

# MAC 1105C Course Syllabus

Course Name: College Algebra with Integrated Review Course Number: MAC 1105C Section (CRN): 10912 Credit Hours: 4 Instructor Name: Ryan Adams Instructor Office Location: 500 -101 A 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 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. This course will follow an embedded corequisite model in which prerequisite topics will be presented as they are needed in order to provide a foundation for the acquisition of College Algebra skills. 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 precalculus, 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 850-729-5258 or email me at adams5@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: 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, 7.5 hours of missed class may result in a penalty of 10% (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. 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.

**Concept Checks and Review Activites-** We will have review activities at the beginning of class. For some activities, you will need to watch a small video before class and complete the concept check in Canvas. Review activities are graded on completion. The concept checks are graded on accuracy. These can be completed multiple times in order to get the highest grade possible.

**Homework**- For each section we cover, I will have a set of problems assigned on ALEKS. The problems need to be on notebook paper or a notebook so that I can look at your work if there are any issues. Due dates for homework will be posted in ALEKS and Canvas. You should be able to attempt each question 3 times. If you use all three attempts, you can try as similar problem.

Problems worked after the due date will receive a 15% penalty. At the end of the semester, I will drop the 3 lowest homework grades. You should work on all the homework since you will be responsible for the material.

**Test and Final**- There will be four chapter tests and the final exam. You may make up a test in advance if you know you will miss it. You can also make up a test if you have proof of military leave or you are representing the college at a school function. However, if I do not hear from you before I give a test you cannot make it up.

#### Grade Break down

Final Grade	%	Letter Grade	%
Concept Checks	10	Δ	100 - 90
and Review Activities	10	~	100 - 30
Homework	15	В	89 – 80
Test	50	С	79 – 70
Final	25	D	69 – 60
		F	Less than 60

\*\*\*Keep in mind the following:

- I will drop the three lowest homework grades.
- You can submit test corrections for the test you did the worst. Make sure to rework each problem completely and submit the corrections on the day of the final. Completing this correction will give you half the points back from the maximum on that test if you attempted all the tests in the semester. (The maximum for a late test is 85)
- If you miss one test, your final exam will take the place of the missing test. Missing subsequent tests will give you a zero for each one.
- You will be exempt from the final exam if you have at least a 90 homework average, 90 concept checks/review activities average, and scored at least a 94 on each test (without test corrections).