

# Dual Credit College Algebra Syllabus

Spring 2022

**Course no.** Math - 1314  
**Instructor** Heather Just  
**Phone** 325-659-3400 ext. 208  
**Email** Heather.Just@saisd.org

**Grading** 70% of your grade will come from 4 exams each nine weeks (One will be dropped at the end of the nine weeks). 30% will come from the homework assignments (Two minor grades will be dropped at the end of the nine weeks).

**Homework** You will be using My Open Math to complete all of your homework assignments.

**Calculators** Much of the material does require the use of a calculator. We will be using the TI-84 CE in class.

## Course Outline

The following is a tentative outline of the material to be covered. *I reserve the right to change the material and/or sequence.*

## Student Disability Services

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA), and subsequent legislation.

The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student's responsibility to initiate such a request by contacting:

Ms. Dallas A. Swafford  
Director of Student Disability Services

- 325-942-2047
- [dallas.swafford@angelo.edu](mailto:dallas.swafford@angelo.edu)
- Houston Harte University Center

### **Title IX Statement**

Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or discrimination, you may contact ASU's Title IX Coordinator:

Michelle Nicole Boone, J.D.

Director of Title IX Compliance 2

- [Michelle.boone@angelo.edu](mailto:Michelle.boone@angelo.edu)
- 325-486-6357
- Mayer Administration Building 204

### **Student Absence for Observance of Religious Holy Days**

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

### **Incomplete Grade Policy**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

### **Student Conduct Policies**

#### **Academic Integrity**

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

#### **Academic Integrity**

##### **Plagiarism**

Plagiarism is a serious topic covered in ASU's Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center.

## **Copyright Policy**

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

## **General Policies Related to This Course**

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

## ***Student Learning Outcome***

**1. The students will demonstrate factual knowledge including the mathematical notation and terminology used in this course.** Students will read, interpret, and use the vocabulary, symbolism, and basic definitions used in college algebra including the real numbers, exponents, radicals, polynomials, factoring, functions, equations, inequalities, and graphs.

**2. The students will be able to describe the fundamental principles including the laws and theorems arising from the concepts covered in this course.** Students will identify and apply the laws and formulas that result directly from the definitions; for example, the quadratic formula, rules of exponents, and properties of logarithms.

**3. The students will apply the course material along with techniques and procedures covered in this course to solve various problems and improve decision making.** Students will use the facts, formulas, and techniques learned in this course to simplify algebraic expressions, graph functions, and solve inequalities, equations, and systems of equations.

**4. The students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field or related fields.** Students will acquire a level of proficiency in the fundamental concepts and applications necessary for further study in academic areas requiring college algebra as a prerequisite, or for work in occupational fields requiring a background in algebra. These fields might include education, business, finance, marketing, computer science, physical sciences, and engineering, as well as mathematics.

## ***Course Content***

**Textbook:** *College Algebra*. From OpenStax. This is a free textbook available online at [www.openstax.org/details/college-algebra](http://www.openstax.org/details/college-algebra) You can also purchase a print version, if you prefer, via the ASU campus bookstore or online(Amazon).

The following topics will be covered

1. **A Review of Basic Algebra:** Real Numbers, Integer Exponents and Scientific Notation; Rational Exponents and Radicals; Polynomials; Factoring Polynomials; Rational Expressions.
2. **Equations and Inequalities:** Linear Equations and Rational Equations; Applications of Linear Equations; Complex Numbers; Quadratic Equations; Applications of Quadratic Equations; Other Types of Equations; Inequalities; Absolute Value.
3. **Functions and Graphs:** Functions and Function Notation; The Rectangular Coordinate System and Graphing Lines; Linear Functions and Slope; Writing and Graphing Equations of Lines.
4. **Functions:** Graphs of Functions.
5. **Polynomial and Rational Functions:** Quadratic Functions.
6. **Exponential and Logarithmic Functions:** Exponential Functions and their Graphs; Logarithmic Functions and their graphs; Properties of Logarithms; Exponential and Logarithmic Equations.
7. **Linear Systems:** Systems of Linear Equations.