



NORTHWEST FLORIDA STATE COLLEGE

MAC 1105 Course Syllabus

Course Name: College Algebra

Course Number: MAC 1105

Section (CRN): 30222

Credit Hours: 3

Instructor Name: Ramses Diaz

Instructor Office Location: (DS - 501) / 217

Instructor Email: diazr3@nwfsc.edu

Course Curriculum

In this course, students will develop problem solving skills, critical thinking, computational proficiency, and contextual fluency through the study of equations, functions, and their graphs. Emphasis will be placed on quadratic, exponential, and logarithmic functions. Topics will include solving equations and inequalities, definition and properties of a function, domain and range, transformations of graphs, operations on functions, composite and inverse functions, basic polynomial and rational functions, exponential and logarithmic functions, and applications. Non-symbolic graphing calculators are required. The TI-83/84 Series is recommended. A minimum grade of "C" is required if used to meet requirements for general education. Students cannot obtain credit for both MAC1105 and MAC1105C.

Goals

The goal of this course is to give the student (1) a thorough background in algebra as a basis for the pre-calculus, trigonometry, calculus sequence and (2) algebra skills and concepts useful in any future mathematics course work. It is expected that the student will be able to understand the concepts of algebra as well as work a range of problems, from basic problems up to the more difficult application and conceptual problems.

Objectives

Student Learning Outcomes:

- *Students will solve an equation or an inequality using an appropriate technique.*
- *Students will define and describe functions, their properties, and graphs.*
- *Students will manipulate functions to simplify expressions and find new functions.*
- *Students will use transformations to write an equation for a function and to graph a function.*
- *Students will model and solve real world problems using functions.*
- *Students will demonstrate technology literacy by using a calculator to graph and analyze functions.*

Expectations of the Instructor and Course

- a. Office Hours: I am available 10 hours each week for office hours. I am also available at other times. You can call me at 850-200-4118 or email me at diazr3@nwfsc.edu to schedule an appointment. My office hours will be posted on my office door and on Canvas after the semester begins.
- b. 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. I generally reply to emails Monday – Thursday from 8:00 a.m. to 4:00 p.m.
- c. Learning Management System Usage Notification: Canvas Resources. are available for students to learn more about using the Canvas learning management system we are using for this course. Since all assignments are submitted through Canvas and/or ALEKS (unless otherwise noted), access to a computer is required for this course. Students have free access to computers at all campuses. Canvas lists minimum computer specifications and supported browsers to ensure compatibility. The Chrome browser is recommended.
- d. ALEKS: 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.

Attendance Confirmation

Active participation and academic engagement are expectations of enrollment in this course. Faculty confirm each student's attendance in class after the schedule adjustment period ends. Students who have not attended class or otherwise engaged academically in the course through the submission of an academic assignment or through participation in a curricular activity may be withdrawn from the course for nonattendance.

Students who are withdrawn for nonattendance or nonparticipation early in the course may request to be reinstated in the course by contacting their instructor by email. Reinstatement in the course is at the instructor's discretion during the first three weeks of class and is not guaranteed. Reinstatement requests occurring after this three-week period may be submitted to the instructor for consideration; however, additional administrative approval will be required to grant the reinstatement. If you are withdrawn from a course due to nonattendance and are not granted reinstatement in the course, please contact a Student Success Navigator for assistance.

- A. Students are expected to attend all of their scheduled classes, as attendance is one of the strongest predictors of success.
- B. Because this is a pre-professional program, students are expected to demonstrate the same professionalism in the classroom as is expected in the workplace.
- C. Students are expected to participate regularly in this class.
- D. This class may involve frequent class discussions and group work. Students will neither benefit from these activities nor contribute to the class as a whole if frequently absent. Therefore, 3 absences may result in the penalty of zero points in the participation element of the final course grade. Please note that your instructor may drop students who have 3 consecutive absences.

Classroom Conduct

The instructor would like to welcome all students into an environment that creates a sense of community, pride, courtesy and respect; we are all here to work cooperatively and to learn together. In order to create a smooth and harmonious learning environment, please make every attempt to come to all the class sessions, to come to class on time, and to stay until the end of the class session unless you previously have informed your instructor that you must leave early. There might be a time when you unavoidably arrive late for class, we ask you to please come into the virtual classroom and keep muted your device.

Once the class session has begun, please keep muted all microphones and devices. If you miss a class meeting for any reason, you are responsible for all material discussed, for announcements made in your absence, and for acquiring any materials that may have been distributed in class. You are responsible for contacting the instructor during the instructor's office hours.

You are encouraged to ask questions in class either by typing in the Chat Room or by raising the hand, but that is also important that we are all able to stay focused on the class discussion. For this reason, only one person in the class at a time should be speaking.

The NWFSO Students' Rights and Responsibilities Handbook describes students' appropriate and inappropriate behaviors, along with their consequences. Additionally, please be aware that cheating, plagiarism, and disruptive behavior are not tolerated and can result in serious consequences such as failure of a course or dismissal from the college. For more information, go to: Student Handbook - Northwest Florida State College - Acalog ACMS™ (nwfsoc.edu)

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).

A breakdown of the final grade is shown below.

Grading Scheme and Procedures

You will achieve the course objectives through interactive lecture, in class practice problems, class participation, homework assignments, and assessments. The grade for this course will be based on homework, five equally weighted exams, and a Final Exam.

| Assessment | Percent of Final Grade |
|------------|------------------------|
| Homework | 10% |
| 4 Exams | 70% |
| Final Exam | 20% |
| Total | 100% |

| | |
|-----------------------|---|
| Average of 90 - 100% | A |
| Average of 80 – 89.9% | B |
| Average of 70 – 79.9% | C |
| Average of 60 – 69.9% | D |
| Average below 60% | F |

$$Grade = 0.7 \cdot \frac{Q1 + Q2 + Q3 + Q4}{4} + 0.2 \cdot Final + 0.1 \cdot Homework$$

Incomplete Grades

At the discretion of the instructor, an incomplete grade (“I”) may be awarded when the student is unable to finish the required work because of unforeseen extenuating circumstances such as illness or TDY assignment. To receive an “I” grade, the student must have successfully completed a significant portion of the required coursework and be able to finish the remaining work without attending class. An “I” grade will automatically convert to a grade of “F” if the student does not complete the remainder of the coursework by the established deadline.

Make-up Work

If a student misses an exam, the final exam grade will be used to replace this grade. For any further missing exams, the grade will be zero. **There will not be any make-ups.**