Instructor: Quinn La Fond

Email: qlafond@uoregon.edu

Office Hours: Fenton 217: Mondays 1:30-3:30 pm, and Thursdays 3-5pm.

Prerequisites: MA251. In particular, a fluency in differential calculus, as well as trigonometry.

Class Meetings: Mon,Wed : 6 - 8 pm, University Hall 112

References: We will mainly follow chapters 1-3 of OpenStax 'Calculus: Volume II'. This is available for free download at openstax.org. The Stewart textbooks are also very helpful, but are not required.

Final Exam: June 11, 10:15 am

Calculator Policy: No calculator is needed for this course, and none will be permitted during exams, or daily quizzes. You are of course permitted to use calculators for homework, but are encouraged not to in order to replicate exam conditions.

Office Hours: My office hours are drop-in and available to all students. Typically, students come to my office hours to discuss questions from recent assignments, current grades, or concerns about the course. If you cannot make these hours, please send me an email and we will find a time that works for you.

Grading Policies: The breakdown of the grade for the course is as follows:

Participation	10%
Daily Quizzes	15%
Midterm Exam 1	25%
Midterm Exam 2	25%
Final Exam	25%

Grades are assigned according to the following scale:

A	$90 - 100\%$
B	$80 - 89\%$
C	$70 - 79\%$
D	$60 - 69\%$
F	$\leq 60\%$

Plus and minus grades will be applied to those marks which are within 3 percentage points of the top and bottom of the respective grade bracket.

Participation: Participation in class is mandatory. To earn you participation class you must either meaningful contribute twice a week to the classroom discussion (i.e. asking or answering a question), or attend office hours.

Daily Quizzes: In lieu of weekly homework, each Wednesday evening I will distribute a problem set for you to work on. We will begin each class period (save for exam days) with a 15-20 minute quiz consisting of 2-3 questions which will be very similar, or exactly the same as those on the problem set. You will receive 1/3 of points for simply writing your name on the page; think of this as an "attendance grade". The other 2/3 points will be distributed based on accuracy. I will drop the lowest four quizzes.

Exams: There will be two midterms, in weeks 4 and 8. The content they cover is dependent on the pace of the course, and will be made available closer to their date. These midterms are not intended to be cumulative, but it is important to note that mathematics, especially calculus, builds upon itself,

so the concept covered in midterm one will be vital to success on the second midterm. The final exam will be cumulative, with a slight emphasis on material covered in the last third of the quarter.

Late work and Makeups: University of Oregon requires these policies to be reason neutral, and as such **no late work is accepted, and there are no make ups for quizzes and midterms**. However, with the understanding that life gets chaotic, the lowest two homeworks in both categories (textbook problems, and challenge problems), will be dropped, and the lowest four daily quizzes wil be dropped. Moreover, in the even that your final exam grade is better than either, or both, of your midterms grades, your final exam grade will replace them. In particular, if you miss a midterm for whatever reason, you will be able to replace your midterm grade with your final exam grade.

In the case of specific AEC accommodations, religious observances, military deployment and University sponsored events, signed documentation should be provided as early in the term as possible and at least a week prior to the planned absence or request for an accommodation.

Important Dates Here are some important dates to bear in mind:

Monday, March 31st	Classes Begin
Saturday, April 5th	Last day to drop without a W
Monday, April 7th	Last day to add a class
Monday, May 26th	Memorial Day: No Lecture (Homework to be turned in on Tuesday);
Monday, June 9th	Final Exams Begin

See the calendar on Registrar's website for other Fall 2025 deadlines.

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 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.
- Failure to cite sources/resources on a challenge problem set.
- 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.

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

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.

Other Important University Policies and Resources: Individuals and the campus as a whole may experience hardships, both short-term and long-term, as a result of factors that pertain to school, family, religion, and other facets of adult life. I endorse the expressions of support provided at:

`https://provost.uoregon.edu/standard-university-syllabus-language`

regarding mental health and wellness, basic needs, and religious observations.

Course Objectives:

a) Learning to calculate and (roughly) estimate as appropriate the value of a definite integral by examining the graph of the integrand using the definition of the integral as a (signed) area.

b) Being able to state and apply the Fundamental Theorem of Calculus

c) Learning how to integrate symbolically (using the Fundamental Theorem of Calculus), including integration by parts and substitution. Note that there is a tension: one could spend the entire term becoming a crack symbolic integrator and do no applications. That isn't appropriate, but at the same time one must master the basic techniques of symbolic integration.

d) Understanding heuristically how to think about the integral as being a limit of Riemann sums. This is often needed in applications in the process of recognizing a question as being one that can be answered by integrating.

Learning Objectives

a) Set up and evaluate formulas for Riemann sums, given the function, interval, and number of rectangles.

b) State and use the fundamental theorem of calculus.

c) Evaluate integrals of polynomial and exponential functions, as well as sine and cosine.

d) Evaluate integrals using substitution and integration by parts.

e) Use standard trig identities where appropriate as part of integral computations for some trig functions.

f) Interpret the area between two graphs as an integral.

g) Interpret an integral as a signed area.

h) Set up one-variable integrals that represent the solutions to a variety of modeling problems.

i) Evaluate improper integrals.

j) Compute volumes of surfaces of revolution using both the disk and shell methods, and recognize which method is most appropriate to a given problem.

k) Compute average values of functions over a closed interval.

l) Determine if a given function is a solution to a given differential equation.

m) Write down a linear differential equation that models a given situation that is described in words, typically where the rate of growth is a linear function of the amount.

n) Find general and particular solutions to basic separable differential equations.