Florida Gulf Coast University - Fall 2017

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Office Hours T/R 0845-0930 & 1115-1200
(other days and times by appointment)

I. COURSE NUMBER AND TITLE:
MAC 2311 – Calculus One

II. PREREQUISITES FOR THE COURSE:
Prerequisite(s): MAC 1147 with a minimum grade of C or MAC 2157 with a minimum grade of C or better

III. GENERAL COURSE INFORMATION:
MAC 2311 is an Introduction to the primary concepts and techniques of differential and integral calculus. Topics include limits and continuity, the derivative, differentiation and integration of algebraic and trigonometric functions, linearization of functions, Mean Value theorem, antidifferentiation, extrema and curve sketching, area and the definite integral, fundamental theorem.

*This is a general education course in mathematics that meets the College-Level Mathematics Skills requirement.

IV. REQUIREMENTS FOR THE STUDENTS:

A) Attendance in this class is mandatory. In general, students who do poorly in mathematics are usually those students who miss class and get behind in their work. Once behind, it is difficult to get caught up. Therefore, it is very important to be in class every session, to keep up with your assignments, and to ask on those concepts that you do not understand.

B) Homework is assigned every class session and is expected of all students. If you spend less than two hours of homework outside of class for each hour of class, you may not learn and understand the material.

C) Students are encouraged to ask questions in class. Students are also encouraged to obtain additional help by seeing the professor during his/her office hours. Specific office hours will be announced during the first week.

D) Incomplete grades will be given for extreme emergency conditions and must be approved by the professor before final examination week.

E) All course work must be completed by the last day of class. Only by

special permission from the professor will any work be accepted during the week of final examination.

V. GRADING PROCEDURE:

All tests will be graded on the following scale:

90-100 A
80-89 B
70-79 C
60-69 D
Below F

VI. ABSENCE POLICY:

All students are expected to attend ***all*** classes and be actively involved in the lecture and discussion sessions. Although there is no specific attendance requirement, it is doubtful that one could be successful without a regular commitment.

VII. TEXTBOOK REQUIREMENTS:

Calculus, Early Transcedentals, Stewart.7thedition. ISBN 978-0-538-49790-9 (the book is available in e-version at no charge when you purchase the WebAssign HW code)

WebAssign Access **will be** required for all HW

STUDENT SOLUTIONS MANUAL (optional)
to accompany the above textbook

Graphing Calculator – the lab instructors will support the TI series, however none is specifically required in class.

SPECIFIC BEHAVIORAL OBJECTIVES:

The main goal of this course is to introduce students to some of the major concepts, techniques, and applications of calculus, especially differential calculus. In particular, upon completion of the course, the successful student will have mastered the concepts below:

1. Discuss in detail limits of functions, limit laws and the precise definition of a limit.

2. Find derivatives using the two-step limiting process.
3. Discuss the derivative as a function.
4. Compute by hand derivatives of polynomial, algebraic, trigonometric, exponential, and composite functions.
5. Incorporate various rules of differentiation to find complex derivatives.
6. Apply the concept of the derivative to applications which will include various optimization problems, growth and decay, and applications appropriate to the Natural and Social Sciences.
7. Understand the concepts and applications of Newton's Method.
8. Find antiderivatives of polynomial, algebraic, trigonometric, exponential, and composite functions.
9. Include curve sketching to define and describe the derivative and antiderivative of a given function.
10. Use differentials to approximate values of functions.
11. Explain the idea of the integral as the area under a curve.
12. Explain the use of antiderivatives to compute integrals.
13. Use the Fundamental Theorem of Calculus to compute areas under curves, and the total change in a quantity.

University Policies

Academic Behavior Standards and Academic Dishonesty
All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of honesty can be found in the FGCU Student Guidebook under **the Student Code of Conduct and Policies and Procedures** sections. All students are expected to study this document which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at http://studentservices.fgcu.edu/judicialaffairs/new.html

University Nondiscrimination Statement
Florida Gulf Coast University is committed to ensuring equity and fairness for all University employees, students, visitors, vendors, contractors and other third parties. As such, the University prohibits discrimination on the bases of race, color, national origin, ethnicity, religion, age, disability, sex (including sexual harassment/assault), gender identity/expression, marital status, sexual orientation, veteran status or genetic predisposition with regard to admissions, employment, programs or other activities operated by the University. This prohibition extends to enforcement of **Title IX** of the

Education Amendments of 1972. Questions or complaints should be directed to the Office of Institutional Equity and Compliance (OIEC). The OIEC's phone number is (239)745-4366; the OIEC email address is OIEC@fgcu.edu.

Disability Accommodations Services

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university's guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please see me or contact the Office of Adaptive Services. The Office of Adaptive Services is located in the Wellness Building. The phone number is 239-590-7956 or Video Phone (VP) 239-243-9453. In addition to classroom and campus accommodations, individuals with disabilities are encouraged to create their personal emergency evacuation plan and FGCU is committed to providing information on emergency notification procedures. You can find information on the emergency exits and Areas of Rescue Assistance for each building, as well as other emergency preparedness materials on the Environmental Health and Safety and University Police Department websites. If you will need assistance in the event of an emergency due to a disability, please contact Adaptive Services for available services and information.

Student Observance of Religious Holidays

All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs. Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.

Center for Academic Achievement Syllabus Statement

The Center for Academic Achievement (CAA) offers various academic success programs to assist you in reaching your academic goals in a student-centered learning environment. CAA services are for all FGCU students and include **Academic Coaching**, **Tutoring**, **Supplemental Instruction (SI), and Success Workshops**.

We invite you to visit www.fgcu.edu/caa to make a **tutoring** and or **coaching** appointment, and get schedules for **supplemental instruction** and **workshops**. You also can stop by our office in Library 103 to pick up a schedule in person and make coaching appointments. We also have walk-in coaching sessions on Friday! Follow us @fgcu_CAA.

Fall 2017
T/R Section
MAC2311
Revised (3)

Week One	Review Chapter 1, 2.1, 2.2, 2.3	Week Two	2.4, 2.5, 2.6 quiz
Week Three	2.7, 2.8	Week Four	Hurricane Delay
Week Five	Hurricane Delay	Week Six	**Chapter 2 Test**, 3.1, 3.2
Week Seven	3.3, 3.4, 3.6 quiz	Week Eight	3.5, 3.7 quiz
Week Nine	3.8, 3.9, 3.10 quiz	Week Ten	3.11, **Chapter 3 Test**
Week Eleven	4.1, 4.2	Week Twelve	4.3, 4.4 quiz
Week Thirteen	4.5, 4.7, 4.8 quiz	Week Fourteen	**Chapter 4 Test**
Week Fifteen	4.9, 5.1, 5.2	Week Sixteen	5.2, 5.3, quiz
Week Seventeen	5.4, 5.5 quiz	Week Eighteen	**Chapter 5 Test**

Your grade in this course will be calculated by using the following criteria:

4 Tests @ 12% each = 48%
8 Quizzes @ 5% each = 40%
1 WebAssign HW = 12%

TOTAL = 100%

Grades will be assigned according to the university scale using only the standard letter grade format (no plus or minus grades). If you miss a test for some reason, make sure that your absence follows the acceptable university guidelines. ….To meet the needs of a missed test policy, your ***next*** test grade will replace any prior missing test score. All students must take the last test to receive a passing grade in the course.

Quizzes will generally be given on Thursdays. There will be 8 quizzes scheduled.

You will be expected to be courteous and quiet during the lecture and participate when appropriate.