Calculus with Analytic Geometry I
MAC 2311 Lecture
4 Credit Hours
Summer B 2025

Instructor:	Dr. Stephen Adams
Office:	LIT 326
E-mail:	stephen.adams@ufl.edu
Office Hours:	MTWR Period 4 (12:30 PM - 1:45 PM)
	F Period 2 (9:30 AM - 10:45 AM)

Lecture

Time	Location
MTWRF Period 3 (11:00 AM - 12:15 PM)	LAR 310

Teaching Assistant	Office	Office Hours	Email
Carl Ye	LIT 487	TBA	jye1@ufl.edu
Vangmay Jayant	LIT 443	TBA	vangmayjayant@ufl.edu

Discussion Section	Time	Location	TA
4764	MW Period 2 (9:30 AM - 10:45 AM)	LIT 221	Ye
4767	TR Period 2 (9:30 AM - 10:45 AM)	LIT 217	Jayant

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.
	A short review of precalculus topics will be posted on Canvas. **You should already be comfortable with this material**. We **strongly recommend** that students who are having difficulty with the precalculus review material consider first taking MAC 1147, a four credit precalculus course reviewing essential precalculus skills.
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 of functions.

- **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 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, evaluation of limits, differentiation of functions using the definition of the derivative and differentiation rules, implicit differentiation, logarithmic differentiation, linear approximations, related rates, curve sketching, antidifferentiation, Riemann sums, areas under curves, and u-substitution.

Required Materials

There are no required textbooks for this course. We will make use of a free online textbook available at Openstx 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 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.**

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 will be taught using a lecture-based approach. Both theory and application will be presented. Lectures will follow the textbook, but outside material may be used from time to time.

Discussion Sections

Discussion sessions meet twice a week either on Monday and Wednesday or on Tuesday and Thursday. These meetings give you a valuable opportunity for open discussion of the lecture material with your TA. **Attendance in discussion is required as it is where assessment of your skills will take place**. However, two periods per week maly not adequate to answer all questions. Be sure to take advantage of the opportunities outside of class for additional help.

Your main resource is your discussion leader. He will be available during discussion sessions to answer your questions about the course material. Your TA is responsible for grading and recording all quiz scores. You must retain <u>all</u> returned papers in case of any discrepancy with your course grade. As mentioned above, **you should check Canvas regularly and consult with your TA if you have any questions about recorded grades. All grade concerns must be taken care of <u>within one week</u> of receiving the score.**

If you have concerns about your discussion class which cannot be handled by your TA, then please contact your instructor.

Exams

There will be four exams throughout the semester. The exams will have two parts. Part 1 will be multiple choice questions, and Part 2 will consist of free-response questions. Due to the condensed nature of this course, exams will be given weekly beginning in the second week of the semester. The exams will be taken each Friday during the scheduled lecture time. Each exam will be worth 15% of your final grade.

There will also be a non-cumulative final exam on the last day of class. The final exam will be all multiple choice and is worth 15% of your final grade. No exam grades are dropped at the end of the semester.

The exam dates are as follows:

Exam 1 – Friday, July 11

Exam 2 – Friday, July 18

Exam 3 – Friday, July 25

Exam 4 – Friday, August 1

Final Exam – Friday, August 8

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. **No assignments can be submitted after the due date**. Online homework assignments are worth a total of 10% of your final grade. There will be a total of two 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.

Attendance

Attendance in class in both the lecture and discussion sections is mandatory. Students who come to class and participate are more likely to do well in the course. Attendance is worth a total of 5% of your grade and will be based upon both your attendance in lectures. The two lowest class participation scores will be dropped at the end of the semester.

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

Discussion Quizzes	Starting in the second discussion session, quizzes will be given during each discussion section. Quizzes on Monday or Tuesday will typically cover the material taught in lecture the previous Wednesday and Thursday. Quizzes on Wednesday and Thursday will typically cover the material taught in lecture the previous Monday and Tuesday. Quizzes will be taken during your discussion sessions. There will be no make-ups for missed quizzes, but the two lowestquiz grades will be dropped at the end of the semester. Quizzes are worth 10% of your final grade.
Make-up Policy	All make-up work must be arranged with your instructor.

Exam Conflicts - UF during Term Assembly Exam Policy (catalog.ufl.edu/ugrad/current/regulations/info/exams.aspx): "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 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.
If illness or other extenuating circumstances cause you to miss an exam, contact your instructor (no later than 24 hours after the exam) by email. Then, as soon as possible after you return to campus, bring the appropriate documentation to him in Little Hall during office hours. You will be allowed to sign up to take a makeup exam at the end of the semester on TBA.

Make-up Xronos HW: There are no make-ups.

Make-up class participation points: There are no make-ups.

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: 10%
	Discussion Quizzes: 10%
	Attendance: 5%
	Midterm Exam Average (4 mid-term exams): 60%
	Final Exam: 15%
	Your final grade will rounded to the nearest hundredth and a letter grade will be given using the following 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

Grading Scale

***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.

Extra Credit

Each midterm exam has 105 points on it but is taken out of 100 points. The final exam has 110 points on it but is taken out of 100 points. These are your only opportunities to earn extra credit this semester. No other extra credit will be offered. **EMAILS ASKING FOR EXTRA CREDIT OR TO ROUND UP YOUR GRADE AT THE END OF THE SEMESTER WILL BE IGNORED**.

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 Teaching Center Math Lab is a tutorial service staffed by traing math and science students to provide help with your calculus questions and homrwork. They are operating online this semester and information pertaining to obtaining help and understanding the layout of this semester can be found at https://teachingcenter.ufl.edu/. They have drop-in tutoring which is more informal and free one-on-one tutoring available by appointment.

The Teaching Center Math Lab also provides videos of reviews and sample test problems. They regularly hold reviews for exams. The reviews will be posted at https://teachingcenter.ufl.edu/tutoring/test-reviews/. 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 https://oas.aa.ufl.edu/current-students/tutoring/ for details and links to each tutor's pages.

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 under Academics → Mathematics Tutors.

The Counseling Center has compiled a large collection of resources for outreach to student groups as well as COVID-19 resources. You can find this collection at the counseling website https://counseling.ufl.edu/ under Resources → Other Resources → COVID-19 Resource Guide.

Aid-A-Gator under the Office for Student Financial Affairs has resources available to help those students who need funding for unanticipated travel, additional technology requirements, or other needs that are related. More information can be found at https://www.sfa.ufl.edu/aidagator/.

UF gives all students free access to the Eduroam system. Other internet connectivity options are available as well. If you are not on campus and have issues with internet connectivity and/or do not have regular access, please see the Aid-A-Gator website as well as the document outlining some possibly connectivity solutions at https://elearning.ufl.edu/media/elearningufledu/keep-teaching/Connectivity-Options.pdf.

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 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), www.dso.ufl.edu/drc/. 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.

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 addition, we remind you that lectures given in this class are the property of the University/faculty member and may not be taped without prior permission from the instructor and may not be used for any commercial purpose. Students found to be in violation may be subject to discipline under the Student Conduct Code.

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/.

Important Summer 2024 Academic Dates and Deadlines

Classes Begin	Monday, July 1
Late Registration	Monday, June 30 - Tuesday, July 1 (11:59pm)
Drop/Add (last day for full refund)	Tuesday, July 1 (11:59pm)
Withdrawal with 25% Refund	Wednesday, July 9
Withdrawal Deadline	Friday, August 1 at 11:59pm
Classes End	Friday, August 8

Holidays

Independence Day   Friday, July 4

Tentative Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
June 30 Syllabus, Limits	July 1 Limits	July 2 Continuity, Intermediate Value Theorem	July 3 Indeterminate forms, intro to derivatives	July 4 July 4 Holiday – No Classes
July 7 Derivatives	July 8 Derivatives of power functions, exponential functions, etc.	July 9 Product Rule, Quotient Rule	July 10 Rates of change, derivatives of trig functions	July 11 Exam 1
July 14 Chain Rule	July 15 Implicit differentiation	July 16 Derivatives of inverse trig functions, logarithmic differentiation, exponential functions	July 17 Related rates	July 18 Exam 2
July 21 Linear approximations and differentials	July 22 Extreme values, Fermat's Theorem, critical points	July 23 Mean Value Theorem, First Derivative Test	July 24 Concavity, Second Derivative Test	July 25 Exam 3
July 28 L'Hopital's Rule, Curve Sketching	July 29 Optimization	July 30 Antiderivatives	July 31 Areas, Riemann Sums	August 1 Exam 4
August 4 Definite integrals, approximations	August 5 Fundamental Theorem of Calculus, Net Change	August 6 Substitution method	August 7 Review for Final (time permitting)	August 8 Final Exam

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