

**Math 1332 Syllabus
Contemporary Mathematics
Spring 2020 Sul Ross State University**

Sec. 001, C01, ALP:	Tue, Thu: 11:00a-12:15pm in MAB 207
Instructor:	Dr. Kris Jorgenson
Office:	ACR 109D
E-mail:	kjorgenson@sulross.edu
Office Hours:	M, W: 10-11a, 2:30–3:30p; Tu, Th: 10-11a, 3:30–4:30p;
	Fri: 10a-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 numbers, proportions, percentages, sets, geometry, solutions of equations, probability, expected value, 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 as appropriate. Students will translate, extend, 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, 3rd, ,or 4th Editions, by Burger and Starbird. John Wiley & Sons, Inc., ISBN-13: 978-0470-42476-6, but this book, although recommended, is not required.

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 \wedge , 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 **Homework-Quiz grade** worth **15%**. Every day I will make assignments upon which the homework, quizzes, and tests 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 and the first class day. The 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 2-3 in-class quizzes prior to each test along with some homework problems that you will be asked to hand in. 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 (70%) 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	Thu. Feb. 13
Test 2	Thu. March 26
Test 3	Mon. May 4, 10:15a-12:15p

I will allow students to correct one of the homework or quiz grades for full credit before each if they student comes to my office to go over what they missed, but also their homework notebook must be relatively up to date. This correction process must also occur before the day of the test.

Late Work, Rescheduled Quizzes/Tests I will accept late homework as long as it is handed in by 5 pm on the due date. Usually there is a grace period but usually HW handed in more than a day late will be deducted by one-half. 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) if your excuse is for a university activity, then 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). This information needs to be transferred to me in writing—e-mail might be most convenient. 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 2 or 3 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 60 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 6 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. Remember an individual homework or quiz grade may not count for a lot in your overall grade, but working and learning from the homework is **essential** because this is where you learn the topics that will appear on the tests, which do count for a lot of your grade. The best lessons learned often come from correcting a quiz or homework problem in which you have made a mistake.

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 weekly habit for the semester, it can be hard to break this habit. So be sure that you allow the necessary time for this course **FROM THE BEGINNING OF THE TERM, 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 are not understanding the material and/or have fallen behind in your work, missing class will not help. **IF YOU FALL BEHIND, PLEASE DO NOT DROP THIS COURSE WITHOUT TALKING TO ME FIRST.** Making mistakes or falling behind is natural, so it is best in this case to come to me and talk to me about this. If you do have to miss class, let me know before class, and plan to come and see me and make an appointment to discuss what you missed and pick up assignments or discuss what you are not understanding. It is essential to get your questions answered, which you are welcome to do in my office. 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. 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 you phone 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 and Students with Special Needs:

Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the Student’s responsibility to initiate a request. Please contact me, Ms. Rebecca Greathouse Wren, M.Ed., LPC-S, Director/Counselor, Accessibility Services Coordinator, Ferguson Hall (Suite 112) at 432.837.8203; mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students should then contact the instructor as soon as possible to initiate the recommended accommodations.

Important Dates

Mon, January 13	First day of classes; late registration, schedule changes begin
Thu, January 16	Last day for late registration and schedule changes
Mon, January 20	Martin Luther King, Jr. Holiday, no classes
Wed, January 29	12th class day: last day to drop without creating an academic record
Fri, April 3	Last day to drop a course with grade of “W” by 4 pm in Registrar’s Office
Fri, April 10	Good Friday Holiday, no classes
Mon, April 20	Honor’s Convocation, 7 pm Marshall Auditorium
Wed, April 29	Last Class Day before finals
Thu, April 30	Dead Day, no classes
Fri, Mon-Wed, May 1, 4-6	Final Exams

Math 1332, Secs. 001, C01, ALP - Contemporary Mathematics - Tentative Course Outline		
X = No Classes	Tue	Thu
Jan. 14, 16	Fun Stories	Pigeonhole Principle
Jan. 21, 23	Prime Numbers	Decimal Numbers, Ratios
Jan. 28, 30	Repeating Decimals	Proportions
Feb. 4, 6	Percentages	Percentages Applications
Feb. 11, 13	Review for Test 1	Test 1
Feb. 18, 20	Fibonacci Sequence, Golden Ratio	Compound Interest
Feb. 25, 27	Exponential Growth	Future Value of Annuity
Mar. 3, 5	Present Value of Annuity	Pythagorean Equation Real Numbers Irrational Numbers
Mar. 9-13	X - Spring Break Holiday, no classes----->	
Mar. 17, 19	Pythagorean Equation	Finite Sets
Mar. 24, 26	Review for Test 2	Test 2
Mar. 31, Apr. 2	Probability 1	Probability 2
Apr. 7, 9	Counting Tools	Counting Tools
Apr. 14, 16	Expected Value	Expected Value
Apr. 21, 23	Risk	Risk
Apr. 28, 30	Review for Test 3	X - Dead Day
Mon. May 4	Test 3: Mon. 10:15a-12:15p	