

Calculus with Analytic Geometry I

MAC 2311

4 Credit Hours

Summer C 2023

Instructor: TBD

Office: TBD

E-mail: TBD

Office Hours: TBD

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.

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.

General Education Requirement A minimum grade of C (not C-) in MAC 2311 satisfies four credits of general education mathematics requirement.

<https://undergrad.aa.ufl.edu/general-education/gen-ed-program/subject-area-objectives/>

Courses Goals This course will introduce students to the ideas of limit, derivative and integral for functions of a single variable. Upon completion, students will be able to understand the theory as well as applications. The course will prepare students for MAC2312.

Required Materials 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. Xronos is only accessible through Canvas. More details will be given in class.

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 instructor 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.

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| E-mail | All communication between student and instructor as well as between students should be respectful and professional. All official class communications will be sent only to the ufl.edu addresses. Students are responsible for checking their email accounts regularly and acquiring any class information sent to their ufl.edu account. Please be sure to sign your name to your e-mails. |
| Lectures | Students are expected to come to each lecture prepared. That means reading and understanding each lectures material in the online book as well as taking appropriate notes in class and asking questions both in and out of class as needed. Outlines to the course lectures notes (with different examples) are available in PDF format on Canvas. You are encouraged to make use of the resources available to you in order to help you succeed in this course. |
| 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 will be calculated based upon completion of post-lecture quizzes. It will be a total of 5% of your grade. Further, following university policy, you may expect a penalty (additional lost points) for attending fewer than 75% of your classes. |
| Online Homework | In this course we will be using the online platform Xronos which is free of charge and will be explained during class. Online homework assignments will be assigned daily and must be completed by the specified due date. There will be a total of three dropped 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. |
| Quizzes | There will be weekly quizzes based on the homework. Quizzes make up a total of 10% of your grade.. |
| Tests | Mid-term exam dates are as follows: Exam 1 - 6/2 Exam 2 - 6/23 Exam 3 - 7/21 Exam 4 - 8/11 |
| Make-up Policy | UF Attendance Policies - 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 - UF during Term Assembly Exam Policy -
(<https://catalog.ufl.edu/UGRD/academic-regulations/examination-policies>):

“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.”

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 - Students who miss an exam due to illness, severe family emergency, and/or severe weather as outlined in the UF Attendance Policies and wish to make up the exam 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 exam took place the student will be signed up by their instructor to take a makeup exam.

Students who miss an exam 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 or in person at least ONE WEEK in advance of the exam.

All makeup exams will take place at the end of the semester on TBD.

Make-up Quizzes - Students who miss a 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 quiz.

Students who miss a 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 or in person at least ONE WEEK in advance of the quiz.

Quiz makeups will take place the following days of the semester - TBD.

In addition, two quiz grades will be dropped at the end of the semester.

Make-up Xronos HW - There are no make-ups as a certain number of these assignments are dropped at the end of the semester.

Make-up class participation points - There are no make-ups as a certain number of these assignments are dropped at the end of the semester.

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.

Grading

Xronos Homework: 15%

Quizzes: 15%

Participation: 10%

Midterm Exam Average (4 mid-term exams): 60%

Your grade will be calculated according to the scale below. Scores within 0.5% of the next cutoff will round up.

Grading Scale

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|----------|----------|----------|-----------|
| 90-100 A | 87-90 A- | 84-87 B+ | 80-84 B |
| 77-80 B- | 74-77 C+ | 67-74 C | 64-67 C-* |
| 60-64 D+ | 57-60 D | 54-57 D- | 0-54 E |

***Note** A grade of C- DOES NOT give Gordon Rule or General Education credit!

For those take the S-U option: 67-100 S 0-67 U

Approval of the S-U option must be obtained from your instructor. The deadline for filing an application with the Registrar and further restrictions on the S-U option are given in the Undergraduate Catalog.

For a complete explanation of current policies for assigning grade points, refer to the UF undergraduate catalog:

catalog.ufl.edu/ugrad/regulations/info/grades.aspx

NOTE: We will not review disputed points at the end of the semester. All grade concerns must be settled within one week of the return of the paper.

Free Help

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 10:40 to 3:50. It is staffed by mathematics graduate students and undergraduate assistants. 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.

The math lab also offers a more structured tutoring program for MAC 2311, called **supplemental instruction**. A tutor, assigned specifically to MAC 2311, provides weekly help sessions. More details will be provided in lecture.

In addition, the Academic Resources teaching center tutors hold reviews on the evenings before each exam. They also provide videos of review and sample test problems. Check the webpage, <https://academicresources.clas.ufl.edu/tutoring/>, for a map of the location, tutoring hours, and test review dates and locations. **All students are encouraged to use the teaching center.**

- Office of Academic Support offers free one-on-one and small group tutoring sessions to an UF students. See <http://oas.aa.ufl.edu/tutoring.aspx> for details.
- Textbooks and solutions manuals are located at reserve desks at Marston Science Library.
- Private Tutors: If after availing yourself of these aids, you feel you need more help, you may obtain a list of qualified tutors for hire at www.math.ufl.edu. Search "tutors".
- The Counseling Center has some informative information on developing math confidence. Go to <http://www.counseling.ufl.edu/cwc/DevelopingMath-Confidence.aspx> for information on math confidence and information on joining the Academic Confidence Group.

Calculators

Calculators are **NOT** permitted on exams and discussion assignments. Please avoid using a calculator on homework as it will not help you prepare for the exams.

Cell Phones

Use (defined as having one physically in your hand) of a cell phone during a test or quiz will be considered contact with another person and will be viewed as a form of academic dishonesty because we cannot be assured in such a circumstance that you have not taken a picture of the test/quiz or sent a text message to someone. Thus, do not touch your cell phone during a test or quiz. **Wait until after you have left the room and are finished with the test/quiz to use it.**

Music Players

iPods and other music players are not to be used during class (including while taking tests and quizzes). Having one out during a test or quiz will result in a grade of zero and possible disciplinary action.

Students with Learning Disabilities

Students requesting class and exam accommodations must first register with the Dean of Students Office Disability Resource Center (DRC), <https://disability.ufl.edu/get-started/>. That office will provide a documentation letter via email to your instructor. This must be done as early as possible in the semester, **at least one week before the first exam**, so there is adequate time to make proper accommodations.

Diversity and Inclusion

The Mathematics Department is committed to diversity and inclusion of all students. We acknowledge, respect, and value the diverse nature, background and perspective of students and believe that it furthers academic achievements. It is our intent to present materials and activities that are respectful of diversity: race, color, creed, gender, gender identity, sexual orientation, age, religious status, national origin, ethnicity, disability, socioeconomic status, and any other distinguishing qualities.

Academic Honesty Guidelines

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. Exhibiting honesty in academic pursuits and reporting violations of the Academic Honesty Guidelines will encourage others to act 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).

The Mathematics Department expects you to follow the Student Honor Code. We are bound by university policy to report any instance of suspected cheating to the proper authorities. You may find the Student Honor Code and read more about student rights and responsibilities concerning academic honesty at the link www.dso.ufl.edu/sccr/.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040.

Evaluations

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/>.

Important Summer A 2023 Academic Dates and Deadlines

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| Classes Begin | May 15 |
| Late Registration | May 15 - 16 |
| Drop Deadline (last day for full refund) | May 16 (11:59pm) |
| Add Deadline | May 16 (11:59pm) |
| Withdrawal with 25% Refund | June 2 |
| Withdrawal Deadline | August 4 |
| Classes End | August 11 |

Holidays

| | |
|------------------|------------|
| Memorial Day | May 29 |
| Juneteenth | June 19 |
| Summer Break | June 26-30 |
| Independence Day | July 4 |

Weekly Schedule

| Week 1 | | | |
|---------------|----------|----|--|
| 5/15 | Monday | X | Introduction (Syllabus, Online Review) |
| 5/16 | Tuesday | L1 | The Limit of a Function |
| 5/18 | Thursday | L2 | Calculating Limits Using Limit Laws; Squeeze Theorem |
| 5/19 | Friday | L2 | Calculating Limits Using Limit Laws; Squeeze Theorem |

| Week 2 | | | |
|---------------|----------|----|---|
| 5/22 | Monday | L3 | Continuity and the Intermediate Value Theorem |
| 5/23 | Tuesday | L3 | Continuity and the Intermediate Value Theorem |
| 5/25 | Thursday | L4 | Limit at Infinity; Horizontal Asymptotes |
| 5/26 | Friday | L5 | Derivatives and Rates of Change |

| Week 3 | | | |
|---------------|----------|----|---|
| 5/29 | Monday | X | Memorial Day (NO CLASSES) |
| 5/30 | Tuesday | L6 | The Derivative as a Function |
| 6/1 | Thursday | L7 | Derivatives of Polynomial and Exponential Functions |
| 6/2 | Friday | X | Exam 1 (L1-6) |

| Week 4 | | | |
|---------------|----------|-----|--|
| 6/5 | Monday | L8 | The Product and Quotient Rules |
| 6/6 | Tuesday | L9 | Derivatives of Trigonometric Functions |
| 6/8 | Thursday | L10 | The Chain Rule |
| 6/9 | Friday | L10 | The Chain Rule |

| Week 5 | | | |
|---------------|----------|-----|---|
| 6/12 | Monday | L11 | Implicit Differentiation |
| 6/13 | Tuesday | L11 | Implicit Differentiation |
| 6/15 | Thursday | L12 | Derivatives of Logarithms and Logarithmic Differentiation |
| 6/16 | Friday | L13 | Rates of Change and First Applications |

| Week 6 | | | |
|---------------|----------|-----|------------------------|
| 6/19 | Monday | X | Juneteeth (NO CLASSES) |
| 6/20 | Tuesday | L14 | Related Rates |
| 6/22 | Thursday | L14 | Related Rates |
| 6/23 | Friday | X | Exam 2 (L7-14) |

| Week 7 | | | |
|---------------|----------|---|--------------|
| 6/26 | Monday | X | Summer Break |
| 6/27 | Tuesday | X | Summer Break |
| 6/29 | Thursday | X | Summer Break |
| 6/30 | Friday | X | Summer Break |

| Week 8 | | | |
|---------------|----------|-----|---|
| 7/3 | Monday | L15 | Linear Approximations and Differentials |
| 7/4 | Tuesday | X | Independence Day (NO CLASSES) |
| 7/6 | Thursday | L16 | Maximum and Minimum Values |
| 7/7 | Friday | L17 | The Mean Value Theorem |

| Week 9 | | | |
|---------------|----------|-----|---|
| 7/10 | Monday | L18 | How Derivatives Affect the Shape of a Graph |
| 7/11 | Tuesday | L19 | L'Hopital's Rule |
| 7/13 | Thursday | L19 | L'Hopital's Rule |
| 7/14 | Friday | L20 | Curve Sketching |

| Week 10 | | | |
|----------------|----------|-----|-----------------------|
| 7/17 | Monday | L20 | Curve Sketching |
| 7/18 | Tuesday | L21 | Optimization Problems |
| 7/20 | Thursday | L21 | Optimization Problems |
| 7/21 | Friday | X | Exam 3 (L15-21) |

| Week 11 | | | |
|----------------|----------|-----|-----------------------|
| 7/24 | Monday | L22 | Antiderivatives |
| 7/25 | Tuesday | L23 | Areas and Distances |
| 7/27 | Thursday | L24 | The Definite Integral |
| 7/28 | Friday | L24 | The Definite Integral |

| Week 12 | | | |
|----------------|----------|-----|-------------------------------------|
| 7/31 | Monday | L25 | The Fundamental Theorem of Calculus |
| 8/1 | Tuesday | L25 | The Fundamental Theorem of Calculus |
| 8/3 | Thursday | L26 | The Net Change Theorem |
| 8/4 | Friday | L26 | The Net Change Theorem |

| Week 13 | | | |
|----------------|----------|-----|-----------------------|
| 8/7 | Monday | L27 | The Substitution Rule |
| 8/8 | Tuesday | L27 | The Substitution Rule |
| 8/10 | Thursday | X | Review for Exam 4 |
| 8/11 | Friday | X | Exam 4 (L22-27) |

Note: Information in this syllabus is subject to change. Any changes will be clearly announced in class or through e-mail.