

**Math 1332 Syllabus**  
**Contemporary Mathematics**  
**Fall 2016 Sul Ross State University**

**Secs. 001:** Mon Wed Fri: 10-10:50 in ACR 205

**Instructor:** Marina Kimball

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**Office Hours:** M, W, 11a - 12p, 2- 3 p

Tu, Th: 11a – 12p; also available by appointment

**Course Description:** The prerequisite is completion of Math 0300 (unless you need 6 hours of math credit in which case the equivalent of Math 0301 is required) or satisfactory score on the Mathematics Placement Exam. This course is an introduction to a selection of interesting mathematical topics that includes problem-solving, the real number system, proportions, percentages, sets, geometry, solutions of equations, probability and statistics, and financial math. This course satisfies the Common Core Curriculum requirement for Mathematics and is recommended for students who do not plan to take Calculus I (Math 2413).

**Student Learning Objectives:** Successful students will demonstrate correct understanding and knowledge of the mathematical topics including but not limited to those listed in the previous paragraph through use of correct terminology, listing and problem-solving techniques. Students must express themselves clearly using complete sentences. Students will translate, extend, synthesize, and apply knowledge of concepts and problem-solving methods to new contexts and problem-solving situations. Students will demonstrate correct knowledge of the difference between numbers 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.

**Required Materials**

**Textbook:** There is no required textbook, but much material comes from Thinking Mathematically, 6rd Edition, by Robert Blitzer. Pearson, ISBN-10: 0-321-86732-7.

**Calculator:** Usually I will allow the use of a calculator for arithmetic purposes. You will need a scientific or business calculator, one with a button labeled similar to  $y^x$ ,  $a^b$ , or  $^$ , since some exponential utility will come in handy for some of the calculations you'll need.

## **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 **2 tests** will count in the test average. Students may only use 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](mailto:mschwartze@sulross.edu). Important Dates

### Important Dates

<b>Mon, August 22</b>	<b>First day of classes, first day of late registration and schedule changes</b>
<b>Thu, September 25</b>	<b>Last day for late registration and schedule changes</b>
<b>Fri, Nov 11</b>	<b>Last day to withdraw from Univ. or drop with a grade of "W" by 4 pm in Registrar's Office</b>
<b>Wed- Fri, Nov 23-25</b>	<b>Thanksgiving Day holiday, No Classes</b>
<b>Thu , Dec 1</b>	<b>Dead Day, No classes</b>
<b>Fri, Mon-Wed, Dec 2,5-7</b>	<b>Final Exams, End of Term</b>

## Tentative Schedule Subject to Change

	Monday	Wednesday	Friday
Week 1	Fun Problems	Fun Problems	Prime Numbers
Week 2	Pigeonhole Principle	Real Numbers	Golden Ratio
Week 3	Labor Day	Fibonacci Numbers	Ratios, Proportions
Week 4	Clock Arithmetic	Clock Arithmetic	Coding and Decoding
Week 5	Voting Methods	Voting Methods	Irrational Numbers
Week 6	Irrational Numbers	Infinity	Compering the Infinite
Week 7	Compering the Infinite	Power Set	Russell's Paradox
Week 8	Pythagorean Theorem	Pythagorean Theorem	Symmetry
Week 9	Platonic Solids	Platonic Solids	Non-Euclidian Geometry
Week 10	Review for Test 1	Test 1	The Fourth Dimension
Week 11	Topological Ideas	Topological Ideas	Mobius Band
Week 12	Konigsberg Bridge	Gordian Knot	Fractals
Week 13	Fractals	Dimensions of Fractals	Imaginary Fractals
Week 14	Probability	Probability	Counting Rules
Week 15	Review for Test 3	Review for Test 3	
Week 16	Final Test		