NORTHWEST FLORIDA STATE COLLEGE

MAC 2311 Course Syllabus

Course Name: Calculus I
Course Number: MAC 2311
Section (CRN): 10126
Credit Hours: 4
Instructor Name: Daniel Fox
Instructor Office Location: Niceville / Bldg. 500 / Room 101C
Instructor Email: foxd2@nwfsc.edu

Course Curriculum

In this course, students will develop problem solving skills, critical thinking, computational proficiency, and contextual fluency through the study of limits, derivatives, and definite and indefinite integrals of functions of one variable, including algebraic, exponential, logarithmic, and trigonometric functions, and applications. Topics will include limits, continuity, differentiation and rates of change, optimization, curve sketching, and introduction to integration and area.

Calculator (required): A scientific graphing calculator is required. Either a TI-83 or TI-84 is strongly recommended; these calculators are pre-approved for this course as well as all other MAC courses numbered 1105 and higher. Any type of computer algebra system (CAS) calculator is NOT allowed; this includes the TI-89 and TI-92.

Broad Goals

The goal of this course is for the student to (1) develop the mathematical maturity required for rigorous scientific coursework and (2) gain the foundational principles needed for success in Calculus II and beyond.

Objectives

Student Learning Outcomes:
• Students will calculate a limit, derivative, or integral using appropriate techniques.
• Students will determine the continuity and differentiability of a function.
• Students will use limits and derivatives to analyze relationships between the equation of a function and its graph.
• Students will apply differentiation techniques to model and solve real world problems.
• Students will use integrals and the Fundamental Theorem of Calculus to analyze the relationship between the integral of a function and the related area.

Expectations of the Instructor and Course

a. Office Hours: I am available during scheduled office hours at least 10 hours each week. I can also be available at other times. You can contact me via email (preferred) at foxd2@nwfsc.edu or phone 850.729.6028 to schedule an appointment. My office hours will be posted on my office door and in Canvas once the semester begins.

b. Expected email/voicemail response time of the instructor: You can anticipate responses to inquiries and questions within 24-48 hours of receipt, except on weekends and holidays.
c. Learning Management System Usage Notification: WebAssign
d. WebAssign: Engages students with online tools used for formative assessments.

Expectations of the Student

a. ACADEMIC INTEGRITY: Active and honest engagement in academic pursuits contributes to an environment conducive to optimal learning, aligning with the college's mission. Conversely, academic misconduct, such as cheating or plagiarism, undermines the integrity of the educational atmosphere and will not be tolerated. "Cheating" encompasses any unauthorized aid in completing coursework. Depending on the severity and frequency of such misconduct, sanctions may range from receiving a failing grade or zero on a test, assignment, or activity to course failure, or even suspension or dismissal from the program or college.
b. Attendance Policy: Regular attendance and participation are significant factors that help to promote success in college. Students are expected to attend ALL class meetings of all courses for which they are registered. Students who stop attending and/or engaging fully in class assignments and other activities, or who are not able to pass the course due to engagement expectations stated in the syllabus, may receive a failing grade which may impact the receipt of federal aid in subsequent courses. Students traveling for college-approved activities will not be penalized academically, but will be responsible for missed work.

How Student Performance Will be Measured

This course uses various summative assessments to measure student performance toward the student learning outcomes listed above. Grading Scale: A (100-90), B (89-80), C (79-70), D (69-60), and F (59-0).

Final Grading Scale: [90, 100]……A, [80, 90)…..B, [70, 80)……C, [60, 70)…….D, [0, 60)……F

Homework	35% of final grade
Quizzes	15% of final grade
Semester Tests	30% of final grade
Cumulative Final Exam	20% of final grade