Mathematics 1314 – College Algebra

1. **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. **Students will 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. **Students will apply course material along with techniques and procedures covered in this course to solve problems.** 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. **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.

**Textbook**

**Course Content**
The following chapters including the particular sections listed are covered.

1. **Chapter P: Prerequisites: Fundamental Concepts of Algebra 1:** Real Numbers; Integer Exponents and Scientific Notation; Rational Exponents and Radicals; Polynomials; Factoring Polynomials; Rational Expressions.
   - Aug. 23 - Sept. 8 (Test on Sept. 8)

2. **Chapter 1: Equations and Inequalities:** Graphs, Linear and Rational Equations, Complex numbers, Quadratic Equations.
   - Sept. 9 – Sept. 21 (Test on Sept. 21)

3. **Chapter 2: Functions and Graphs:** Basic functions and their graphs, linear functions and slope, Transformations of functions.
   - Sept. 22 – Oct. 6 (Test on Oct. 6)
4. **Chapter 3: Polynomial and Rational Functions**: Quadratic functions, polynomial functions and their graphs, dividing polynomials, zeros of polynomial functions, Rational functions and their graphs, Polynomial and rational inequalities.
   - Oct. 7 – Oct. 26 (Test on Oct. 26)

5. **Chapter 4: Exponential and Logarithmic Functions**: Exponential functions, Logarithmic functions, Properties of logarithms exponential and logarithmic equations, exponential growth and decay.
   - Oct. 27 – Nov. 12 (Test on Nov 11-12)

   - Nov. 15 – Dec. 3 (Test on Dec. 2-3)

7. **Final Exam Review and Final Exam**
   - Dec. 6 – Dec. 10 (Final Exam Dec. 9 – 10)

- **Grades:**
  - Assignments 30%
  - Tests 50%
  - Final 20%

- **Percentage (%) Grade**
  
  A 90- 100  
  B 80-89  
  C 70-79  
  F Below 70  

- **Contacting me:**
  - Phone: 432-558-1300 - Please respect the class time of your student and others by calling only during conference or leaving a message and I will return your call as soon as possible.
  - Conference period: 2nd period 8:33 – 9:18
  - Email: canderson@craneisd.com  *(The easiest way to contact me is through email)*
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

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.

The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.

Accommodations for Students with Disabilities

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.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

---

1 https://www.angelo.edu/current-students/student-handbook/
2 https://www.angelo.edu/academics/catalog/
3 https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96
4 https://www.angelo.edu/current-students/disability-services/
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.

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. Resources to help you understand this policy better are available at the ASU Writing Center.

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.

Title IX at Angelo State University
Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

---

5 [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
7 [https://www.angelo.edu/current-students/writing-center/academic_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)
8 [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)
Online: Incident Reporting Form\(^9\)
Face to Face: Mayer Administration Building, Room 210
Phone: 325-942-2022
Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State’s policy please visit the Title IX website.\(^{10}\)

**Information About COVID-19**

Please refer to ASU’s COVID-19 (Coronavirus) Updates\(^{11}\) web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

**Modifications to the Syllabus**

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

---

\(^9\) [https://www.angelo.edu/incident-form](https://www.angelo.edu/incident-form)

\(^10\) [https://www.angelo.edu/title-ix](https://www.angelo.edu/title-ix)

\(^11\) [https://www.angelo.edu/covid-19/](https://www.angelo.edu/covid-19/)