

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. Spring 2024 CRN: 10552

II. Contact Information

Instructor: Riccardo Mensitieri

Instructor Credentials: Associate Professor, BS Mathematics, MS Mathematics. I have been teaching at Gulf Coast State College for 9 years and have taught a range of courses including Intermediate Algebra through Calculus and Statistics. I teach face to face as well as online.

Phone Number: (850) 769-1551 (ext. 5875)

Email: rmensitie@gulfcoast.edu

Division Chair contact information: Angelia Reynolds, areynolds@gulfcoast.edu; (850)872-3852

Division admin. Assistant contact information: Scott Spencer, sspencer@gulfcoast.edu; (850)747-3229

III. Approved Course Materials and Resources

TEXT: Calculus, ET Larson/Edwards; **7th edition**, 2019, 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.

IV. Curriculum

- a. **Course Description:** Perquisite: Math placement test or minimum grade of "C" in MAC 2311. A graphing calculator is required. The TI-83 or TI-84 recommended and these are the only calculators that will be allowed on test days. 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.
- b. **Methods of instruction: Traditional Class Room Setting:** The course is conducted by the lecture-question-demonstration method. At the beginning of the period, questions are encouraged about the previous lecture, current reading, and problem assignment. All questions and problems are discussed as time permits. The instructor then lectures from current material from the text. Demonstrations of various sample problem-solving methods are presented thoroughly when not beyond the scope of the course and the background of the students. Formulas are proven, background is given (when possible), applications are mentioned, and procedures are outlined. Sample problems are worked. The students are encouraged to ask questions at any point in the lecture. A short summary is given and a problem assignment is made. Return unit tests and quizzes at the beginning of the period to allow ample time for discussion and questions. Unit tests and the final exam are announced in advance through the daily schedule. Unit tests are returned in a timely manner and any of the problems requested are fully explained. Problems frequently missed are reviewed whether requested or not. The final exam **is not** returned.
- c. **Broad Goals for the course:**

To equip the student with the tools required to be successful in engineering and computer science courses

d. **Approved Student Learning Outcomes (objectives)**

The Student will be able to:

- 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

V. **Student's Expectations of the Instructor**

- a. **Office Hours:** The instructor will be available for 10 hours each week. The specific hours will be announced in class and posted in Canvas before the end of the first week of classes. The instructor will respond to email within 24-48 hours with the possible exception of weekends and holidays. Sending an email to your instructor is the fastest way to get a response.
- b. **Learning Management System Usage Notification:** The student can expect the instructor to discuss the course layout in Canvas, and an explanation of how to access all course material therein such as the textbook, lecture notes, video instruction, reviews, and unit quizzes.
- c. **Email/voicemail response time of the instructor:** The student should communicate with the instructor using the Canvas email system or the Gulf Coast State College email and can expect to receive a reply within 24-hour window except weekends, holidays, and college closure events. Additionally, the student may also call the instructor's extension and leave a voicemail, which will be answered when the instructor is in their office.

VI. **EXPECTATIONS OF THE STUDENT**

- a. **Accountability:** The student will be held accountable for all material in this course. It is expected that the student is fully prepared for each test and taken on schedule date and time. This course should be viewed as a job. **Studying requires discipline, tenacity, and hard work.** View this course as a job. Attendance is necessary as well as attention to detail in order to be successful. You must earn a "C" in this course in order to receive credit.
- b. **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 is 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.
- c. **GULF COAST MATH LAB (Tutoring help!) Online or face to face.**
The Math Lab is on the second floor of SUW rooms 260 and 261 and their operating hours can be found either in the link provided in your Canvas course, on the college website, and on the math lab door. The Math Lab offers both face-to-face and online tutoring, please take advantage of this free service provided.
- d. **Online Videos**
Course videos can be found in the Canvas course under each test material tab. If you miss a class, it is strongly encouraged that you watch these useful videos along with keeping up with any assignments for that section.
- e. **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.

f. **AI**

Use of Artificial Intelligence (AI) Tools: The Math Division at GCSC discourages you from utilizing AI as a substantial source of your learning. You are expected to do your own work in this course and will be graded on your mastery of the material herein. Although AI can be an outside resource for problem solving, it may not be a reliable source. What is most important in a math course is that you personally learn the step-by-step processes that it takes to find solutions to problems, to analyze data sets, to create mathematical models, and to apply what you have learned, in theory or through formulas, to applications of mathematics found in real-life instances.

For graded assignments (tests or quizzes), you will not be allowed to use any AI tools, such as chatbots, text generators, paraphraser, summarizers or solvers, to complete any part of your assignments. Using AI tools for graded assignments will be considered a form of academic dishonesty and could result in a grade of zero for the assignment and disciplinary action. If you have any questions about what constitutes acceptable uses of AI tools, inside or outside the classroom, please consult your instructor.

g. **Recording of Lectures**

HOUSE BILL 233 RECORDING CLASSES 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>

h. **ATTENDANCE AND WITHDRAWAL POLICIES**

Attendance Policy: Students are expected to attend class every day. Instructor will take roll daily. 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.

- **Student Withdrawal (Prior to Withdrawal Date)**

Student completes a withdrawal form and submits the form to Enrollment Services no later than the withdrawal date.

- **Administrative Withdrawal**

Students wishing to be withdrawn should withdraw themselves by the deadline. Instructors will not issue withdrawals after the deadline. A student who has not withdrawn will receive a letter grade. Students with extenuating circumstances may appeal to Mr. Lloyd Harris, VP of Student Affairs.

i. **Classroom Conduct Policy**

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:

- 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.

- Disciplinary action in the case of cheating will be administered in accordance with college policy.
As stated in the College Course Catalog "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 and plagiarism, is destructive to the spirit of an educational environment and therefore cannot be condoned." See the *Student Handbook* for details on this policy. Cheating will result in you receiving the grade of "F".
- 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.
- 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.
- **Food is not allowed in the classroom.** Your instructor may allow a drink with a cap or lid.
- Infractions of discipline may be handled by the instructor as final authority. The student has a right to appeal.

VII. Measure of Student Performance

- a. **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.
- b. **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.**
- c. **GRADING:**
The average of the unit tests comprises 75% of the grade for this course. Your instructor may choose to count your quiz average 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)
- d. **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

e. **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.

f. **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.

g. **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.

h. **Available Help Outside the Classroom**

- **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.
- **Specific Course Objectives:** Specific Course Objectives are available to students upon request. These objectives are posted on the Mathematics Division Web Site.
- **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 home.