Math 1332 Syllabus
Contemporary Mathematics
Spring 2015 Sul Ross State University

Sec. 001:	Mon, Wed, Fri: 9:00-9:50a in ACR 205
Instructor:	Dr. Kris Jorgenson
Office:	ACR 109D
Phone:	837-8398
E-mail:	kjorgenson@sulross.edu
Office Hours:	Mon, Wed: 2-5p; Tu: 10-11a; 3:30-5 pm; Thu: 10-11a; 2-4 pm also 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 The Heart of Mathematics, An invitation to effective thinking, 2nd or 3rd Edition, by Burger and Starbird. John Wiley & Sons, Inc., ISBN-13: 978-0470-42476-6, but this book, although recommended, is optional.

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 assignments discussed below will help students achieve all of the Learning Objectives mentioned above through active learning and assessment.

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**%. Every day I will make assignments upon which the quizzes and test will be based. 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.

There will be 2 or 3 in-class quizzes prior to each test. I may ask you to hand in an assignment in some cases. Half credit on assignments will be based on the neatness and clarity of your writing. Since the goal of the course is primarily learning mathematics and doing well on in-class tests, it is important that you work on the assignments with comprehension and do not hesitate to ask questions, do your own work, and perhaps make mistakes since learning from mistakes is an important part of the learning process. It is better that you make your best, honest effort on a homework assignment or quiz and allow yourself to make mistakes, learn from these mistakes and correct this before a test than to copy something down without comprehension (which might be incorrect anyway).

In-class Tests (**60**%) Each of the 3 tests will count in the test average. However as a bonus to you, your highest test grade will count twice. Therefore, you will have 4 test grades in all. Students may only use one page of pre-written notes for each test in addition to writing/erasing implements and calculator.

There will be 3 tests given during the term that will be based on the Unit Assignments. The dates for these tests are as follows:

Test 1	**Wed**, **Fri Feb**. **11**, **13**
Test 2	**Wed**, **Fri March 25**, **27**
Test 3	**Wed**, **Fri 29**, **May 1**

In addition, everyone will get to pick a **Final Project Problem**, which will count for **10**% of your final grade. Five percent of this grade will be based on the percentage of your classmates presentations for which you are in attendance. This Final Project Problem will not be as big a project as a research paper, but bigger than a homework assignment. The last week of classes Mon., Wed. May 4th and 6th will be reserved for a combination of student work on final project problems, students getting credit back on test grades through corrections, and student presentations of their final project problems, which will conclude during finals week: **Wed**., **May 13**, **8-10 am**.

Late Work, **Rescheduled Quizzes/Tests** No late homework will be accepted, but I will accept homework as long as it is handed in by 5 pm on the due date. To take an in-class quiz or test at a time other than the scheduled time, you must notify me of this absence ON OR BEFORE THE DAY MISSED, and satisfy one of two requirements: either (1) supply a written medical excuse signed by a medical professional for the day of the absence, or (2) your excuse is for a university activity, in which case you must notify me of this authorized absence in writing with your name, the name of your organization and the date(s) of your absence, and your name must appear on a published explained absence list that I am provided (or this is verified by a faculty sponsor). Also, you and I must set up a time for you to make up the quiz or test within a reasonable time period (not more than 1 or 2 days) before or after the time of the missed grade. Usually I will let you make up a grade according to the above conditions if it is due to another one-time occurrence, such as the care of someone else in your family or a friend, or for a work-related excuse as long as you

can document your absence and you let me know BY THE DAY OF THE ABSENCE AT THE LATEST. A CSG may also be made up with me in my office if you follow the above policy.

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.

Good Advice Concentrate on learning the material of the course rather than worrying about your grade. Your time is best spent concentrating on the material to be learned in the impending assignments, asking questions, and devoting yourself to activities that will help you learn the material and do better in the course. I will worry about the details of your grade since you doing so does not help you earn a higher grade. But learning the material and doing well on the tests *will* help your grade. **Remember that math is not a spectator sport**, so the more problems you work yourself, the more practice you will get, the more confident you will be, and the better you will do in this course. Working on the problems helps you to figure out what your specific questions are.

More Good Advice Keep absences to a minimum. You never know when you might miss something you will find important either from the lecture or class discussion such as questions other students ask. Remember: YOU ARE RESPONSIBLE FOR EVERYTHING THAT IS DISCUSSED DURING CLASS WHETHER YOU ARE PRESENT OR NOT.

Also do not allow yourself to develop bad habits such as missing classes. It's human nature to be controlled by our habits, so once you develop a daily habit for the semester, it can be hard to break this habit. So be sure that you allow the necessary time for this course, ESPECIALLY if you consider mathematics not to be your best subject. If you have trouble in math, then you should attend EVERY class of a college mathematics course. Not showing up to class or not doing the required work will not cause this class to "go away". If you do have to miss, let me know before class, and plan to come and see me and make an appointment to discuss what was missed and pick up assignments you did not get back. However meeting in my office is not a substitute for attending class.

Ask questions no matter how easy or trivial they may seem. There is no such thing as a bad or silly question. Questions result when you are interested and have been thinking about areas, such as mathematics, in which you have some limitations in your educational background. Being in a college mathematics course means you will have questions both obvious and more subtle. Asking questions is a very important part of learning.

Study and work problems regularly–every day, or almost every day. Work on assignments discussed in class as soon as you can after class while the methods discussed are still fresh in mind. You can't expect to succeed in a math course by waiting till the last minute to only study and cram prior to a test. If you promise yourself you will study for ½-hour, get into the work, forget the clock, then the next thing you know, you've studied and worked for one to two hours.

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.

I think you will find that I am a very friendly, sympathetic, and generous instructor as long as you are sincerely working to succeed in this course and certain guidelines for classroom behavior are followed during class to allow a sanctity of study for your fellow students. 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. My sympathy and generosity will quickly evaporate if I find that you are working against the goals of the course or that you are simply trying to get a good grade without learning or without honestly doing the required work. I want you to have every opportunity to succeed in this course.

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. Use commonsense to think of anything else that will allow you to learn and do the best work that you can in this class, and for me to better help you do your best work. Remember that being registered for this course does not allow you to behave in any manner you wish during class. You must keep other people in mind. It is within university policy for me to send a student out of this class on a temporary or permanent basis if disruptions or interruptions like the types listed above persist.

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

Tues, January 20	First day of classes, first day of late registration and schedule changes
Fri, January 23	Last day for late registration and schedule changes
Mon-Fri, March 16-20	Spring Break Holiday, No classes
Fri, April 10	Last day to withdraw from Univ. or drop with a grade of "W"
	by 4 pm in Registrar's Office
Wed, May 6	Last Day of Classes
Thu-Fri, May 7, 8	Dead Days, No classes
Mon-Thu, May 11-14	Final Exams, End of Term

Tentative Math 1332 Course Outline			
X = No Classes	Mon	Wed	Fri
Jan. 21, 23	X MLK Day	Fun Stories	Pigeonhole Principle
Jan. 26, 28, 30	Prime Numbers	Prime Numbers Proportions	Proportions
Feb. 2, 4, 6	Percentages	Percentages Applications	Applications
Feb. 9, 11, 13	Review for Test 1	Review for Test 1 Test 1	Test 1
Feb. 16, 18, 20	Compound Interest	Exponential Growth	Exponential Growth Future Value of Annuity
Feb. 23, 25, 27	Future Value of Annuity	Present Value of Annuity	Present Value of Annuity
Mar. 2, 4, 6	Pythagorean Equation	Pythagorean Equation	Sets, Venn Diagrams
Mar. 9, 11, 13	Sets, Venn Diagrams	Finite Sets	Finite Sets
Mar. 16-20	Spring Break Holiday ---------->		
Mar. 23, 25, 27	Review for Test 2	Review for Test 2 Test 2	Test 2
Mar. 30, Apr. 1, 3	Probability 1	Probability 1	Probability 2 Good Friday Classes meet till noon
Apr. 6. 8, 10	Probability 2 Counting Tools	Counting Tools	Expected Value
Apr. 13, 15, 17	Expected Value	Measures of Center	Measures of Center Risk
Apr. 20, 22, 24	Risk	Final Project Problem Discussion	Final Project Problem Discussion
Apr. 27, 29, May 1	Review for Test 3	Review for Test 3 Test 3	Test 3
May` 4, 6	Presentation of Final Project Problems	Presentation of Final Project Problems	Dead Day, no class X
May `13	X	Presentations 8-10 am	X