

# MAC 2233: Survey of Calculus 1

## Summer B 2024

### Course Information

**Class Time:** MTWRF Period 2 (9:30am-10:45am)

**Location:** Little Hall 219

**Instructor:** Sucharita Mallick

**Email:** sucharitamallick@ufl.edu

**Office:** Little Hall 489

**Office Hours:** TBA, or by appointment

**LIT 215 Hours:** Friday Period 3 (11:00 am – 12:15 pm)

### Course Description

MAC 2233 is the first in the two-semester sequence, MAC 2233 and MAC 2234, surveying the important ideas of calculus but emphasizing its applications to business, economics, life, and social sciences. The course covers important calculus topics such as: limits, differentiation, application of the derivative, introduction to integration and its applications including area.

A minimum grade of C (not C-) in MAC2233 satisfies three credits of the General Education Mathematics requirement. The General Education Objectives for Mathematics (and other subject areas) can be found [here](#).

### Prerequisites

We assume a comprehensive background in precalculus for this course. We may briefly review some precalculus topics but will not spend a lot of time on it.

To enroll in MAC 2233, you must have earned a grade of C or better in MAC1140, precalculus algebra, or MAC 1147, precalculus: earned calculus credit through an exam or earlier coursework: or have taken the ALEKS placement assessment and attained the required minimum score. You may take the ALEKS assessment through the ONE.UF homepage. Note the following paragraph:

“The Department of Mathematics encourages you to take the assessment even if you have met one of the prerequisites for MAC 2233. You may need to review your algebra skills and your placement assessment can provide information and specific areas for additional study.”

You can check with either an advisor in your college, the MAC 2233 course coordinator, or an advisor in the math department (the main office is Little 358) to be sure that you are eligible for MAC 2233.

### Course material and resources

There are no required materials for this course; specifically, there is no required textbook, clicker, or online homework code that you must purchase for this course.

## Canvas

E-learning Canvas, a UF course management system, is located at <https://elearning.ufl.edu>. Use your Gatorlink username and password to login. All course information including your grade, course homepage, syllabus, office hours, test locations, mail tool, discussion forum, free help information, etc. can be accessed from this site. You are responsible for verifying that your grades are accurate. There is no grade dispute at the end of the semester (see below for the One Week Policy).

We will also be utilizing Canvas for homework assignments; see the Homework section under Course Content below.

## Calculators

No calculators are allowed on quizzes or exams, nor are they required for any other course-work. However, a graphing calculator and Wolframalpha are useful as study and learning tools when used appropriately. Some other useful tools are the online graphing calculator [Desmos](#), and the app [GeoGebra](#) to help you as you learn the material. Keep in mind however, mathematics is a collection of ideas that are not mastered through calculator skills. You need to know how to solve problems without a calculator.

## Xronos Modules

You will be given access to the learning modules from an online version of this course. This is essentially a “textbook” that includes lecture videos and some written text explaining each topic, as well as some interactive practice along the way. These modules are optional, but you may find it helpful to go through them as a supplement to our classes (I will try to cover material in the same order as the modules to make it easy to follow along). They are located under the “Modules” tab on Canvas.

Note that these modules use an online system known as Xronos, which we will also be using for homework assignments. However, unlike your homework, we are not using the learning modules for grades or required assignments, so you do not need to worry about them syncing with Canvas.

## Assignments and Makeups

### Homework

You will be assigned a homework problem set for each lesson we cover in class. Homework will be delivered via the online platform Xronos, which is free of charge and accessible through Canvas. More details will be provided in class.

Furthermore, at the beginning of the semester, you will have a Syllabus Quiz on Canvas that will count as a homework assignment. You can retake this quiz as many times as you'd like to achieve a better score; the highest score you attain before the deadline will be used for your final grade on this assignment. The purpose of the Syllabus Quiz is to help ensure that you understand and remember course policies and other information conveyed in this syllabus. Your lowest 2 homework grades will be dropped.

### Quizzes

There will be several graded quizzes each week in class, for a total of 12 quizzes. Quizzes will be administered at the end of the period and you will have about 15 minutes to complete them. Your lowest 2 quiz grades will be dropped.

## Class Participation

Your class participation for that day will simply be based on attendance. Furthermore, classes are not merely lectures. We will pause several times throughout each class to work on practice problems. You may work on these problems alone or with classmates, but I expect you to do them!

## Exams

There will be three exams (excluding the final exam) throughout the semester. These exams will be administered in the evening in Little Hall 201 on the following dates:

**Exam 1: July 15**

**Exam 2: July 25**

**Exam 3: August 7**

**Exams will begin at 7:00pm and end at 8:30pm.** You **MUST** ensure that you do not have any conflicts with these exam times/dates. Contact me ASAP if there are any issues with this.

## Final Exam

The final exam is cumulative and will have two portions: a take-home portion, and an in-class portion.

- **Take-home portion:** You will complete this on your own time near the end of the semester (exact dates TBA). You may use class notes, past assignments, and the resources available to you on Canvas, but you may not work with other people or use the Internet (outside of Canvas and course materials) to answer questions. The take-home portion will be graded and returned to you before the in-class portion. I recommend using the feedback you receive on the take-home portion to help study for the in-class portion.
- **In-class portion:** This portion of the exam will be administered during our usual class time, in our usual classroom, on the last day of classes (August 9).

## Makeups

You must send me documentation of an excused absence (for example, a doctor's note if you are sick) to make up any assignment. Makeups must be completed within 1 week of the original assignment (and, for assignments towards the end of Summer B, before the last day of classes ends). Different assignment types have different makeup policies:

- **Homework:** No makeups or extensions will be given for homework assignments, since homework is submitted online and you will have several days to complete each assignment. No late homework will be accepted, even if it's only a few minutes past the deadline. Do not wait until the last minute to complete your homework, just in case you run into technical difficulties. If you have completed your homework but are experiencing technical difficulties, you must contact me before the deadline with proof that you have completed the assignment and/or proof that you have earned the grade that you should receive.
- **Quizzes:** These assignments may be made up within the guidelines explained above. There is no hard limit on the number of makeups for these assignments, but an excessive number of makeups may lead me to stop offering them to you unless you have extenuating circumstances.

- **Attendance:** You cannot make up attendance, but your grade will be excused if you have documentation of an excused absence. You must contact me about missed attendance and provide documentation within 1 week of the day of class you missed.
- **Exams:** You may only make up one exam (excluding the final) throughout the semester. Once again, you must follow the guidelines above to be allowed a makeup. Makeup exam dates TBA.
- **Final Exam:** There are no makeups or extensions for the take-home portion of the final. Since course grades must be submitted only a few days after classes end, opportunities to make up the in-class portion will be minimal. You must ensure that you are present in class on the day of the in-class final. If you absolutely cannot come to class that day, contact me (preferably ahead of time) and I will see what arrangements can be made. UF policies regarding attendance and excused absences may be found [here](#).

## Course Schedule

Below is a schedule showing the lessons we will cover, as well as dates for exams and quizzes. We may need to make slight adjustments if some lessons take longer or shorter than expected, but the exam dates are firm.

Monday	Tuesday	Wednesday	Thursday	Friday
1 Lesson 1: Limits	2 Lesson 2: Limit Laws	3 Lesson 3: Continuity <b>Quiz 1</b>	4 Independence Day No Classes	5 Lesson 4: Indeterminate Forms
8 Lesson 5: Asymptotes <b>Quiz 2</b>	9 Lesson 6: Velocity	10 Lesson 7: Derivatives <b>Quiz 3</b>	11 Lesson 8: Derivatives as Functions	12 Lesson 9: Differentiation Rules I <b>Quiz 4</b>
15 Review 1 <b>Exam 1</b> (Lesson 1-8)	16 Lesson 10: Differentiation Rules II	17 Lesson 11: Exponentials and Logarithms <b>Quiz 5</b>	18 Lesson 12: Logarithmic Differentiation	19 Lesson 13: Maxima and Minima <b>Quiz 6</b>
22 Lesson 14: Curvature <b>Quiz 7</b>	23 Lesson 15: Applications of Derivatives I	24 Lesson 16: Applications of Derivatives II <b>Quiz 8</b>	25 Review 2 <b>Exam 2</b> (Lessons 9-15)	26 Lesson 17: Applications of Derivatives III
29 Lesson 18: Antiderivatives <b>Quiz 9</b>	30 Lesson 19: Area under the curve	31 Lesson 20: Definite Integrals <b>Quiz 10</b>	1 Lesson 21: Indefinite Integrals	2 Lesson 22: Fundamental Theorem of Calculus <b>Quiz 11</b>
5 Lesson 23: u- Substitution	6 Final Review I <b>Quiz 12</b>	7 Review 3 <b>Exam 3</b>	8 Final Review II	9 <b>In-Class Final (All Lessons)</b>

Due dates for any other assignments (for example, homework) will be posted on Canvas.

## Grading

Your numerical grade for the course will be calculated as follows: Homework 15% ,Quizzes 18%, Class Participation 7%, Exams 40%, Final Exam 20%.

The cutoffs for letter grades are as follows: A 90%, A- 87%, B+ 84%, B 80%, B- 76%, C+ 73%, C 67%, C- 64%, D+ 62%, D 57%, D- 56%, E Less than 56%.

You will receive the letter grade corresponding to the highest cutoff you have met or surpassed. Grades will not be rounded or curved. This means you will still get an A- if your numerical grade is 89.9999%, etc. Extra assignments for individual students to improve a grade are not Possible. Information on current UF grading policies may be found [here](#).

## One Week Policy

All grade concerns must be settled within one week of the receiving the grade on the assignment (and, for assignments towards the end of Summer B, before course grades must be submitted). This means you need to pay close attention to your grades throughout the course to ensure there are no errors. There will be no review of disputed points at the end of the semester.

## Incomplete Policy

A grade of I (incomplete) will be considered only if you meet the Math Department criteria which is found at <https://www.math.ufl.edu>. If you meet the criteria you must see the instructor before the final to be considered for an I. A grade of I only allows you to make up your incomplete work. You cannot redo any previously completed work.

## Additional resources and expectations

### Online Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

### Advising and Help

For all concerns with MAC2233, please talk to your instructor! Office hours will be posted and are regular times when I am available to answer questions, discuss grades, advise students on future classes, or help students in any available way. You do not need an appointment to visit during office hours. If you need to meet outside of office hours, please contact me for an appointment. In addition, there are several other free resources available to you:

The Teaching Center Math Lab, located at SE Broward Hall, offers free informal tutoring. You may want to attend different hours to find the tutors with whom you feel most comfortable. Also the Little 215 Tutoring Center provides free tutoring for math courses up to Calculus 3. Go to <https://www.teachingcenter.ufl.edu> to find their hours. You can also request free one-on-one Tutoring. A list of qualified tutors for hire is available at <https://www.math.ufl.edu>.

## **Honor Code**

All students are required to abide by the Academic Honesty Guidelines which have been accepted by the University. The academic community of students and faculty at the University of Florida strives to develop, sustain and protect an environment of honesty, trust and respect. Students are expected to pursue knowledge with integrity.

Violations of the Academic Honesty Guidelines shall result in judicial action and a student being subject to the sanctions in paragraph XIV of the Student Code of Conduct. The conduct set forth hereinafter constitutes a violation of the Academic Honesty Guidelines (University of Florida Rule 6C1-4.017). You may find the Student Honor Code and read more about student rights and responsibilities concerning academic honesty at the link <https://www.dso.ufl.edu/sccr/>.

## **Students with Disabilities**

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting: <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. If a student does not supply the appropriate documentation in a timely fashion, the instructor may not be able to accommodate the student in a timely manner.