

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, numeric integration, improper integrals, infinite series, and topics in analytical geometry, conics, parametric equations, and polar equations.

Current Semester: Spring 2026 Section number: 14936

Instructor Contact Information

Instructor: Sharon Hudson, MS in Applied Mathematics, Georgia Tech

Phone Number: (850) 769-1551 X3354

Email: shudson@gulfcoast.edu

II. TEXT: Calculus, ETF Larson/Edwards; *8th edition*, 202, 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:

- Set up and solve basic differential equations
- Develop an understanding of various integration techniques
- Solve application problems involving integration
- 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. DELIVERY METHOD: This is a hybrid course. Lectures will be posted on Canvas as videos, with accompanying outlines. Students are expected to complete the lecture outlines, work homework and complete online quizzes between class meetings. Attendance is required one night a week. During class time, the instructor will address questions, provide additional examples if needed, discuss material from prerequisite courses needed for review and check student progress. Group work may be required during this time. Students may also be asked to demonstrate exercises.****VI. ATTENDANCE AND WITHDRAWAL POLICIES**

A. Attendance Policy: Students are expected to attend class every week. Instructor will take roll.

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 (Prior to Withdrawal Date) Student completes and submits a withdrawal form to Enrollment Services no later than the withdrawal date.

2. Administrative Withdrawal Students wishing to be withdrawn should withdraw themselves by the deadline. Instructors will not issue withdrawals after the deadline. Students not withdrawn will receive a letter grade. Students with extenuating circumstances may appeal to Dean Lloyd Harris, 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 weekly. Completion of 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 comprises 62.5% of the grade for this course. Your quiz average (12.5%) also counts as a test grade. A comprehensive final exam (no exemptions) counts 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 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 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, MP3/Music players, 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. **Food** is not allowed in the classroom. Your instructor may allow a drink with a cap or lid.
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:

Accessibility 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 Student Accessibility Services. Appropriate academic accommodations will be determined based on the documented needs of the student. For information regarding the registration process, email sar@gulfcoast.edu or call 850-747-3243

XIII. Paper Cut Print Management

The PaperCut print management client is installed in all computer labs. The PaperCut user web console is accessed through the MyGCSC portal. The logon is the first part of your student email address, everything before the @mygulfcoast.edu. Students will be required to add money to their PaperCut accounts before they are able to print. Money can be added to student print accounts by cash, credit, or debit card. Cash is accepted at PaperCut kiosks located in the Library. Credit and debit card payments, minimum \$5.00, can be made through the “add credit” tab on the PaperCut user web console. Instructions for the use of PaperCut are located at <https://www.gulfcoast.edu/administration-departments/information-technology-services/printing/>.

XIV. COVID-19:

1. The health and safety of students and faculty are a priority. While on campus and in classrooms, cloth or disposable facial coverings are recommended per current CDC guidelines. Students and faculty must also practice social distancing when possible.
2. If sick, please stay home to protect others. Notify professor by phone or email.
3. If you test positive, please inform your instructor(s) to make arrangements for course requirements and inform Damian South, Campus Safety & Security, at 873-3582 (or dsouth@gulfcoast.edu). You will receive additional instructions at that time. Confidentiality will be maintained.
4. This information is subject to change. For the most recent information, please refer to the GCSC website regarding COVID-19: <https://www.gulfcoast.edu/covid-19-coronavirus.html>.

XV. ACADEMIC INTEGRITY:

Honest participation in academic endeavors fosters an environment in which optimal learning can take place and is consistent with the college’s mission. Academic misconduct, including cheating or plagiarism, is destructive to the spirit of an educational environment and therefore will not be tolerated. “Cheating” includes but is not limited to use of any unauthorized assistance in completing course work. “Plagiarism” includes, but it not limited to, the use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment. Sanctions for incidences of academic misconduct, depending on the severity of the incidence and/or its repetition, may range from receiving an F grade (or zero) for the test, assignment, or activity, to failure of the course, to suspension or dismissal from the program or the college.

XVI. HB 233: In accordance with federal and state privacy laws, students may record class lectures for their own personal educational use, in connection with a complaint to the college, or as evidence in internal or external legal proceedings. Students may not publish or upload the recordings or any components thereof without the knowledge and written permission of the faculty member. Failure to obtain permission to publish could lead to the students’ having to pay damages, attorney fees, and court costs. For more information about what can be recorded, please see the guidelines on pages 36-38 in the GCSC Student Handbook <https://www.gulfcoast.edu/current-students/student-handbooks/2021-2022-student-handbook.pdf>