

**Sul Ross State University**  
**Course Syllabus**  
**MATH 1314-001,ALP: College Algebra**  
**Fall 2015**

**Instructor:** Dr. Angela Brown

**Office Number:** ACR 107B

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**Office Hours:** 10-11 WF, 9-12 TR, others by appointment

**Time and Place of Class Meetings:** MWF 9-9:50 am ACR 204 (Other locations provided by distance locations)

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

**Mathematics Program 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. You will need to purchase the mymathlab access for this textbook. The class id will be: brown78992

**Other Equipment Needed:** paper and pencils

**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:** Before the material of each class is presented, you will have a pre-quiz over that section posted on My Math Lab. These pre-quizzes will ask you general questions about the chapter and to answer some of the easier problems out of the assigned problems. These pre-quizzes will be graded, but on a completion basis. You could also have in class quizzes over material covered. These quizzes will be graded out of 100 points and are designed to only take 5-10 minutes.

**Homework:** Homework will be assigned daily and will be on My Math Lab. This homework will be due on Mondays at the beginning of class. Copying off other people or from other sources is cheating and will be prosecuted as such. To make sure you are actually doing your own work and not copying off someone else, you will also have periodic notebook checks where you are supposed to work out your homework problems

**In Class Assignments:** From the pre-quizzes I will decide which topics need to be covered more in depth, so you need to read your textbook and complete the pre-quiz before the day we are presenting that material. I will then give mini lectures on any topic that was not understood and we will then complete in class assignments that expand on all of the ideas of the chapter.

**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.

Final Exam Date: Wednesday, December 9 at 8:00 am

**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.

**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:**

August 24	First Day of Classes
August 27	Last Day for Late Registration and Schedule Changes
September 7	Labor Day Holiday
September 9	12th Class Day-Last Day to Drop a Course Without Creating an Academic Record
November 13	Last Day to Withdrawal from University or Drop Classes with a Grade of “W” (by 4 pm)
November 25-27	Thanksgiving Holiday
December 2	Last Day of Classes
December 3-4	Dead Days
December 7-10	Final Exams
December 12	Commencement

Tentative Schedule-Subject to Change

	Monday		Wednesday		Friday
Aug. 24	Graphs	Aug. 26	Linear Equations and Rational Equations	Aug.28	Complex Numbers and Quadratic Equations
Aug 31	Quadratic Equations	Sept. 2	Other Types of Equations	Sept. 4	Linear and Absolute Value Inequalities
Sept 7	Labor Day	Sept 9	Linear Functions	Sept 11	Functions
Sept 14	Function Transformations	Sept 16	Function Composition and Algebra of Functions	Sept 18	Inverse Functions
Sept 21	Distance and Midpoint Formulas and Circles	Sept 23	Catch Up/Review	Sept 25	Exam 1
Sept. 28	Quadratic Functions	Sept. 30	Other Polynomial Functions	Oct.2	Polynomial Functions
Oct. 5	Polynomial Functions	Oct. 7	Rational Functions	Oct. 9	Polynomial and Rational Inequalities
Oct. 12	Exponential Functions	Oct. 14	Logarithmic Functions	Oct.16	Properties of Logs
Oct. 19	Exponential and Logarithmic Equations	Oct. 21	Exponential Growth and Decay	Oct.23	System of Equations in Two Variables
Oct. 26	System of Equations in Three Variable	Oct. 28	Catch Up/Review	Oct. 30	Exam 2
Nov 2	Partial Fractions	Nov. 4	Systems of Inequalities	Nov. 6	Matrices and Vectors
Nov 9	Matrices and Vectors	Nov. 11	Matrices and Vectors	Nov. 13	Conic Sections
Nov 16	Conic Sections	Nov. 18	Conic Sections	Nov. 20	Catch Up/Review
Nov 23	Exam 3	Nov. 25	Thanksgiving Holiday	Nov. 27	Thanksgiving Holiday
Nov 30	Catch Up/Review	Dec.2	Catch Up/Review	Dec. 4	Dead Day