

Syllabus: College Algebra

Course Information		
Course Prefix/Number: Mat 151	Credit Hours: 3	
Semester: Spring 2021	Course Title: College Algebra	
	Virtual Class	
Class Days/Times: Virtual Class Friday		
1:00 – 2:30pm		
Instructor Information:	Phone/Voice Mail: 928-475-2378	
Name: Noemi O. Hubilla	E-mail: no.hubilla@scusdaz.org	
Degree: Master of Arts in teaching major in	Office hours: 10:30 AM – 12:00 NOON	
Mathematics	Monday - Friday	

Course Description: College algebra; algebraic functions. Includes the language of sets, lines in the plane, systems of linear equations, rational expressions and equations, inequalities, radical expressions and equations, quadratics, exponents, functions and logarithms.

Course Objectives

During this course students will:

- Calculate the slopes of lines; determine equations of lines, and graph lines.
- Given two points in the plane, find the distance and midpoint between them.
- Solve systems of linear equations in two and three variables algebraically.
- Solve compound inequalities in one variable and graph linear inequalities in two variables.
- Solve absolute value equations and inequalities.
- Factor polynomials using advanced techniques and solve related equations.
- Simplify rational expressions, including complex rational expressions.
- Solve rational equations involving quadratic equations.
- Simplify radical expressions, convert between radicals and rational exponents, and solve radical equations.
- Solve quadratic equations using completing the square and the quadratic formula; interpret the discriminant.
- Graph parabolas.
- Solve literal equations.
- Define and identify a function and use function notation.
- Determine the domain of a function, and determine whether an element is in the range of a function.
- Use the algebra of functions and composition of functions.
- Use the definition of one-to-one function and compute the inverse of a function.

Student Learning Outcomes (SLOs)

After completion of the course students will be able to:

- Solve linear, absolute value, quadratic, rational, and radical equations, linear and
- > Absolute value inequalities, and linear systems in two and three variables.
- Graph linear, quadratic, and elementary exponential equations, and linear inequalities.
- Solve problems involving real world applications.
- > Define function and composite function.

Course Structure

This course will be delivered through the computer using ALEKS and Schoology. Students are expected to log in for a minimum of 8 in Aleks hours per week and answer Schoology assignments weekly.

Texts and Materials

All materials and text are provided by ALEKS online and Schoology.

Evaluation and Grading and Assignments

Evaluation will be based on the following two criteria:

- 1. Attendance and participation (camera on)
- 2. Completion of all class works (assignments Schoology and Aleks), quizzes, and Benchmark test

Attendance and Participation: (100 points, 10% of final grade)

We have a weekly virtual class. Each meeting is worth 10 points for a total of 100 points. In order to get a full points, students must attend on time (5 points will be deducted for every 5 minutes a student is late for class) with camera on and fully participate in the class.

Grading System/Policies Your final grade will be calculated as follows:

Grading Scale

Attendance	10 %	A=100% - 90%
Assignments/Homewor	k 30%	B = 89% - 80%
Quizzes	30%	C = 79% - 70%
Final Exam	30%	D = 69% - 60%
Total possible	100%	F = less than 60%

Apache Cultural Component

San Carlos Apache College is in the process of developing culturally relevant curriculum and coursework in Apache history, culture, and language. Student and community feedback will guide this process. All SCAC instructors will find ways to incorporate culturally relevant topics and materials into their courses as appropriate.

Policies and Expectations

Policies and expectations- minimally Students are expected to attend the virtual class per week and log on a minimum of 8 hours per week in Aleks. In order for learning to progress, academic honesty is essential. Ask for help when you do not understand. Your instructor is your first resource. The best way to learn math is to do math every day. The more you log on the faster your skills will grow. The Aleks program will periodically test your skill to assess progress. You may find you are repeating items you have previously covered because you did not pass the assessment item. Be patient you will succeed. Some topics are easy some are hard. The program is presented to each in an individual way depending on your skills and abilities. No one will be at the same place at the same time. Be respectful of yourself and other students in the class. Disruptive may result in being asked to leave the class.

Finally, if you must be absent please notify me by e-mail.

Disclaimer: This syllabus is designed to evolve and change throughout the semester based on class progress and interests. You will be notified of any changes as they occur.

Approved: