

COLLEGE ALGEBRA
SOUTH PLAINS COLLEGE
MATH 1314.308
2025-2026 Dual Credit
Lubbock High School
Mr. Joseph Heinrich
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Textbook: *College Algebra*, Blitzer. (2014). College Algebra, 6th ed. Pearson.
ISBN: 10:0-321-78228-3.

COURSE DESCRIPTION:

This is a standard course in college algebra: quadratic equations; ratios and proportions; variations; binomial theorem; inequalities; complex numbers; theory of equations; determinants and matrices.

COURSE PURPOSE:

The purpose of the course is to provide a fundamental background in algebra to meet the mathematics requirement for the core curriculum and to provide a basis for further study in mathematics.

COURSE REQUIREMENTS:

To maximize the potential to complete this course, a student should attend all class meetings, take notes and participate in class, and complete all homework assignments and examinations. You are responsible for your learning.

STUDENT LEARNING OUTCOMES/COMPETENCIES:

Successful completion of this course should reflect mastery of the following objectives. The course objectives the student will be able to meet are:

1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Understand and analyze higher degree polynomial and rational functions.
5. Recognize, solve and apply systems of linear equations using matrices.

DIVERSITY STATEMENT:

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be. (Copied from current South Plains College Faculty Handbook)

SPECIFIC GRADING POLICIES:

1. 70% Formative Assessments
2. 30% Summative Assessments
3. 0% Homework

There will be an assessment weekly, and the assessments will contain material very similar to the homework. Also, 5% of your homework average will be added to your 9 weeks grade!

CORE OBJECTIVES:***Communication Skills:***

Effective development, interpretation, and expression of ideas through written, oral, and visual communication.

- Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through oral communication
- Develop, interpret, and express ideas through visual communication

Critical Thinking:

Creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information.

- Generate and communicate ideas by combining, changing, and reapplying existing information
- Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information

Empirical and Quantitative Competency Skills:

The manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

- Manipulate and analyze numerical data and arrive at an informed conclusion
- Manipulate and analyze observable facts and arrive at an informed conclusion

DISABILITY STATEMENT:

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Special Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Special Services Coordinator. For more information, call or visit the Disability Services Office through the Guidance and Counseling Centers at Reese Center (Building 8) 806-716-4606, or Levelland (Student Services Building) 806-716-2577. (Copied from current South Plains College Faculty Handbook)

ACADEMIC HONESTY, EQUAL OPPORTUNITY:

You are expected to uphold the ideas of academic honesty. All work that is graded must be your own. This policy applies to all work attempted in this course. If this policy is violated the student will receive an F for the assignment and will be dropped with an F. For more details on what is considered cheating, see the South Plains College catalog.

South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability, or age.