

Math 1314 Syllabus
College Algebra
Spring 2016 Sul Ross State University

Secs. 001: : M,W, F 10-10:50in ACR 204

Instructor: Marina Kimball

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Office Hours: M, W, 1-3pm;

Tu, Th: 10:11am; also available by appointment

Course Description: The prerequisite is Math 0301 or a satisfactory score on a Mathematics Placement Exam. This is a university-level algebra course for students who plan to take calculus. Topics include linear and quadratic equations and functions, inequalities, graphs and zeros of functions, complex numbers, exponential and logarithmic functions, conic sections, matrices and vectors.

Student Learning Objectives Successful students will demonstrate correct understanding and knowledge of the algebra topics including but not limited to those of the preceding paragraph through use of correct terminology, listing, identifying, and labeling. Particular emphasis will be placed on the order of operations and the algebra and language of functions. Students will translate, extend, synthesize, and apply concepts and problem-solving methods to different problem-solving situations. Students will demonstrate correct knowledge of the difference between numbers (perhaps in the context of another mathematical object such as a function or algebraic expression) that are in exact form and numbers that are approximate and will be able to report numbers in exact form and with a correct approximation when required. Students will express their solutions clearly in writing using complete sentences when appropriate.

Required Materials: Textbook: College Algebra, 6th edition by Blitzer, ISBN-13: 978-0-321-78228-1. Additional practice problems for exercises in this edition of the Blitzer extra can be found online for free at the website: <http://interactmath.com> (At this web address, select "Enter". On the new page, on the left scroll down to "Blitzer: College Algebra, 6e" and press select.)

Scientific Calculator: There will be some need of a scientific calculator, which has buttons with denotations such as y_x , a_b , \wedge , e_x , LN, LOG, but use of a calculator will not be a large part of this course. A calculator may be used to check arithmetical calculations throughout 1 the semester. Graphing calculators contain a scientific calculator, but this more expensive graphing utility will not be needed in this course. Scientific calculators range in price of \$8 and up.

Grading and Assignments

The Daily Grade (DG) worth **30%** of your final grade will consist of **Class Study Grades (CSG)** worth **15%** and a Quiz grade worth **15%**. Students should maintain a homework notebook for all homework assignments, class notes, and in-class examples. On class days in which there is no in-class quiz or test, students will receive a CSG based on attendance and class participation, which includes taking notes of class examples and other concepts and definitions arising from the class lecture and people's questions. In this way, students will receive a DG in every class except test days. These homework assignments will be the basis for the 3 in-class tests. Students may use their homework notebook during the in-class quizzes, but not the in-class tests.

In-class Tests (70%) Each of the **3 tests** will count in the test average. Students may only use one page of pre-written notes for each test in addition to writing/erasing implements and calculator.

Attendance I will be taking attendance as university policy precludes you from missing 3 weeks or more of classes for anything other than authorized university activities. To excuse an absence for a university activity, in addition to letting me know of the absence by the day of the absence (as explained previously) you must also spend at least 45 minutes outside of class on this course with me or with a tutor, but they will need to sign a note that documents this made-up time. Also I will allow you to excuse a test day for a documented medical absence as long as you also make up the test. If you have 9 or more unexcused absences, I reserve the right to drop you from this class with a grade of 'F', which is university policy.

Classroom Conduct It is important to conduct yourself in a college classroom so that everyone can benefit from good communication between instructor and students. My goal is to create a classroom environment in which everyone can do their best work, learn, and make the best grades possible. Class habits such as holding conversations during class lecture, or being engaged in activities not related to this course such as working on a different course or reading a newspaper will work against the goal of this course and cause you to be counted absent and you will lose Daily Grade credit. Also engaging with electronic communication devices of any kind during class or coming into class more than 5 minutes late or leaving early before class is dismissed circumvent the goals of this course and cause you to lose credit. Please be aware of the rules for Academic Honesty that you will find in the Sul Ross Student Handbook and building codes prohibiting food, beverages, tobacco (smokeless or otherwise) in the classroom

Equal Access The university is committed to equal access in compliance with the Americans with Disabilities Act of 1990 (ADA) and section 504 of the Rehabilitation Act of 1973. If you have questions regarding accessibility, please consult with the ADA coordinator, Mary Schwartze, Counselor in the Counseling and Accessibility Services Office in Ferguson Hall Rm. 112, and feel free to discuss this with me in private. The mailing address is Accessibility Services, Box C-122, Sul Ross State University, Alpine, Texas 79832. The telephone number is (432) 837-8691; FAX: (432) 837-8363. E-mail: mschwartze@sulross.edu. Important Dates

Important Dates

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|----------------------|---|
| Tu. Jan 19 | First day of classes, first day of late registration and schedule changes |
| Fri, Jan 22 | Last day for late registration and schedule changes |
| Wed, Feb 3 | Last day to withdraw from Univ. or drop with a grade of "W" by 4 pm in Registrar's Office |
| Mon-Fri, March 14-18 | Spring Break, No Classes |
| Thu-Fri, May 5-6 | Dead Days, No classes |
| Mon-Thu, May 9-12 | Final Exams, End of Term |

Tentative Schedule Subject to Change

| | Monday | Wednesday | Friday |
|------------------------|---|--|---|
| Jan. 20,22 | | Radicals, Rational Exponents | Order of Ops |
| Jan.25,27,28 | Linear Equations | Linear Applications | Linear Applications |
| Feb.1,3,5 | Linear Applications Graphs | Linear Applications Graphs | Variation |
| Feb. 8,10,12 | Variation | Sets of Real Numbers | Inequalities |
| Feb. 15,17,19 | Functions Linear Functions | Linear Functions | Linear Functions |
| Feb. 22,24,26 | Review Test 1 | Test 1 | Matrices, Vectors |
| Feb./March 29,2,4 | Matrices, Vectors | Complex Numbers Quadratic Equations | Quadratic Equations |
| March 7,9,11 | Quadratic Equations Rational Equations | Rational Equations Distance, Circles | Rational Equations Distance, Circles |
| March 21,23,25 | Circles Quadratic Functions | Quadratic Functions Applications of Parabolas | Quadratic Functions |
| March/April 28,30,1 | Review Test 2 | Test 2 | Composition, Inverses |
| April 4,6,8 | Composition, Inverses | Inverses, Exponential Functions | , Exponential Functions |
| April 11,13,15 | Logarithmic Functions Log Graphs | Properties of Logarithms | Properties of Logarithms |
| April 18,20,22 | Exponential, Log Equations | Applications of Exponentials, Logs | Applications of Exponentials, Logs |
| April 25 ,27,28 | Applications of Exponentials, Logs | Applications of Exponentials, Logs | Applications of Exponentials, Logs |
| May 2,4 | Review Test | Review Test 3 | |

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| | 3 | Last Day Classes | |
| May 9 | Test 3 | | |