

Syllabus, MAC 2312 (Calculus II)
Section U03, Spring 2017
11:00–11:50 Mon&Wed in PC 428, 11:00–12:50 Fri in DM 190

Instructor: Idris Mercer, DM 438D, imercer@fiu.edu

Webpage: <http://faculty.fiu.edu/~imercer/>

Office hours: Tuesdays and Thursdays, 11–12 and 1–3.

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

Textbook: *Calculus: Early Transcendentals*, Anton, Bivens, and Davis, 10th edition

Course objectives: This course has MAC 2311 as a prerequisite. The goals of this course are for you to learn techniques for evaluating integrals, learn some applications of integrals, learn techniques for determining whether an infinite series converges or diverges, learn some applications of infinite series, and learn some applications of calculus to polar and parametric equations. 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 February 10th | 20% |
| Test #2, FRIDAY March 3rd | 20% |
| Test #3, FRIDAY April 7th | 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 | 96–100 | 92–95 | 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 January 16th: No class (Martin Luther King Jr. Day)
- Monday March 13th to Friday March 17th: No class (Spring Break)
- Monday March 20th: Deadline to drop a course with a DR grade

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 5: Integration. Sections 5.4–5.10
- Chapter 6: Applications of Integration. Sections 6.1–6.6
- Chapter 7: Techniques of Integration. Sections 7.1–7.5, 7.7–7.8
- Chapter 9: Infinite Series. Sections 9.1–9.10
- Chapter 10: Parametric and Polar Curves. Sections 10.1–10.3.

Best wishes for a successful semester!