



# NORTHWEST FLORIDA STATE COLLEGE

## MAC 2311 Course Syllabus

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**Course Name:** Calculus I

**Course Number:** MAC 2311

**Section (CRN):** 10113

**Credit Hours:** 4

**Instructor Name:** Ryan Adams

**Instructor Office Location:** Building 350, Room 210, Niceville Campus

**Instructor Email:** adams5@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.

### 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 [apaks@nwfsc.edu](mailto:apaks@nwfsc.edu) or phone 850-729-5255 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.

## **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).