

Course Syllabus -- Fall 2023 - MAC 2311 Calculus 1

University Core Curriculum Category: Mathematics.

MAC 2311-U22 - Class meetings (in person): TuTh 6:30PM - 8:10PM, PG6 Room 114

Instructor: Tedi Draghici

Office: DM 432 B

Office Phone: 305 348 2028

Email: draghici@fiu.edu (best method of communication)

Office Hours (in DM 432B): W 11:00am - 2:00 PM, or by appointment

Learning Assistant (LA): TBA

*The professor reserves the right to change or modify the syllabus at any time during the semester.

Textbook: *CALCULUS Early Transcendental*, 3rd Edition, by Briggs, Cochran, Gillett, Schulz. Publisher: Pearson. The e-text is packaged with MyMathLab access code with ISBN: 9780134856926. The bundle package (paper textbook and MyLab math access code) ISBN: 9780134996684. The access code has a 24-month duration and students can go through the calculus sequence with one access code. Panther Book Pack Information Every student is automatically enrolled for the Panther Book Pack (<http://bookpack.fiu.edu/>) at the time that you register for classes. The program will cover your textbooks for each course at a charge of \$20 per credit hour. We suggest that you compare this to the cost of all your required course materials. If this total is higher than the Panther Book Pack Cost, you can opt out at any point from the day you receive your Panther Book Pack email until three days after the add/ drop date on the Academic Calendar for that term.

BASICS

Prerequisite: MAC 1147 with a grade of C or better, or, both MAC 1114 and MAC 1140 with grades of C or better, or, for students who have not previously taken a college math class, a score of 75 or better on the ALEKS Exam.

Course Description: This is the first course of the Calculus sequence. It introduces the basic concepts and techniques of differential calculus of functions of one real variable. The concept of derivative and its underlying notion of limit will be introduced as well as

techniques of differentiation and integration. Applications such as related rates, analysis of graphs of functions, and optimization are an important part of the course.

Course Objectives: Upon completing this course, students should demonstrate:

1. strong computational skills of limits, derivatives and basic antiderivatives;
2. good understanding of the major topics (limits and continuity, differentiation, basic anti-derivatives) and ability to use these in applications;
3. reasonable reasoning skills – e.g. comprehend and reproduce basic proofs.

Sections to be covered in the book:

- Limits and Continuity : Chapter 2, sections 1-6
- Derivatives: Chapter 3, sections 1-11
- Applications of Derivatives: Chapter 4, sections 1-7, 9
- Indefinite Integrals and the Fundamental Theorem of calculus: Sections 5.1, 5.2, 5.3
- 5.5: substitutions
- 12.1: parametric equations and curves

Class Structure: This class will be run in an active learning format in which there will be less emphasis on the “traditional lecture” style of teaching and more emphasis on a student-centered environment where students will learn calculus by actively engaging with the material and each other. The majority of your time in class will be spent working in groups on various activities meant to motivate and encourage your engagement with and learning of the content. Throughout the course, emphasis will be placed learning the material through problem solving via reasoning, cooperative learning, discourse, and the generation and sharing of ideas among your classmates. The instructor and learning assistants will serve as resources of knowledge during class, however you are still responsible for your mastery of the content of the course.

Method of Evaluation: Your grade in the course is based **solely** on your overall percentage. The following items have the corresponding weight in your grade:

1. Online homework (MyLabMath) – 10%; (These are available in Canvas)
2. Attendance and class worksheets - 12.5 %;
3. Quizzes - 12.5%; (There will be 6-7 in class quizzes)
4. Three 100 minutes in-class exams (15% each) – topics TBA; Tentative dates:

Exam 1 – Tuesday, Sep. 19; Exam 2 – Tuesday, Oct. 17; Exam 3 – Tuesday, Nov. 21

4. **FINAL EXAM (20%) - comprehensive exam – Tuesday, Dec. 5**

Important: All exams are based on class lectures, worksheets, and homework problems.

Grade-scale: Your overall grade is based solely on your overall percentage. The following percentage guarantees the associated grade:

Letter	Range%	Letter	Range%	Letter	Range%
A	93 or above	B	83-86.9	C	70-76.9
A-	90-92.9	B-	80-82.9	D	60-69.9
B+	87-89.9	C+	77-79.9	F	less than 60

Drop deadlines -- Last day to Add/Drop with tuition refund: Monday, Aug. 28;

-- Last day to drop with a DR grade (but no refund): Monday, Oct. 30.

Calculator: No calculator is allowed.

Attendance: You are expected to attend class regularly. Attendance and class activities will count towards your grade.

Make up policy: There is NO make up for missed exams, quizzes or worksheets. **However**, I will discard the two lowest scores on quizzes and worksheets, and possibly more for **excused (documented)** absences on quizzes or worksheets. One missed exam due to **an excused absence** can be replaced by the final. The final exam is mandatory.

The dates of all Exams are scheduled above. If you cannot take an exam due to particular circumstances, please contact the instructor PRIOR TO the exam. If you miss a test and you produce a doctor certificate indicating that you were sick, unable to write the test, you'll be excused, otherwise, a zero will be recorded for the missed test.

Be aware though that excessive absences, even excused ones, may lead to failure of the course or an incomplete grade. In order to be considered for an incomplete grade, the student must have completed at least three fourths (3/4) of the course and must be passing the grade of C or better.

Help: I encourage you to come with questions during office hours or in class.

The Math Department will be offering free tutoring for students in GL 120, no appointment is needed.

For more information check the link

[Calculus 1-TutoringLinks to an external site.](#)

Student Success

- Proper time management, spending time studying, asking questions, and engaging in the class discussions.
- For many people taking notes during the class helps with focus and engagement. However, it is important to know what works best for you.
- You may want to form your own study group. Take advantage of whatever tools and resources you have available in order to facilitate working with others on group projects (e.g. WhatsApp, and Google Drive). Working through questions and concepts together is an important part of learning.
- Find/establish a dedicated quiet space where you can study or work from.
- To avoid the natural human tendency to procrastinate, especially during these overwhelming times, it's important to organize your time and set deadlines (Links to an external site.). If you find yourself struggling to keep up with course requirements, I'm happy to help you brainstorm a plan for getting you back on track. Everybody needs support and understanding in this unprecedented moment.

Academic Misconduct will not be tolerated. This includes: **Cheating**– The unauthorized use of books, notes, aids, electronic sources; or assistance from another person with respect to examinations, course assignments, field service reports, class recitations; or the unauthorized possession of examination papers or course materials, whether originally authorized or not. **Plagiarism** – The use and appropriation of another's work without any indication of the source and the representation of such work as the student's own. Any student who fails to give credit for ideas, expressions or materials taken from another source, including internet sources, is responsible for plagiarism. To learn more about the academic integrity policies and procedures visit <http://integrity.fiu.edu/Links to an external site.>

The usage of an electronic device of any kind during exams is strictly forbidden.

Other Important Information

Accessibility and Accommodation: The Disability Resource Center collaborates with students, faculty, staff, and community members to create diverse learning environments that are usable, equitable, inclusive and sustainable. The DRC provides FIU students with disabilities the necessary support to successfully complete their education and participate in activities available to all students. If you have a diagnosed disability and

plan to utilize academic accommodations, please contact the Center at 305-348-3532 or visit them at the Graham Center GC 190.

For additional assistance please contact FIU's [Disability Resource Center](#). [Links to an external site.](#)

Before starting this course, please review the following pages:

- [Accessibility and Accommodations](#)
- [Academic Misconduct Statement](#)

Mental Health and Wellbeing

- The global pandemic has changed our daily lives in unprecedented ways. It's understandable for us to experience fear and concern when facing immense change and adversity. To look for ways to cultivate calm and a clear perspective amidst the chaos, check out the [Guide to Well-Being During Coronavirus \(Links to an external site.\)](#)[Links to an external site.](#) from the University of California Berkeley's Greater Good Science Center.
- Check out applications that include meditation, sleep, and movement exercises, such as [Headspace. \(Links to an external site.\)](#)[Links to an external site.](#)
- If you are interested in seeking support from a mental health professional, please call FIU's [Counseling & Psychological Services \(Links to an external site.\)](#)[Links to an external site.](#) at 305-348-2277 (MMC) or 305-919-5305 (BBC).
- Don't forget to take breaks while working on assignments and studying. Taking a break while going over the course material is important because it gives your brain time to rest and recover, which leads to boosts in everything from your productivity to your wellbeing.
- Nobody signed up for this! Know that we are all in this together, so let's prioritize supporting each other as humans, finding simple solutions that make sense, and sharing resources and communicating clearly.