South Plains College
Common Course Syllabus: Calculus I (MATH 2413)
Spring 2026

Department: Mathematics, Engineering, and Computer Science
Discipline: Mathematics
Course Number: MATH 2413
Section: 001 (Tuesdays and Thursdays, 8:30-10:35am, Mathematics-Engineering building, room 108)
Course Title: Calculus I
Available Formats: conventional/flex
Campuses: Levelland and Lubbock Downtown Center. This class meets face-to-face on the Levelland campus in the Mathematics-Engineering building, room 108.

Course Description: Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.

Prerequisite: Successful completion with a grade of 'C' or better in MATH 2412 (Precalculus) or successful completion with a grade of 'C' or better in MATH 1314 (College Algebra) and MATH 1316 (Trigonometry).
Credit: 4 **Lecture:** 3 **Lab:** 2

Instructor: Jay Driver
Telephone: (806) 716-2780
Office: Math and Engineering building, office 114
Email: The instructor may be emailed through Blackboard or at jdriver@southplainscollege.edu.

Email Policy: All students at South Plains College are assigned a standardized SPC e-mail account. Although personal email addresses will continue to be collected, the assigned SPC e-mail account will be used as the official channel of communication for South Plains College. The Student Correspondence Policy can be found at www.southplainscollege.edu. To access the SPC student e-mail account, log in to portal.office.com. (Copied from SPC Student Guide)

- Since all students have an assigned SPC email, the instructor will only acknowledge, respond, and send emails to your assigned SPC email. This ensures all correspondence from the instructor is received by the intended recipient.

Virtual/Face-to-Face Office Hours:

- Mondays and Wednesdays, 10:45am-12:00pm, 1:30-2:30pm;
- Tuesdays and Thursdays, 10:45-11:30am;
- Fridays, 9:30-11:30am.
- And by appointment (contact me).

Textbook: *Calculus, Volume 1*, Strang and Herman, OpenStax
The following message is from OpenStax.org:
Good news: your textbook for this class is available for free online, in web view and PDF format! You can also purchase a print version, if you prefer, via the campus bookstore or from OpenStax on Amazon.com.

You can use whichever formats you want. Web view is recommended -- the responsive design works seamlessly on any device. If you buy on Amazon, make sure you use the link on your book page on openstax.org so you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

Calculus Volume 1 from OpenStax, Print ISBN 193816802X, Digital ISBN 1947172131,
http://www.openstax.org/details/calculus-volume-1

Supplies: You will need a scientific calculator and a small supply of graph paper. Calculators on cell phones, TI-89, TI-92, or TI-Inspire calculators, or any other electronic devices will not be allowed during testing without permission from the instructor. Make certain you have access to a scanner or scanning app. Gradescope is the recommended app.

Blackboard: Blackboard is the online course management system that will be utilized for this course. This course is supplemented online, so all access to course information and your instructor is through the Internet. This course syllabus, as well as all course materials can be accessed through Blackboard. Login at https://southplainscollege.blackboard.com/. The user name and password should be the same as the MySPC and SPC email.

User name: first initial, last name, and last 4 digits of the Student ID
Password: Original CampusConnect Pin No. (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to blackboard@southplainscollege.edu or by telephone to 806-716-2962.

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

Core Curriculum Objectives addressed:

- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

1. Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.
2. Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point.
3. Determine whether a function is continuous and/or differentiable at a point using limits.
4. Use differentiation rules to differentiate algebraic and transcendental functions.
5. Identify appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.
6. Evaluate definite integrals using the Fundamental Theorem of Calculus.
7. Articulate the relationship between derivatives and integrals using the Fundamental Theorem of Calculus.

Student Learning Outcomes Assessment: Pre- and post-test questions (assignments, labs, and major exams) will be used to determine the extent of improvement that the students have gained during the semester.

Attendance/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the total class meetings **and** submit at least eighty percent (80%) of the total class assignments to have the best chance of success. If the student has more than six (6) absences or missed assignments, the instructor may remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student cannot receive an X, the instructor will assign an F.

Course Evaluation: There will be departmental final exam questions given by all instructors. Assignments, labs, and quizzes will count for 20% of the final grade, while exams count for 80% of the final grade. Expect assignments, labs, and 4 scheduled exams throughout the course. Your final average in the course will determine the letter grade posted on your transcript. This grade is determined by the following scale:

A (90-100%), B (80-89%), C (70-79%), D (60-69%), F (0-59%).

- Assignments/Labs/Quizzes = 20%
- Exam 1 (covering Assignments 1-6) = 20%
- Exam 2 (covering Assignments 7-11) = 20%
- Exam 3 (covering Assignments 12-16) = 20%
- Exam 4 (covering Assignments 17-21 and cumulative topics) = 20%.

Assignments and Exams: The following is a sequential list of the assignments and exams.

1. Functions Review
2. Limits: Tables and Graphs
3. Limits & Continuity
4. Definition of Derivative
5. Differentiation Rules
6. Rates of Change

Exam 1 (20%)

7. Differentiation of Trigonometric Functions
8. The Chain Rule
9. Derivatives of Inverse Functions
10. Implicit Differentiation
11. Differentiation of Exponential and Logarithmic Functions

Exam 2 (20%)

12. Related Rates
13. Curve Sketching
14. Optimization
15. Antiderivatives
16. Definite Integrals and The Fundamental Theorem of Calculus

Exam 3 (20%)

17. Integration by Substitution
18. Integration Involving Exponential and Logarithmic Functions
19. Integration Resulting in Inverse Trig Functions
20. Area Between Curves
21. Volumes of Revolution (Disks and Washers)

Final Exam – Exam 4 (cumulative) (20%)

Assignment/Lab Format and Policy:

- Labs are administered in-class, while assignments are to be completed outside of the class meeting time. In the event of an absence, make certain to get the lab downloaded from Blackboard, worked, and submitted with the assignment.
- Labs and assignments are given after each lesson and are collected in Gradescope by the beginning of the next class meeting. Late assignments are **not** accepted. Make certain to complete the assignments with enough time to get help, if needed. At the end of the semester, the lowest four daily grades (assignment, quiz) will be dropped.
- With each exercise of the assignment show all necessary work and clearly mark your answer.
- Check your answers in Blackboard to make certain you are practicing the exercises correctly.
- Write your name at the top of each page of your work.
- Submit assignments/labs in Gradescope as a single pdf file, preferably using the Gradescope app.
- The following grading rubric is used for each assignment/lab submission.

100%	Completed assignment and lab; all work shown; selected exercises found accurate
95%	Completed assignment and lab; all work shown; missing accuracy on selected exercise
85%	Completed assignment and lab; all work shown; missing accuracy on a few selected exercises
75%	Completed assignment and lab; all work shown; missing accuracy on several selected exercises
75%	Lab missing
50%	Assignment incomplete and/or no work shown
0%	No assignment or lab submitted

Exam Format and Policy:

- There are four (4) units of study in this course. At the conclusion of each unit is a face-to-face examination on specified Thursdays, 8:30-10:35am with the exception of the final exam, which is on Tuesday, May 5, from 8:00-10:00am.
- No electronic communication devices (phones, smart watches, headphones, earbuds, etc.) are permitted during examinations.
- The final exam is cumulative with no exemptions.

SPC Tutors

Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, and view tutoring locations.
http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

Brainfuse Live Tutoring

You also have 180 FREE minutes of tutoring with Brainfuse Live Tutoring each week, and your hours reset every Monday morning. Log into Blackboard, click on the tools option from the left-hand menu bar. Click on the Brainfuse link and you will automatically be logged in for free tutoring. You may access Brainfuse tutors during the following times:

Monday – Thursday: 8pm-8am
6pm Friday – 8am Monday morning

For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-2241.

Academic Integrity (Plagiarism and Cheating Policy): "Complete honesty is required of the student in the presentation of any and all phases of course work. This idea applies to quizzes of whatever length as well to final examinations, to daily reports, and to term papers" *(SPC General Catalog)*.

Plagiarism violations include, but are not limited to, the following:

1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another's work during an examination or on a homework assignment;
8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. *(SPC General Catalog)*

Plagiarism and cheating are not tolerated in this course. Under the policies of South Plains College, punishment for cheating may include no credit (failing) on the assignment, quiz, exam, or the course.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning**.** Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

COVID Response: South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: COVID Response (southplainscollege.edu).

Diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, Campus Concealed Carry: South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: Syllabus Statements (southplainscollege.edu).

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

Tentative Course Calendar: Below is a calendar view of assignment and exam due dates and times.

Day (Mon/Wed), Date	What is due before arriving to class that day?	Topic(s) to be discussed that day	Work to be done
Tue, Jan 13		Course Introduction; Lesson 1: Functions Review	Assignment 1
Thur, Jan 15	Assignment 1	Lesson 2: Limits: Tables and Graphs	Assignment 2
Mon, Jan 19	<---------- *Martin Luther King, Jr. holiday (SPC is closed)* ---------->		
Tue, Jan 20	Assignment 2	Lesson 3: Limits & Continuity	Assignment/Lab 3
Thur, Jan 22	Assignment/Lab 3	Lesson 4: Definition of Derivative	Assignment/Lab 4
Tue, Jan 27	Assignment/Lab 4	Lesson 5: Differentiation Rules	Assignment/Lab 5
Thur, Jan 29	Assignment/Lab 5	Lesson 6: Rates of Change	Assignment/Lab 6
Tue, Feb 3	Assignment/Lab 6	Preparation for Exam 1	Study for Exam 1
Thur, Feb 5		**Exam 1**	Exam 1
Tue, Feb 10		Lesson 7: Differentiation of Trig Functions	Assignment/Lab 7
Thur, Feb 12	Assignment/Lab 7	Lesson 8: The Chain Rule	Assignment/Lab 8
Tue, Feb 17	Assignment/Lab 8	Lesson 9: Derivatives of Inverse Functions	Assignment/Lab 9
Thur, Feb 19	Assignment/Lab 9	Lesson 10: Implicit Differentiation	Assignment/Lab 10
Tue, Feb 24	Assignment/Lab 10	Lesson 11: Differentiation of Exponential and Logarithmic Functions	Assignment/Lab 11
Thurs, Feb 26	Assignment/Lab 11	Lesson 12: Related Rates	Assignment/Lab 12
Tue, Mar 3	Assignment/Lab 12	Preparation for Exam 2	Study for Exam 2
Thur, Mar 5		**Exam 2**	Exam 2
Tue, Mar 10		Continuation of Related Rates; Lesson 13: Curve Sketching	Assignment/Lab 13
Thur, Mar 12		Continuation of Curve Sketching	Assignment 13
Mon-Fri, Mar 16-20	<---------- *Spring Break (SPC is closed)* ---------->		
Tue, Mar 24	Assignment 13	Lesson 14: Optimization	Assignment 14
Thur, Mar 26		Continuation of Optimization	Assignment 14
Tue, Mar 31	Assignment 14	Lesson 15: Antiderivatives	Assignment 15
Thur, Apr 2	Assignment 15	Lesson 16: Definite Integrals & The Fundamental Theorem of Calculus	Assignment/Lab 16
Fri, Apr 3	<---------- *Easter holiday (SPC is closed)* ---------->		
Tue, Apr 7	Assignment/Lab 16	Preparation for Exam 3	Study for Exam 3
Thur, Apr 9		**Exam 3**	Exam 3
Tue, Apr 14		Lesson 17: Integration by Substitution	Assignment/Lab 17
Thur, Apr 16	Assignment/Lab 17	Lesson 18: Integration Involving Exponential and Logarithmic Functions	Assignment/Lab 18
Tue, Apr 21	Assignment/Lab 18	Lesson 19: Integration Resulting in Inverse Trig Functions	Assignment/Lab 19
Thur, Apr 23	Assignment/Lab 19	Lesson 20: Area Between Curves	Assignment/Lab 20
Tue, Apr 28	Assignment/Lab 20	Lesson 21: Volumes of Revolution (Disks and Washers)	Assignment 21; Study for Exam 4
Thur, Apr 30	Assignment/Lab 21	Preparation for Exam 4 (cumulative final exam)	Study for Final Exam
Tue, May 5		**Exam 4** This exam is the cumulative final exam that will be from 8:00-10:00am in M108.	Final Exam