

Syllabus, MAC 2241 (Calculus I for Biology)
Section U04, Fall 2017
Mon&Wed 2:00–2:50 in PC 428, Fri 1:00–2:50 in PC 431

Instructor: Idris Mercer, DM 438D
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Office hours: Tuesdays and Thursdays, 11–12 and 1–3.

Outside help: <http://mathstat.fiu.edu/useful-information/math-resources/>

Textbook: *Biocalculus: Calculus for the Life Sciences*, Stewart and Day

Course objectives: Demonstrate understanding, reasoning skills, and computational skills regarding limits, derivatives, and basic antiderivatives. A detailed list of topics is on page 2.

Course components: There will be homework to be handed in on paper, short quizzes that take place during the lectures, three tests that take place during the lectures, and a final exam.

METHOD OF EVALUATION:

Homework	5%
Quizzes	5%
Test #1, FRIDAY September 22nd	20%
Test #2, FRIDAY October 20th	20%
Test #3, FRIDAY November 17th	20%
Final Exam, [date to be determined]	30%

Note that the final exam is [probably] NOT at the regular class time.

GRADE SCALE:

Numerical scores will be converted to letter grades using the following scale.

Score	95–100	92–94	89–91	86–88	83–85	79–82	75–78	65–74	< 65
Grade	A	A–	B+	B	B–	C+	C	D	F

Depending on class performance, this correspondence between scores and letter grades may be adjusted slightly in your favor. However, it will likely stay very close to the numbers given in this table.

IMPORTANT DATES (in addition to the test dates listed above)

- Monday September 4th: No class (Labor Day)
- Monday October 30th: Deadline to drop a course with a DR grade
- Friday November 10th: No class (Veterans Day)
- Friday November 24th: No class (Thanksgiving break)

CALCULATOR USE: Calculators of any kind may **NOT** be used on any of the tests. There are a wide variety of different calculators and this is the simplest way of ensuring that all students are on an even playing field. Problems on tests will tend to use round numbers.

MISSED TESTS: Due to scheduling constraints, if you miss a test for a **documented** medical, professional, or personal reason, it may not be possible to allow a makeup test. Instead, your score on the missing test (again, if you have an **excused, documented** absence) will either be replaced with your average score on the other tests, or your score on the final exam.

KEYS TO SUCCESS IN THIS COURSE: Mathematics is a hierarchical discipline, where you cannot master a topic unless you have already mastered earlier, more fundamental topics. Mathematics also requires regular *practice* as well as conceptual understanding. You need to *actively* engage with the material; nobody can learn mathematics by just watching somebody else do it! You need to *earn* your grade in this course, and the only way to do that is to demonstrate that you have gained the ability to solve calculus problems on your *own*, both correctly and efficiently.

EARLY ALERT SYSTEM: The “Early Alert” system at FIU allows the university to reach out to students who may be experiencing obstacles to their success in the course while it is still early enough in the semester for the student to improve their academic progress.

LIST OF TOPICS:

- Chapter 1: Functions and Sequences. Sections 1.1–1.6
- Chapter 2: Limits. Sections 2.1–2.5
- Chapter 3: Derivatives. Sections 3.1–3.8
- Chapter 4: Applications of Derivatives. Sections 4.1–4.6
- Chapter 5: Integrals. An introduction to integrals

Best wishes for a successful semester!