

**Math 1332 Syllabus
Contemporary Mathematics
Fall 2024 Sul Ross State University**

Secs. 001, ALP:	Tue, Thu: 11:00a-12:15pm in ACR 205
Instructor:	Dr. Kris Jorgenson
Office:	ACR 109D
E-mail:	kjorgenson@sulross.edu
Office Hours:	Mon, Tue, Wed, Thu: 10-11a; Fri: 10a-12p, 3:30-4:30p; Tue, Thu: 2:00-3:30p; 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 college-level mathematical topics that includes problem-solving, counting, the real numbers, proportions, percentages, sets, geometry, solutions of equations, probability, expected value, financial math, and the mathematics of voting.. 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 math 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.

Pandemic Restrictions It is strongly encouraged that students get a vaccination and a booster for the Covid-19 Corona Virus. Students are also encouraged to wear a proper face covering and follow social distancing guidelines based on your own personal decision as there have been recent increases in contagious diseases such as Covid-19.

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 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 **10%** and a **Homework-Quiz grade** worth **20%**. Every class 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 CSG in every class except for test or quiz days and the first class day. The homework assignments and quizzes will be the basis for the 3 in-class tests. Students may use their homework notebook during in-class quizzes, but not during the in-class tests. 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. Sep. 26
Test 2	Thu. Oct. 31
Test 3	Mon. Dec. 9, 10:15a-12:15p

I will allow students to correct one of the homework or quiz grades for full credit before each major test if the 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 corresponding test.

Late Work, Rescheduled Quizzes/Tests Usually there is a grace period for late HW, 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. You can make up the CSG in my office area before the day of the next test.

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 with me or in the testing center. 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, and the more confident you will be, and you will do better 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 and quizzes 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 to not 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 to talk to me about this. If you do have to miss class, let me know beforehand. Discuss with me what you are not understanding. It is essential to get your questions answered. But meeting with me outside of class 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. Remember that

LEARNING FROM MISTAKES + PERSISTENCE = SUCCESS!

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 an 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 to allow a sanctity of study for your fellow students. Habits such as holding conversations during class, or being engaged in activities not related to this course such as working on a different course or reading your cell-phone will work against the goal of this course and cause you to be counted absent and you will lose Class Study 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 learn and succeed in this course.

Please be aware of the rules for Academic Honesty that you will find in the Sul Ross Student Handbook. 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.

ADA Statement

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the 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 each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director at 432-837-8203 or email mschwartz@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

This course is supportive of the
Student Learning Outcomes for the Bachelor of Science degree in Mathematics:

- 1) The student will be able to demonstrate content knowledge of basic mathematical principles.
- 2) The student will be proficient in logic, able to negate statements, provide counterexamples to false statements, and determine the validity of arguments.

3) The student will be able to communicate mathematical content clearly and with valid reasoning.

Program Marketable Skills:

Marketable Skill (MS) 1: Students Demonstrate Logical and Analytical Skills.

MS 2: Students Demonstrate Problem-Solving Using Analytic and Algebraic Methods.

MS 3: Students Use Technology in Problem-Solving and Presentation.

MS 4: Students Use Communication and Pedagogical Skills.

Core Curriculum Courses Academic Year 2024-2025

Since this is a core curriculum course, for the 2024-2025 academic year, the Student Learning Objectives are: Empirical and Quantitative Reasoning.

Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Important Dates (16-week term)

Mon, Aug. 26	First day of classes, first day of late registration and schedule changes
Thu, Aug. 29	Last day for late registration and schedule changes
Mon, Sep. 2	Labor Day Holiday, No Classes
Wed, Sep. 11	12th Class Day: Last Day to Drop a Class Without Creating an Academic Record for 16- week Courses
Fri, Sep. 27	University as a Community Meal on the Mall
Mon, Oct. 28	Freshman Mid-Term Grades are Due
Fri, Nov. 8	Last day to drop a class with a grade of “W” for 16-week term by 4 pm in University Registrar’s Office
Wed-Fri, Nov. 27-29	Thanksgiving Holidays, No Classes
Wed, Dec. 4	Last Day of Class before Finals
Thu, Dec. 5	Dead Day, No Classes
Fri, Mon-Wed: Dec. 6, 9-11	Final Exams, End of Term

Tenatative Course Outline MATH 1332 Fall 2024		
	Tue	Thu
Aug. 27, 29	First Class Day Fun Stories	Pigeonhole Principle
Sep. 3, 5	Prime Numbers	Decimal Numbers, Ratios
Sep. 10, 12	Repeating Decimals	Proportions
Sep. 17, 19	Percentages	Percentages Applications
Sep. 24, 26	Review for Test 1	Test 1
Oct. 1, 3	Fibonacci Sequence, Golden Ratio	Compound Interest
Oct. 8, 10	Exponential Growth	Future Value of Annuity
Oct. 15, 17	Present Value of Annuity	Pythagorean Equation Real Numbers Irrational Numbers
Oct. 22, 24	Pythagorean Equation Math of Voting	Math of Voting
Oct. 29, 31	Review for Test 2	Test 2
Nov. 5, 7	Finite Sets	Probability 1
Nov. 12, 14	Probability 2	Counting Tools
Nov. 19, 21	Counting Tools	Expected Value
Nov. 26	Expected Value Risk	Thanksgiving Holiday Nov. 27-29 X - No classes
Dec. 3	Review for Test 3 Last Day of Regular Classes Before Finals	Dead Day X - No Classes
Mon. Dec. 9	Test 3 Mon. 10:15a-12:15p	