

Sul Ross State University
Course Syllabus
MATH 1314-003/A01: College Algebra
Fall 2016

Instructor: Dr. Angela Brown

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Office Hours: 10-12 and 2-4 M, 11am-12pm W, 3:30-5pm TR, others by appointment

Time and Place of Class Meetings: TR 9:30-10:45 am ACR 204

Course Prerequisites: Undergraduate level Math 0301 Minimum Grade of D or high enough score on one of the math placement exams.

Mathematics Student Learning Objectives: The graduating student should be able to

- Apply knowledge of basic mathematics principles.
- Identify and provide valid proofs or solutions for theorems or problems.
- Recognize and dispute invalid mathematical statements by using counter-examples.

EC-6 Core Teacher Competencies:

- CO 013 (Mathematics Instruction) The teacher understands how students learn mathematical skills and uses that knowledge to plan, organize and implement instruction and assess learning.
- CO 014 (Number Concepts and Operation) The teacher understands concepts related to numbers, operations and algorithms and the properties of numbers.
- CO 015 (Patterns and Algebra) The teacher understands concepts related to patterns, relations, functions and algebraic reasoning.
- CO 016 (Geometry and Measurement) The teacher understands concepts and principles of geometry and measurement.
- CO 017 (Probability and Statistics) The teacher understand concepts related to probability and statistics and their applications.
- CO 018 (Mathematical Processes) The teacher understands mathematical processes and knows how to reason mathematically, solve mathematical problems and make mathematical connections within and outside of mathematics.

Course Objectives:

- The student will be able to solve linear, quadratic, rational and radical equations and inequalities using various methods.
- The student will be able to graph functions by plotting points and performing transformations on certain parent functions.
- The student will be able to graph polynomial functions by finding roots using synthetic or long division and distinguish the end behavior of graphs.
- The student will be able to model growth and decay problems using exponential functions.
- The student will be able to solve systems of equations in two and three variables.

Required Textbooks: *College Algebra* 6th ed, Blitzer, ISBN 978-0321782281.

Other Equipment Needed: paper and pencils, may want graph paper as well.

Grading Scale: 90-100 A, 80-89 B, 70-79 C, 60-69 D, 59-Below F

Grading Policy: The grade weighting will be as follows:

Homework/In Class Assignments/Quizzes: 30%

Exams: 40%

Final Exam: 30%

Quizzes: You will have in class quizzes over material covered. These quizzes will be graded out of 100 points and are designed to only take 3-7 minutes. You will have online reading quizzes on Blackboard. These are to make sure you got the major concepts of the topic and will need to be completed at least two days before the following class period.

Homework: Homework will be assigned daily and will be posted on Blackboard. Due dates will be posted to Blackboard as well. Copying off other people or from other sources is cheating and will be prosecuted as such.

In Class Assignments: In class assignments will be given most days. You are expected to read the section before we cover it in class.

Exams: No make-up exams will be given. If an exam is missed with a valid excuse, the grade on the final can replace this exam. Any exams missed beyond one will be an automatic zero. Exams will be closed notes, closed book, and no calculator will be allowed unless otherwise stated by your instructor. Any restroom breaks need to be taken before an exam starts. You cannot leave the classroom in the middle of an exam under any circumstances. No cell phones should be on during exams and your exam will be taken up if your phone rings or vibrates.

Attendance Policy: Students are expected to attend every class. If class must be missed, the student is expected to get the notes from a classmate, and to check with me or on Blackboard for announcements and updated assignments.

Students are expected to arrive to class on time. If a student is perpetually late, they will be asked to not attend class unless they can arrive on time. If tardiness becomes a problem for the class as a whole, people who arrive late will not be permitted to enter the class. If this stricter policy becomes necessary, there will be an announcement made in class.

It is policy of the university to drop a student with a grade of “F” if 9 hours or more of class are missed. For this course that would be 9 or more class sessions missed. Absences for school related activities will not count in these 9 absences.

Cell Phone Policy: Cell phones are not allowed in class. They can not be used as calculators on any assignment. Any phone ringing during class will be taken up until the end of class. If a phone rings during a test or quiz, the student will forfeit their right to finish said test or quiz.

Americans With Disabilities Act: Sul Ross State University is committed to equal access in compliance with the Americans With Disabilities Act of 1973. As an instructor I am required to give students reasonable accommodations in each course. It is the student’s responsibility to initiate a request for accessibility services. Contact Mary Schwartz, the ADA Coordinator in Counseling and Accessibility Services Ferguson Hall, Room 112. Her phone number is 432-837-8203 or you can email her at mschwartz@sulross.edu.

Important Dates:

- Aug 22 First Day of Classes
- Aug 25 Last Day for Late Registration and Schedule Changes
- Sept 5 Labor Day Holiday
- Sept 7 12th Class Day-Last Day to Drop a Course Without Creating an Academic Record
- Nov 11 Last Day to Withdrawal from University or Drop Classes with a Grade of “W” (by 4 pm)
- Nov 23-25 Thanksgiving Holiday
- Dec 2-7 Final Exams

Tentative Schedule-Subject to Change

	Tuesday		Thursday
August 23	Introduction	August 25	Graphs, Linear Equations, Linear Functions
August 30	Intro, Graphs, Linear Equations, Linear Functions	September 1	Complex Numbers, Quadratic Equations, Quadratic Functions
September 6	Complex Numbers, Quadratic Equations, Quadratic Functions	September 8	Complex Numbers, Quadratic Equations, Quadratic Functions
September 13	Rational Equations, Rational Functions	September 15	Rational Equations, Rational Functions
September 20	Other Equations and Polynomial Functions	September 22	Algebra of Functions and Inverse Functions
September 27	Distance and Midpoint Formulas, Circles	September 29	Exam 1
October 4	Inequalities	October 6	Exponential Functions
October 11	Logarithmic Functions and Properties	October 13	Logarithmic Functions and Properties
October 18	Exponential and Log Equations	October 20	Exponential Growth and Decay
October 25	Exam 2	October 27	Systems of Equations of Two Variables
November 1	Systems of Equations of Three Variables	November 3	Systems of Equations of Three Variables
November 8	Systems of Inequalities	November 10	Matrices and Vectors
November 15	Exam 3	November 17	Conic Sections
November 22	Conic Sections	November 24	Thanksgiving
November 29	Final Review	December 1	Dead Day
December 5	Final Exam 8-10am *This is a MONDAY		