

Sul Ross State University
Course Syllabus
MATH 2413-001: Calculus I
Fall 2022

Instructor: Dr. Angela Brown

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Office Hours: 10 am-12 pm and 2-4 pm M, 10 am-12 pm and 2-3 pm W, others by appointment

Time and Place of Class Meetings: TR 3:30-4:45 pm ACR 206; Lab W 3-4:50 pm Ferguson 201

Course Prerequisites: Passing grades in MATH 1315 and MATH 1316 (or equivalent, including passing appropriate placement exams) or instructor approval.

Mathematics Program Learning Objectives: The graduating student should be able to

- Apply knowledge of basic mathematics principles.
- Identify and provide valid proofs or solutions for theorems or problems.
- Recognize and dispute invalid mathematical statements by using counter-examples.

Course Objectives:

- The student should be able to find and understand limits
- The student will be able to identify continuous functions
- The student will be able to differentiate algebraic, logarithmic, exponential, and trigonometric functions
- The student will be able to integrate algebraic, logarithmic, exponential, and trigonometric functions
- The student will be able to apply these topics accordingly to “real world” problems.

Marketable Skills: Mathematics BS

- Students Demonstrate Logical and Analytical Skills.
- Students Demonstrate Problem-Solving Using Analytic and Algebraic Methods.
- Students Use Technology in Problem-Solving and Presentation.
- Students Use Communication and Pedagogical Skills.

Required Textbooks: *Calculus Concepts & Contexts*, 4th ed, Stewart ISBN 0-495-55742-0. Homework will be assigned from the text.

Other Equipment Needed: paper and pencils.

Grading Scale: 90-100 A, 80-89 B, 70-79 C, 60-69 D, 59-Below F

Grading Policy: The grade weighting will be as follows:

Quizzes/Homework: 30%

Exams: 30%

Laboratories: 15%

Final Exam: 25%

Quizzes will be given at least weekly, either on Tuesdays or during Lab time. Homework will be assigned daily. Assignments with their due dates will be posted on Blackboard. Homework will be graded on completion and accuracy. Copying answers out of the back of the book is plagiarism and will be prosecuted. No make-up exams will be given. If there is a valid reason for missing an exam, then the grade for the missed exam will be replaced by the grade on the final exam. Otherwise, a missed exam will be a zero. Exams will be closed notes, closed book, and no calculator will be allowed. Any restroom breaks need to be taken before an exam starts. You cannot leave the classroom in the middle of an exam under any circumstances.

Lab time will be used in a variety of ways. It may be used to answer questions we did not get to in class, extra assignments to gain a deeper understanding, or quizzes and exams. If exams are to be given during lab time, I will give ample notice.

Attendance Policy: Students are expected to attend every class. If class must be missed, the student is expected to get the notes from a classmate, and to check with me or on Blackboard for announcements and updated assignments.

Students are expected to arrive to class on time. If a student is perpetually late, they will be asked to not attend class unless they can arrive on time. If tardiness becomes a problem for the class as a whole, people who arrive late will not be permitted to enter the class. If this stricter policy becomes necessary, there will be an announcement made in class.

It is policy of the university to drop a student with a grade of "F" if 9 hours or more of class are missed. For this course that would be 6 or more class sessions missed. Absences for school related activities will not count in these 6 absences.

Cell Phone Policy: Cell phones are not allowed in class. They can not be used as calculators on any assignment. Any phone ringing during class will be taken up until the end of class. If a phone rings during a test or quiz, the student will forfeit their right to finish said test or quiz.

Americans With Disabilities Act: SRSU Disability Services. 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 each semester for each class. Alpine students seeking accessibility/accommodations services must contact Mary Schwartze Grisham, M.Ed., LPC, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave

a message and we'll get back to you as soon as we can during working hours), or email mschwartz@sulross.edu. Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas, 79832.

Library Services: The Bryan Wildenthal Memorial Library in Alpine. Offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

Academic Integrity: Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden.

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.

Diversity Statement: I aim to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, socioeconomic class, age, nationality, etc.). I also understand that the crisis of COVID, economic disparity, and health concerns, or even unexpected life events could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create an inclusive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.

Important Dates:

- Aug 22 First Day of Classes
- Aug 25 Last Day for Late Registration and Schedule Changes
- Sept 5 Labor Day Holiday
- Sept 7 12th Class Day-Last Day to Drop a Course Without Creating an Academic Record
- Nov 14 Last Day to Withdrawal from University or Drop Classes with a Grade of "W" (by 4 pm)
- Nov 23-25 Thanksgiving Holiday
- Dec 2,5-7 Final Exams

Tentative Schedule-Subject to Change

	Tuesday		Thursday
Aug. 23	Introduction	Aug. 25	Representing a function
Aug. 30	New functions from old functions	Sept. 1	Exp. and Log. functions, Trig Review
Sept. 6	Tangent & Velocity	Sept. 8	Limits of Functions, Limits Laws
Sept. 13	Continuity	Sept. 15	Exam 1
Sept. 20	Limits with infinity	Sept. 22	Derivatives and Rates of Change
Sept. 27	Derivative of a Functions	Sept. 29	Derivatives and what does f' tell us about f
Oct. 4	Derivatives of polynomials and exponentials	Oct. 6	Product and Quotient rules Derivatives of trig fcns
Oct. 11	Chain rule, Implicit Differentiation	Oct. 13	Exam 2
Oct. 18	Derivative of inverse trig fcns and log fcns	Oct. 20	Linear approximations and differentials
Oct. 25	Related Rates Minimum and Maximum Values	Oct. 27	Derivatives and shapes of curves, Graphing
Nov. 1	L'Hospital's Rule	Nov. 3	Optimization
Nov8	Newton's Method	Nov. 10	Antiderivatives, Area
Nov. 15	Exam 3	Nov. 17	Definite Integrals
Nov. 22	Fundamental Theorem of Calculus	Nov. 24	Thanksgiving Holiday
Nov 29	Substitution		

Final Exam Monday December 5, 3-5 pm