Calculus with Analytic Geometry I MAC 2311 Lecture

4 Credit Hours Summer A/C 2024

Course Coordinator: Dr. John Streese

Office: LIT 324

E-mail: jstreese@ufl.edu

Office Hours: TBD

Section/Class Number	Time	Location	Instructor
8316/15064	MTRF Period 3 (11:00 AM - 12:15 PM)	LIT 235	Wong
8317/11583	MTRF Period 4 (12:30 PM - 1:45 PM)	LIT 233	Williams
7B25/11564	ONLINE		Liu/Mandrick
7B31/11565	ONLINE		Liu/Mandrick
7714/18282	ONLINE		Liu/Mandrick

Prerequisites

Any of the following: Minimum acceptable score on the online mathematics placement exam (ALEKS), which is a 76 or higher; a grade of C in a MAC course numbered 1147 or higher; AP credit for MAC2311; IB credit for a MAC course numbered 1147 or higher. Any course grades, AP, or IB scores used to meet this prerequisite must be on file at UF by registration.

Course Description

MAC 2311 is the first semester in the three-semester sequence MAC 2311, MAC 2312, MAC 2313 covering basic calculus. The course consists of analytic geometry; limits; continuity; differentiation of algebraic, trigonometric, exponential and logarithmic functions; applications of the derivative; inverse trigonometric functions; differentials; introduction to integration; and the fundamental theorem of calculus. (M) Credit will be given for, at most, one of MAC 2233, MAC 2311 and MAC 3472. MAC2311 credit will also provide credit for MAC2233, but not the other way around.

General Education Objectives and Learning Outcomes

This course is a mathematics (M) course in the UF General Education Program. Completing this course with a minimum grade of C will satisfy the student's State Core Mathematics requirement of the UF General Education Program. Courses in mathematics provide instruction in computational strategies in fundamental mathematics including at least one of the following: solving equations and inequalities, logic, statistics, algebra, trigonometry, inductive and deductive reasoning. These courses include reasoning in abstract mathematical systems, formulating mathematical models and arguments, using mathematical models to solve problems and applying mathematical concepts effectively to real-world situations.

After successful completion of this course students will have demonstrated competency in the following Student Learning Outcomes (SLOs):

- Content: Students demonstrate competence in the terminology, concepts, theories, and methodologies used within the discipline. After completing this course students will gain a knowledge of limits, differentiation, and integration.
- Communication: Students communicate knowledge, ideas, and reasoning clearly and effectively in written and oral forms appropriate to the discipline. Throughout this course students will communicate mathematical ideas verbally in their discussion sessions and as well as through writing on discussion quizzes and exams.
- Critical Thinking: Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems. Students will apply their knowledge to solve problems concerning topics that include, but are not limited to, differentiation techniques, calcuation of exact areas under curves, application of rates of change to physical examples of position, velocity and acceleration, identifying the limit of various functions, using the derivative as a tool for approximation through differentials and linear approximation, among countless other applications.

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 as well as Stewart Calculus. A link to both are provided on our Canvas homepage. 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 accessible through the Canvas site. 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 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.

E-mail

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 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.

Lectures

This course meets for in-person 75-minute lectures Mondays, Tuesdays, and Thursdays, and Fridays either Period 3 or Period 4. Attendance to the lectures is **strongly** encouraged, since missing just a few will put you behind in the class..

Lecture Quizzes

After each lecture, you will take a short canvas quiz on the material covered that particular day.

Tests

Mid-term exam dates are TBD.

Exam Policy

Please come to the exams prepared with pencils/mechanical pencils and your ID (UFID or other government issue ID). Do not enter the testing room until the proctors have finished setting up the room and allowed you to come in. You may not have your phone out at all during the exam. If you are using your phone during the exam, you will receive a zero for the exam. There are no calculators allowed on exams. Respect other students and the proctors while in the testing room. Any transcription errors that occur on your scantron or free response are there to stay after the exam. These errors include, but are not limited to: bubbling in the wrong form code, not bubbling in your answers, bubbling in the wrong section number, etc. Providing the wrong information such as your section number or name during an exam may greatly delay the grading of your exam. It is very important that you are aware of what is going on and following directions carefully so no materials are lost and that your exam is graded properly.

Online Homework In this course we will be using the online platform Xronos which is free of charge and will be explained during class. Complete Xronos homework by first navigating to our Canvas page. Once in Canvas, go to the assignments section of canvas and complete assignments directly. There is a slight delay in scores being recorded to Xronos. Be patient as your gradebook will update a little bit every so often until you reach 100 percent for the assignment. Please double-check in the canvas gradebook that your scores are in fact recording. Reach out to me as soon as possible of any technical difficulties that may arise.

Online homework assignments will be assigned throughout the semester, as we progress through material. It is your responsibility to keep up with the work and not fall behind. Please do not wait until the last minute to start your homework. No assignments can be submitted after the due date. There will be a total of three dropped Xronos homework grades at the end of the semester.

All assignments will have posted due dates and will follow our pace in the course. Please keep up with the due dates of assignments using canvas.

Personal computer issues, will NOT be a reason to offer any type of extension.

Class Participation Attendance in class is strongly recommended. Students who come to class and participate are more likely to do well in the course.

Make-up Policy

All make-up work must be arranged with the your instructor.

Conflicts Term Assembly Policy Exam - UF during Exam (catalog.ufl.edu/ugrad/current/regulations/info/exams.aspx): "During-term examinations are held during regular class times or during assembly exam periods, which are Monday-Friday from 8:20 - 10:10 p.m. (periods E2-E3) for the fall and spring terms and Monday-Friday from 7:00 - 9:45 p.m. E1-E2) for the summer 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. When two exams conflict, assembly exams (multiple sections and enrollment over 300) take precedence over non-assembly exams (single sections and/or enrollment under 300). If two assembly exams conflict, the course with the higher number will take priority. Likewise, if two non-assembly exams conflict, the higher number will again take priority. Instructors giving make-up exams will make the necessary adjustments. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. A reasonable amount of time to make up a during-term exam is before the end of the semester in which the student is enrolled in the class."

If MAC 2311 is the lower course number, students must inform the course coordinator 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 If you are participating in a UF sponsored event or religious observance, you may make up an exam only if you make arrangements with the course coordinator during the FIRST WEEK OF THE COURSE. You must present documentation of a UF sponsored event.

If illness or other extenuating circumstances cause you to miss an exam, contact the course coordinator (no later than 24 hours after the exam) by email. Then, as soon as possible after you return to campus, provide the appropriate documentation to the course coordinator. You will be allowed to sign up to take a makeup exam at the end of the semester.

• Make-up Xronos HW: There are no make-ups. Please reach out to me with plenty of advance notice if you're having Xronos issues. Technical issues the day before the homework is due is not an excuse.

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 contact the course coordinator 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%

Lecture Quizzes (3 drops): 15%

Midterm Exam Average (3 mid-term exams): 45%

Final Exam: 25%

Your final grade will rounded to the nearest hundredth and a letter grade will be given using the following grading scale:

Grading Scale

90.00-100 A	87.00-89.99 A-	84.00-86.99 B+	80.00-83.99 B
77.00-79.99 B-	74.00-76.99 C+	67.00-73.99 C	64.00-66.99 C-*
60.00-63.99 D+	57.00-59.99 D	54.00-56.99 D-	0-53.99 E

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

For those take the S-U option: 67.00-100 S 0.00-66.99 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 9:30 to 4:00. 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 teaching center tutors hold reviews on the evenings before each exam. They also provide videos of review and sample test problems. Check the webpage, teachingcenter.ufl.edu, for a map of the location, tutoring hours, and test review dates and locations. Additional practice exams and video tutorials may be found here: https://academicresources.clas.ufl.edu/vsi/. 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. Seach "tutors".
- The Counseling Center provides a variety of resources for mental health and well-being to students as well. Go to https://counseling.ufl.edu/

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

Cell phones must be turned off (not on vibrate) before coming to class. 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 I 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. As a result, all infractions will be reported to the Dean of Students Office. Wait until after you have left the room and are finished with the test/quiz to use it.

Other distractions

While attending lecture, please ensure that your cellphone is on silent and that alarms are turned off. Please be respectful and attentive during lecture. Do not disturb those around you with excessive talking. You will be asked to leave the classroom if you are repeatedly distruptive during class.

Students with Learning Disabilities

Students requesting class and exam accommodations must first register with the Dean of Students Office Disability Resource Center (DRC), www.dso.ufl.edu/drc/. That office will provide a documentation letter via email to the course coordinator. 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.

COVID Policy

In response to COVID-19, the following recommendations are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones.

- If you are not vaccinated, get vaccinated. Vaccines are readily available and have been demonstrated to be safe and effective against the COVID-19 virus. Visit one.uf for screening / testing and vaccination opportunities.
- If you are sick, stay home. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 to be evaluated.
- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.

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 Student

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/.

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

Tentative Schedule

HOLIDAYS: May 27, June 19, June 22 - June 30, July 4

Week 1 (May 13 - May 17): Lectures 1-4 Precalculus Review.

Week 2 (May 20 - May 24) Lectures 5-7 Limits and Continuity.

Week 3 (May 28 - May 31): Lecture 8-10 Indeterminates Forms and the Derivative.

Week 4 (June 3 - June 7): Lectures 11-13 Derivative Rules for Power, Exponential Functions, Product and Quotient Rules, Rates of Change.

Week 5 (June 10 - June 14): Lectures 14-15 Derivatives of Trig Functions and the Chain Rule.

Week 6 (June 17 - June 21): Lectures 16-17 Implicit differentiation and logarithmic differentiation.

Week 7 SUMMER BREAK

Week 8 (July 1 - July 5): Lectures 18-20 Related Rates, Linear Approximations, and Extreme Values.

Week 9 (July 8 - July 12): Lectures 21-23 Mean Value Theorem, First Derivative Test, and Second Derivative Test.

Week 10 (July 15 - July 19): Lectures 24-26 L'Hopital's Rule, Curve Sketching, and Optimization.

Week 11 (July 22 - July 26): Lectures 27-29 Antiderivatives, Riemann Sums, and the Definite Integral.

Week 12 (July 29 - August 2): Lectures 30-32 Fundamental Theorem of Calculus, Net Change, and U-Substitution.

Week 13 (August 5 - August 9): Final Exam Review