

I. COURSE DESCRIPTION:

MAC 2312: Calculus with Analytic Geometry II, 4 lecture hours, and 4 credit hours.

Prerequisite: Math placement test or minimum grade of "C" in MAC 2311.

Topics included are mathematical modeling with differential equations, application of integrals, integral evaluation, L'Hopital's Rule and indeterminate limits, improper integrals, infinite series, and topics in analytical geometry, conics, parametric equations, and polar equations.

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. GENERAL COURSE OBJECTIVES:

Students will

- Set up and solve basic differential equations
- Develop an understanding of various integration techniques
- Solve application problems involving integration
- Demonstrate understanding of L'Hopital's Rule
- Evaluate improper integrals
- Demonstrate an understanding of various sequences and series

IV. COURSE OUTLINE: The material to be covered is found in chapters 6-10 in your 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Students wishing to be withdrawn should withdraw themselves by the deadline.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 A grade will be assigned for students who have not withdrawn.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. 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.

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 dean of students. All grades from the third and subsequent attempts will be calculated in the grade point average.

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.

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 unit tests 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, The student will be expected at times to demonstrate mastery of differentiation and integration techniques without the use of a calculator.**

GRADING:

The average of the unit tests will comprise 75% of the grade for this course. A comprehensive final exam (no exemptions) will count as 25% of the grade for this course. The following scale will be 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)

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 use your final grade in the place of the first missing unit test grade. If you miss more than one unit test, you may take a makeup test at the discretion of the instructor. If you have not missed any unit tests, the instructor may opt to replace the lowest unit test grade with the final exam grade.

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.

Available Help Outside The Classroom

- 1. Instructor**
Full time faculty have 10 posted office hours per week. Their offices are located on the second floor of the Student Union West Building. Students having difficulty are strongly encouraged to see the instructor for additional help.
- 2. Specific Course Objectives**
Specific Course Objectives are available to students upon request. These objectives are posted on the Mathematics Division Web Site.
- 3. Communication Through Canvas**
Students are 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.

XI.

**CLASSROOM CONDUCT POLICY
OF THE
DIVISION OF MATHEMATICS
GULF COAST COMMUNITY 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 must 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 must have prior consent of 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, Ipods, PDA's, 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.