

MAC 2311 Introduction to Calculus with Analytic Geometry I

Fall 2022

MWF Time 4th Period Sections 15162, 15163 (LIT 237)

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Teaching Assistants:

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Course Description: MAC 2311 is the first in the three-semester sequence MAC 2311, MAC 2312, and MAC 2313 covering basic calculus. Intended topics will include functions and inverse functions, limits, continuity, differentiation of algebraic and trigonometric functions; applications of derivatives; integration and the fundamental theorem of calculus; applications of definite integrals.

A minimum grade of C (not C-) in MAC 2311 satisfies the four credits of general education requirement and satisfies the pure math portion of the state Writing/Math requirement.

Intended Learning Outcomes: This course will introduce you to the ideas of limit, derivative and integral for functions of a single variable. Upon completion, you will be able to understand the theory as well as applications. The course will prepare you for MAC2312.

Prerequisites: Appropriate score on the ALEKS placement assessment, or MAC 1147 (or its equivalent, both MAC 1140 and MAC 1114) with a C (2.0) or better.

Recommended Textbook: There are no required textbooks for this course. We will make use of a free online textbook available at [OpenStax Calculus Volume 1](#). Also, in this course we will use the online platform Xronos which has been developed at UF and is supported by the Office of the Provost and the College of Liberal Arts and Sciences.

Grades: Your grade is based on Xronos Homework, Lecture Quizzes, Discussion Quizzes, 3 midterm exams and a final exam.

Assignment	Weight
Xronos Homework	7%
Lecture Quizzes	5%
Class Participation	6%
Discussion Board Participation	2%
Discussion Quizzes	10%
Exams (Three exams, 15% each)	45%
Final Exam	25%

Your grade will be calculated according to the scale below.

A [90,100]; A-[87,90); B+[84,87); B [80,84); B-[77,80); C+[74,77); C [67,74);
C-[64,67); D+[60,64); D [57,60); D-[54,57); E [0,54)

Exams Dates: Exam 1 - September 22nd, Exam 2 - October 19th, and Exam 3 - November 16th.

Final Exam Date: December 10, 2022. Time: 10:00 AM to 12:00 PM.

Xronos Homework: In this course we will be using both Canvas and the online platform Xronos which is free of charge and will be explained during class. Online homework assignments include lecture quizzes which are due the day before the corresponding class and Xronos homework are due one week after the corresponding class. These assignments must be completed by the specified due date/time. There will be a total of three dropped lecture quizzes grades and three dropped Xronos homework grades at the end of the semester.

All assignments will have posted due dates and these due dates will not be extended under any circumstance. Personal computer issues will NOT be a reason to offer any type of extension.

Class Participation: Attendance in class both in lecture and discussion section is highly recommended. Students who come to class and participate are more likely to do well in the course. Participation will be a part of your grade and how it is calculated will be explained in class. It will be 6% of your grade and will be based upon your attendance in lectures and group work that is assigned.

Further, following university policy, you may expect a penalty (additional lost points) for attending fewer than 75% of your classes.

Discussion Board Participation: Canvas is organized by modules, which pertain to each exam. Module 1 corresponds to all the material related to exam 1. Within each module, there is a discussion board where students are able to ask questions or post answers. This includes, homework, quizzes, exam reviews and lectures. You may earn up to 2 points for each module by:

- Asking a coherent mathematical question. (+1 each)
- Answering a fellow student's questions. (+1 each)

Discussion Quizzes: There will be weekly quizzes (except for the first week) during your discussion, based on the homework. Quizzes make up a total of 10% of your grade. Your TA will administer the quizzes and any questions about the grades should be directed to them.

E-Learning Canvas: E-learning canvas, a UF course management system, is located at elearning.ufl.edu. Use your Gatorlink username and password to login. All course information including your grade, course homepage, syllabus, lecture outlines, 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. **You have one week after a score has been posted to contact your TA if you believe there has been a recording error. There is no grade dispute at the end of the semester.**

Please note: Important course information is clearly communicated in this course guide, the MAC 2311 homepage and links in Canvas, and announcements in lecture and discussion. Due to the volume of email received by the instructor and TAs, we cannot reply to each request for this well publicized information. If you cannot find your answer in the resources above, there is also a **Discussion Forum** available in Canvas. Please use this to post questions and to supply answers to your fellow students.

Communication: All communication between student and instructor and between students should be respectful and professional. All official class communications will be sent only to the ufl.edu email addresses. Students are responsible for acquiring, checking their email accounts regularly, and any class information sent to their ufl.edu account. Please be sure to sign your name to your e-mails.

Online course evaluation: Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>

Academic Honesty: On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

The UF honor code is available here: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

Wellbeing: If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, I strongly encourage you to seek support. The website <https://counseling.ufl.edu/resources> provides a list of on-campus and local resources to support various populations.

Diversity and Inclusion: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In particular, I will gladly honor your request to address you by an alternate/ preferred name or gender pronoun. Please advise me of this preference early in the semester so I may make appropriate changes to my own records.

Students with Disability: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting our [Get Started page](#). 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.

Resources: In addition to attending your discussion section regularly and visiting your discussion leader, lecture, or the course coordinator, during their office hours, the following aids are available.

- The Math Help Center in Little 215 is open for drop-in assistance with homework Monday through Friday from 9:30 to 4:00. Mathematics graduate students and undergraduate assistants staff it. Please note that this space is not designed for intense one-on-one tutoring, but rather as a resource for quick questions and explanations. You should not expect the staff to help you if you have not at least begun your homework and have specific questions. Moreover, they absolutely will not assist you with quizzes or any other such work.
- The Teaching Center Math Lab, located in SE Broward Hall, is a tutorial service staffed by trained math and science students to provide help with your calculus questions and homework. Tutors will be glad to provide guidance on specific problems after you have attempted them on your own. You may want to attend different hours to find tutors with whom you feel most comfortable. You can also request free one-on-one tutoring.

Make-Up Policy: All make-up work must be arranged with your instructor. UF has outlined acceptable reasons for absence from or failure to participate in classes at <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>. Following these guidelines students are allowed a reasonable amount of time to make up the missed assessments from during class time. In our course this **only** covers assembly exams and discussion quizzes. The class policy is outlined for both assembly exams and discussion quizzes below.

- **Exam Conflicts**

1. Exams may be held Monday - Friday from 8:20-10:10PM (periods E2-E3) for the fall and spring terms. If other classes are scheduled during an exam time, instructors must provide make-up class work for students who miss class because of an assembly exam. If two exams are scheduled at the same time, assembly exams take priority over time-of-class exams. When two assembly exams conflict, the higher course number takes priority. Instructors giving make-up exams will make the necessary adjustments.
2. If MAC 2311 is the lower course number, students must inform their instructor in person at least ONE WEEK in advance of the exam date so that appropriate accommodations can be made. Otherwise, it may not be possible to reschedule.

- **Make-up Exams**

1. If you are participating in a UF sponsored event or religious observance, you may make up an exam only if you make arrangements with your instructor at least ONE WEEK PRIOR to the event. You must present documentation of a UF sponsored event.
2. If illness or other extenuating circumstances cause you to miss an exam, contact your instructor through the Dean of Students office CARE team at <https://care.dso.ufl.edu/instructor-notifications/> with appropriate documentation. You will be allowed to sign up to take a makeup exam at the end of the semester on TBD.

- **Make-up Xronos Homework:** None

- **Make-up Class Participation Points:** None

- **Make-up Discussion Quizzes** - Students who miss a discussion quiz due to illness, severe family emergency, and/or severe weather as outlined in the UF Attendance Policies and wish to make up the quiz must contact their instructor through the Dean of Students office CARE team at <https://care.dso.ufl.edu/instructor-notifications/> with appropriate documentation. Once the instructor receives notice from the CARE team covering the dates during which the quiz took place the student will be able to attend to make up a discussion quiz. Students who miss a discussion quiz due to other reasons as outlined in the UF Attendance Policies (e.g. special curricular requirements, religious holidays, official university activities, etc) must contact their instructor either through email.

Incomplete: Students who are currently passing a course but are unable to complete the course because of illness or emergency may be granted an incomplete grade of “I” which will allow the student to complete the course within the first two weeks of the following semester. See the policy on <http://www.math.ufl.edu/fac/incompletes.html>. If you meet the criteria, you must see your instructor before finals week to be considered for an “I”. An “I” only allows you to make up your incomplete work, not redo your work.

* I reserve the right to change anything in this syllabus if needed. Please check canvas for changes.

Tentative Course Schedule

Monday	Wednesday	Friday
	August 24	August 26
August 29	Introduction August 31	L1/L2 - Review (Functions) September 2
L3/L4 - Review (Trigonometry, Inverse Functions, and Logarithms) September 5	L5 - Limits September 7	L6 - Limit Laws September 9
Labor Day - No Classes September 12	L6 - Limit Laws and Squeeze Theorem September 14	L7 - Continuity and Intermediate Value Theorem September 16
L8 - Indeterminate Forms September 19	L9 - Definition of the Derivative September 21	L10 - Derivative as a Function September 23
L11 - Power Rule and Exponential Functions September 26	Review for Exam 1 Thursday, September 22 - Exam 1 (L5-10) September 28	L12 - Product Rule and Quotient Rule September 30
L13 - Rates of Change October 3	L14 - Derivatives of Trigonometric Functions October 5	L15 - Chain Rule October 7
L15 - Chain Rule October 10	L16 - Implicit Differentiation October 12	Homecoming - No Classes October 14
L16 - Implicit Differentiation October 17	L17 - Logarithmic Differentiation October 19	L18 - Related Rates October 21
L18 - Related Rates October 24	Review for Exam 2 Wednesday, October 19 - Exam 2 (L11-17) October 26	L19 - Differentials and Linear Approximations October 28
L20 - Extreme Values October 31	L21 - Rolle's Theorem and Mean Value Theorem November 2	L22 - First Derivative Test November 4
L23 - Second Derivative Test November 7	L24 - L'Hôpital's Rule November 9	L24 - L'Hôpital's Rule November 11
L25 - Curve Sketching November 14	L26 - Applied Optimization November 16	Veteran's Day - No Classes November 18
L26 - Applied Optimization November 21	Review for Exam 3 Wednesday, November 16 - Exam 3 (L18-25) November 23	L27 - Antiderivatives November 25
L28 - Areas and Riemann Sums November 28	Thanksgiving Break - No Classes November 30	Thanksgiving Break - No Classes December 2
L29 - The Definite Integral December 5	L30 - Fundamental Theorem of Calculus December 7	L31 - Net Change Theorem
L32 - Substitution Method	Review for Final Exam	
Saturday, December 10 - Final Exam (10:00 AM - 12:00 PM) (Cumulative L5-32)		