret the result of mathematical processes in a non-mathematical context
- Express written descriptions between variables as the graph of or formula for a function
- Solve equations resulting from setting a function output equal to a value
- Determine the practical domain of functions described in a non-mathematical context
- Model equations relating two variables in which proportionality or inverse proportionality are described
- Evaluate piecewise-defined functions and solve for input, given an output
- Construct elementary piecewise-defined functions
- Identify increasing and decreasing behavior in a function
- Determine from a formula, words, or a table if the function described is exactly linear or exponential
- Fit a quadratic, rational, power, or logarithmic function to data
- Find the location or value of the extremum of a quadratic function
- Identify long-term ($t \to \infty$) behavior of polynomial or rational functions
- Identify long-term ($t \to \infty$) behavior of exponential or logarithmic functions
- Identify the relative or continuous growth rates of exponential models
- Combine two functions (defined by formula, table, graph, or words) using arithmetic operations on functions
- Identify whether or not functions are one-to-one.

Most importantly, the student can model the mathematical topics described among the learning outcomes in words, then solve or simplify the relevant equations and/or expressions, and finally write a summary statement of the solution.

Course Materials:

- Text: "Modern Precalculus", AY2018-19 edition, by Mike Price

- Calculator: (Recommended) A graphing calculator; TI-83, TI-83+ or TI-84 is recommended. We will be using graphing utilities to help us graph complicated functions during the term. Such a calculator is not mandatory for the course, but if you can get one without too much trouble, do so. Calculators will also be an allowed resource on exams. If you don't have access to a calculator of this type, you can download an emulator here. However, note that you may not use this online resource on exams.

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

Category	Portion of Course Grade
Classroom Citizenship	5%
Quizzes	10%
Worksheets	15%
WebWork	20%
Midterm Exam 1	10%
Midterm Exam 2	10%
Final Exam	30%

Classroom Citizenship: In order to provide and maintain a safe and positive classroom learning environment, students are expected to follow all COVID-19 protocols while in this course. Please respect your peers and myself by adhering to the requirements below.

Citizenship Criteria:

- Wear your mask and make sure it fits you well.

- Do not eat or drink in the classroom.

- Stay home if you're sick.

- Get to know your neighbors in class, and let them know if you test positive.

- Get tested regularly.

- Watch for signs and symptoms with the daily symptom self-check.

- Wash your hands frequently or use hand sanitizer.

- Complete the UO COVID-19 case and contact reporting form if you test positive or are a close contact of someone who tests positive.

Students who do not abide by the above directives will be reminded of the rules. If the issue persists, students will be asked to leave the classroom. For exemptions to any of the above criteria, please contact the AEC about appropriate accommodations. For more a more detailed list of Covid expectations and resources, see the COVID Containment Plan for Classes below.

Please do not attend class if you are experiencing any symptom of illness. All assignments and content will be available on Canvas and missed participation points can be made up by attending office hours or using Canvas discussions, so student absence due to presumed illness need not have any negative effect on course grade.

Concept Quizzes: There will be a quiz each week on Friday administered on Canvas. Students may take the quiz at any time from 10:00am until 11:59pm. Content covered will be based on the homework due the previous Wednesday. Each quiz will have a time limit of 30 minutes and students will be given one attempt. The lowest two quizzes from the quarter will be dropped from the grade book.

Worksheets and Course Engagement: Every Wednesday in class students will work in small groups to complete worksheets, focused on processing recent material discussed in primary class time. These will be worth course credit for participation and demonstration of understanding. 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.) The worksheet can be completed during or after class, to be turned in on or before the following Wednesday via Canvas. It will be graded for correctness and clarity. Thus it is necessary to show your thought processes in order to receive credit.

There are two alternative options to receive participation credit for any given week if are unable to engage in group work on Wednesday.

1. Attend and engage in office hours. Please let me know that you would like participation credit if you choose this alternative.

2. 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.

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 exam.

Exams: The two midterm exams will cover approximately three chapters each. There will also be a final exam at the end of the course. Exams will be cumulative and must be taken during the scheduled class time. Exceptions will be made if students are unable to attend class for an exam due to illness, but the instructor needs to be notified via email as soon as possible. Other exam exceptions must be

arranged **at least** one week before the date of the exam.

Midterm Exam 1 (Sections $1-3$):	Jan 28
Midterm Exam 2 (Sections $4-6$):	Feb 25
Final Exam: (All course material, including Sections 7 and 8)	March 15

Sections covered on exams 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.

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

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. In extenuating circumstances, please contact the instructor via email as soon as possible to discuss possible extensions or accommodations.

Accessibility: For those of you who are currently registered with 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.

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.

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.

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.

COVID Containment Plan for Classes: As the University of Oregon returns to in-person instruction, the key to keeping our community healthy and safe involves prevention, containment, and support. Here is information critical to how the UO is responding to COVID-19.

<u>Prevention:</u> To prevent or reduce the spread of COVID-19 in classrooms and on campus, all students and employees must:

- Comply with vaccination policy.

- Wear face coverings in all indoor spaces on UO campus.

- Complete weekly testing if not fully vaccinated or exempted.

- Wash hands frequently and practice social distancing when possible.

- Complete daily self-checks.

- Stay home and do not come to campus if feeling symptomatic.

- If you have mild viral symptoms that do not require medical attention and you have not tested positive for COVID in the previous 90 days, students can drop by UHS to get a free COVID-19 self-test kit to more quickly determine if you have Covid.

- Complete the UO COVID-19 case and contact reporting form if you test positive or have been in close contact with a confirmed or presumptive case.

<u>Containment:</u> If a student in class tests positive for COVID-19:

- Instructors should follow the guidance in the Instructor Notification email.

- Follow guidance in classroom notification email if sent to an entire class.

- If notified by a student that they have tested positive for Covid or believe they have Covid, both instructors and the student should complete the UO COVID-19 case and contact reporting form.

- Answer the call if contact by the Corona Corps (541-356-2292).

- Isolate if you test positive or are symptomatic.

- Quarantine if you are an unvaccinated close contact or a vaccinated close contact with symptoms.

- Test weekly if you are unvaccinated or partially vaccinated.

- Stay home if symptomatic and complete the UO COVID-19 case and contact reporting form.

<u>Support:</u> 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	Chapter 1	Quiz 0	WW 0
Week 2	Chapter 2	Quiz 1	WS 1, WW 1ab
Week 3	Ch. 3, pt. I	Quiz 2	WS 2, WW 2ab
Week 4	Ch. 3, pt. II	Midterm 1	Review 1, WW 3a
Week 5	Chapter 4	Quiz 3	WS 3, WW 3b
Week 6	Chapter 5	Quiz 4	WS 4, WW 4ab
Week 7	Chapter 6, pt. I	Quiz 5	WS 5, WW 5ab
Week 8	Chapter 6, pt. II	Midterm 2	Review 2 , WW 6a
Week 9	Ch. 7, Ch. 8 pt. I	Quiz 6	WS 6, WW 6b
Week 10	Chapter 8, pt. II	Quiz 7	WS 7, WW 7ab+8ab

What will an average week look like?

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

Important Dates:

January 8	Last day to drop without a "W"
January 10	Last day to switch to or from audit
February 20	Last day to withdraw (drop with a "W") or change to P/NP

See the DuckWeb course page for this course for other Winter 2022 deadlines.