

I. COURSE DESCRIPTION:

MAC 2311: Calculus with Analytic Geometry I, 4 lecture hours, and 4 credit hours.

Prerequisite: Math placement test or minimum grade of "C" in MAC 1140 and MAC 1114.

Topics included are limits and continuity, differentiation of logarithmic, exponential, trigonometric, and rational functions, related rates, analysis of functions and their graphs, applications of the derivative, Newton's method, Rolle's Theorem, Mean-Value Theorem, integration, Simpson's rule, and hyperbolic functions.

II. TEXT: Calculus, ETF Larson/Edwards; **6th edition, 2015, Cengage.**

OTHER MATERIALS: A graphing calculator is **required**. TI-83 or TI-84 recommended. These are the only calculators that will be allowed on test days.

III. LEARNING OUTCOMES:

Students will:

- Demonstrate a basic understanding of functions
- Analyze and evaluate limits
- Demonstrate an understanding of continuity of functions
- Find derivatives of various types of functions
- Demonstrate understanding of the Mean Value Theorem and Intermediate Value Theorem
- Solve application problems involving derivatives
- Exhibit an elementary understanding of integration

IV. COURSE OUTLINE: Material to be covered includes chapters 2 through 5 in the textbook. See the attached daily class schedule for a more detailed outline.**V. ATTENDANCE AND WITHDRAWAL POLICIES****A. Attendance Policy:**

Students are expected to attend class every day. Roll will be taken daily.

B. Withdrawal Policy:

Two withdrawals are permitted per course. After that, a grade will be assigned. Please be concerned about withdrawals. When admitting students into certain programs, universities may calculate a withdrawal as an F.

1. Student Withdrawal (Student cannot initiate withdrawal after Withdrawal Date)

Student completes a withdrawal form and submits the form to the Office of Admissions and Records prior to the withdrawal date.

2. Administrative Withdrawal

Students wishing to be withdrawn should withdraw themselves by the deadline. Effective Fall 2013, instructors will not issue withdrawals after the deadline. A grade will be assigned for students who have not withdrawn. If there are extenuating circumstances, a student may appeal to Dr. Melissa Lavender, VP of Student Affairs.

C. Grade Forgiveness:

A student may repeat a course when a grade of "D" or "F" has been earned. At GCSC, the last grade counts. However, universities may count forgiven grades in calculating the grade point average. Forgiven grades may also be calculated in determining financial aid eligibility.

ATTENDANCE AND WITHDRAWAL POLICIES (continued)

- D. **Attempts:**
This course, which is a college credit course, may be attempted three times. On the third attempt, 100% of the full cost of instruction will be charged. Students with major extenuating circumstances may submit a letter of appeal stating the circumstances to the VP of Student Affairs. All grades from the third and subsequent attempts will be calculated in the grade point average.
- VI. **HOMEWORK:**
Homework will be assigned daily. The daily completion of all homework is essential for learning the material in the course and as preparation for the examinations.
- VII. **TESTING:**
There will be four or five (4 or 5) unit tests and a final exam. The unit tests will be announced in advance, will count equally, and will be returned. The final exam **will not** be returned. There are **no exemptions** from the final exam. At the option of the instructor, unannounced "pop-quizzes", graded homework, or group activities may be given. If so, the average of the grades will count as an additional unit test. Therefore, the number of grades counted as a unit test may be five or six (5 or 6). The student is expected to keep up daily with the assigned work. **Although a graphing calculator is required for this course, students will be expected, at times, to demonstrate mastery of differentiation and integration techniques without the use of a calculator.**
- VIII. **GRADING:**
The unit test grades and daily quizzes comprise 75% of the grade for the course. The weight of each item on a unit test will be determined by the instructor. Mathematics Division policies allow no take-home tests, no extra credit assignments and no curving of grades. All students will be required to take a comprehensive final exam, comprise 25% of the grade for the course. The following scale is used to convert the numerical average to a letter grade: A (100-90), B (89-80), C (79-70), D (69-60), and F (59-0)
- IX. **MAKE UP WORK:**
No daily quizzes will be made up. If you miss a unit test and you have a valid excuse, the instructor has the option to allow you a make-up test or use your final grade in the place of the first missing unit test grade. If you have not missed any unit tests, the instructor may opt to replace the lowest unit test grade with the final exam grade.

X. **OTHER:**

Studying requires discipline, tenacity, and hard work. View this course as a job. Attendance is absolutely necessary, as well as attentiveness to detail and alertness. You must earn a "C" in this course in order to receive credit.

A. **Available Help:
Your Instructor**

Full time faculty have posted ten (10) hours per week on their schedule. Their offices are located in the Student Union West Building, 2nd floor. Adjunct faculty are available for assistance 30 minutes before or after class. Students having difficulty are strongly encouraged to see the instructor for additional help.

Specific Course Objectives

These objectives are posted on the Mathematics' Web Site. Ask your instructor how to obtain a copy.

Communication Through Canvas

Students should be encouraged to e-mail one another through Canvas and organize study groups in public locations. Students are **NOT** encouraged to invite people they do not know well to their homes.

Course Videos

Lectures for this course have been recorded and are available on the GCSC website. Choose College Library, Library Resources, Course Videos, then MAC 2311.

XI.

**CLASSROOM CONDUCT POLICY
OF THE
DIVISION OF MATHEMATICS
GULF COAST STATE COLLEGE**

In order to promote a learning environment, in which you as a student may receive the greatest consideration, we will do all we can to prevent unnecessary interruptions and class disruptions. To this end, it is the stated policy of the Division of Mathematics that disruptions, absolutely and unequivocally, will not be tolerated in the classrooms administered by this division. To this end, we remind you that the **instructors are obligated** to adhere strictly to the following policies:

1. Everyone is required to be in class on time.
Anyone entering the classroom after the instructor has begun class is late and is a disruption to the class. The instructor should implement an appropriate policy to discourage late arrivals.
2. Disciplinary action in the case of cheating will be administered in accordance with college policy.
3. The student should notify in advance the instructor before leaving the class early.
If you must leave class early, notify the instructor before the beginning of class. We do not conduct "open" classrooms where individuals may arrive and exit at their discretion. This activity is disruptive to those trying to learn and will not be allowed.
4. The instructor is not to allow talking or other distractions to occur at inappropriate times. There will be **NO usage of electronic communication devices** (including, but not limited to, cell phones, smart phones, Ipods, MP3/Music players, Blackberries, etc) allowed in the classroom. Talking or other disruptive behavior (texting, ringing or vibrating cell phones, etc.) are distracting to other students and have no place in a college environment. Students who engage in such behavior will be asked to stop. If the behavior continues, the student(s) will be asked to leave and confer with Mrs. Reynolds, Division of Mathematics Chair, concerning the nature of the behavior before being allowed back in the classroom.
5. **No food or drink** is allowed in the classroom.
6. Infractions of discipline may be handled by the instructor as final authority.
The student has a right to appeal.

XII. Americans with Disabilities Statement:**Disability Statement**

Gulf Coast State College supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, reasonable accommodations can be arranged. Prior to receiving accommodations, you must register with Disability Support Services. Appropriate academic accommodations will be determined based on the documented needs of the student. For information regarding the registration process, email dss@gulfcoast.edu or call 850-769-1551, Ext. 6071.

XIII. Pay for Print:

Pay4Print is installed in all computer labs and in the library. The logon to the system can be found on the Oasis homepage, and will be the same logon ID as the student email, using only the initials and randomly generated number. (You may also access the information by going to www.gulfcoast.edu and clicking on Student Resources and then on Pay4Print.) Students will be required to add money to their print accounts before they are able to print. In labs where students are paying a lab fee, students will not be required to pay for print in those labs during class time. Money can be added to student print accounts by credit or debit card with a minimum of \$5.00 or at patron kiosks or bill acceptors on the Panama City campus at the third floor Library Circulation Desk, the lobby of the Technology Building, and the lobby of the Student Union West Building outside the bookstore. Bill acceptors are also located at the Gulf Franklin Center in room B108, at the Tyndall AFB Center in room 34, and at the North Bay Center in the EOC student break room. Black and white copies will be 5¢, and color copies will be 20¢. There will be no refund on any portion of unused prints.