



NORTHWEST FLORIDA STATE COLLEGE

MAC 1105 Course Syllabus

Course Name: College Algebra

Course Number: MAC 1105

Section (CRN): 10115

Credit Hours: 3

Instructor Name: Linda Brasher

Instructor Office Location: Options for Zoom office hours are available. Please email me after the first day of class to set those up.

Instructor Email: brasherl@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.

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: Options for Zoom office hours are available. Please email me to set those up.
- b. Your NWFSC email is the official communication medium of the College. Please check College email regularly for any class and College notifications.
- 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:** Students who stop attending class, or are not able to pass the course due to attendance 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. Students are expected to attend all of their scheduled classes, as attendance is one of the strongest predictors of success. Therefore, 9 hours of missed class may result in a penalty of 10% (Letter Grade) (a percentage penalty assessed on the final course grade).

How Student Performance Will be Measured

This course uses various summative assessments to measure student performance toward the student learning outcomes listed above.

Homework

- Homework assignments will be completed in ALEKS through Canvas. Students have unlimited attempts on the problems so you can keep practicing with the material until you master the topic. Homework assignments will be due the day before the Unit Exam at 11:59 PM.
- Late homework is not accepted for any reason.

Quizzes

- Quizzes will be completed in ALEKS through Canvas. Students will have three attempts on quizzes and the high grade will be recorded in the gradebook. All quizzes will be due the day before the Unit Exam at 11:59 PM.

- There are NO make-up quizzes allowed.

Tests

- All Test are taken in class
- There are no make-up tests allowed. Your final exam grade will replace your lowest test grade if the score is higher.

Final Exam

- The final exam will be in Class.
- There are no make-up tests allowed for the Final Exam.

Grading Weights

Homework 10%

Quizzes 20%

Exams 50%

Final Exam 20%

Make-up Work

This course can move quickly, and material often builds off previous assignments. It is in the best interest of students to complete all assignments on time. Students have until the day before the unit test to complete all homework and quiz assignments. No late assignments will be accepted. If a student is absent for an exam, the final exam will replace the lowest test grade. No make-up test will be given.