

# Calculus for Business and Social Sciences, Spring 2026

**Instructor:** Jason Groves  
**e-mail:** jgroves@southplainscollege.edu  
**Phone:** 806-716-2739  
**Office Hours:** Mon - Fri: 8:30 am - 11 am  
or by appointment  
**Office:** B001 or B017 (LDTC)

*Students are responsible for knowing the policies of SPC as an institution, and this information is available in the student handbook. Policies that are applied to all sections of this course per the Department of Math and Engineering are found in the common course policies preceding this document. Below are the course policies specific to this course section and this instructor.*

**Materials:** The following materials are required for this course

**Writing:** Pencil and paper are required for taking notes during videos, while reading the text, or during class meetings, as well as taking quizzes and exams. Generally, I recommend having a spiral notebook dedicated to notes and solving problems for this class, and a folder for receiving returned/graded work.

**Calculators:** You will need a calculator with  $e^x$  and  $\ln$  keys will be required. These can be found on scientific calculators (inexpensively obtained from Wal-Mart or any other big-box store) or graphing calculators. Online options such as Wolfram Alpha ([wolframalpha.com](http://wolframalpha.com)), Desmos ([www.desmos.com](http://www.desmos.com)) Desmos also has smartphone apps) or GeoGebra ([www.geogebra.org](http://www.geogebra.org)). Smartphone apps such as Panecal or Class-Calc are also available for low cost (or free). All are great for doing homework or studying. ***Please note that computer software and mobile apps will not be allowed on exams.***

**Computer:** Access to a computer with stable internet connection will be required for viewing course materials as well as using other software (see “Calculators” above and “Blackboard” below). Students who do not have a computer may find success using mobile devices in some cases. Also all students have access to suitable computers via the computer labs found at every SPC campus.

**Blackboard:** Blackboard (accessible via the SPC website) will be used as a central hub for the course. Students will find this syllabus, and all other course materials, as well as assignments, grading rubrics, etc. Students should be checking Blackboard daily for announcements and updates, and to access the homework. Blackboard utilizes students’ SPC email, thus students should also be checking their SPC email regularly.

**Gradescope:** Gradescope is an app that will be used for submitting written work of any form during this course. It will be how assignments are submitted, and how feedback from the grading process is viewed. If you do not have a smartphone or other mobile device, please speak with your instructor as soon as possible.

**Assessment:** Grading will be done according to the standard 10 percent scale (i.e. 100% - 90% is an A, etc.) with assignments weighted as follows:

Assignments	20%
Tests	55%
Final Exam	25%

Grades are calculated by taking the average of all of the grades in that assessment type, and then weighing them according to the proportions given above. Details of each assessment type are given below.

**Class Attendance:** This course is an asynchronous (not at the same time) online course, so there is no formal class to attend. Attendance is instead managed by participation in the course. Students should be involved with working the course material as often as possible in order to develop mastery of the topics presented. To account for the lack of a formal Lecture/Lab setting, to achieve the same result, students should expect to spend at least 15 hours per week on this course to complete it successfully. Successful

students usually break this down into 3 hours per day, 5-6 days per week working on this course (note that the 3 hours do not have to be continuous, but that amount of time should be accumulated each day for best results.) If a you miss more than 5 assignments, you may be dropped from the course with an X or an F.

It is the policy of the South Plains College math department that online math courses cannot be repeated, regardless of success in or completion of the course. Therefore if a student fails, drops, or is administratively dropped, they will not be able to repeat the course online, and must repeat the course in a traditional classroom setting.

Students should plan their work time at the beginning of each week so that they are committed in advance to the completion of their assignments. It has been well documented that spreading out study and practice over a longer period of time helps to retain knowledge, create new connections, and gain additional insights into the material. This can also help with quizzes (see below). **Make arrangements now and plan ahead for what you will do in the event that your own computer or internet connection becomes unavailable or unreliable.**

**Homework:** Using the videos provided, as well as any other resources desired, students need to complete the assignments given along with each lesson. Students must submit both their notes and the worked problems for the assignment on Gradescope. The due date for these submissions is the corresponding Friday of each week's lessons. Work on assignments should be neatly written, well explained where necessary, and organized. Problems should be clearly numbered with final answers clearly marked.

**Exams:** There are four midterm exams and one final exam. All exams are to be taken in person. For each exam, a survey will go out 2-3 weeks prior to the exam date for students to choose when they will take the exam. Please note the following:

- All students who reside within 75 miles of any SPC campus must appear in person to take exams.
- All students who live farther than 75 miles from any SPC campus are responsible for finding their own proctor for exams (a form is available in the Course Resources with instructions).
- If you are unable to appear for an exam, it is your responsibility to coordinate with me an alternative *before* the due date of the exam.

**Final Exam:** The final exam is comprehensive, and a required part of the course. Failure to take the final exam results in an automatic grade of F for the course. The Final Exam must be turned in by Tuesday, May 5.

**Email:** The email at the header of the syllabus is the best way to get into contact with me. This should be used as often as necessary to ask questions, schedule appointments for office hours (physical or virtual) or turn in written assignments in the event that Blackboard or Gradescope are down. You may also email incomplete parts of assignments in order to get feedback on how to proceed.

Students should be using the SPC email that is provided. All emails should be formatted with the course number and section, and an adequate heading (i.e. "Math 1324-151 project questions"). Failure to follow these two guidelines may result in emails being caught by SPC's email filter. Neither the instructor nor SPC is responsible for emails lost due to improper formatting.

Be sure to confirm that all relevant attachments are sent with the email and that the body of the email contains all relevant information for that correspondence.

**Showing Work:** In all written assignments submitted (exam work, case studies, projects) work of one kind or another needs to be shown in order for the instructor to properly assess how much of the content has been properly learned and implemented. *When submitting written work any question or component that does not have work associated with it will be given reduced (or no) credit.* The Course Resources area has further instructions and examples of properly showing work.

**Civility in the classroom:** Students are expected to assist in maintaining a classroom environment that is conducive to learning. Given that this is an online course, “the classroom” is defined as any set of interactions that students will have with one another (primarily discussion boards). Students who are found to be intentionally hurtful or disrespectful, or repeatedly detract from the focus of the discussion boards will have their grade in this category penalized (up to zero credit for a discussion assignment), and may be administratively dropped from the course (with an X or F) for creating a hostile learning environment.

It is important to note the role that students play in their own mathematical education. Just as everybody has had (and continues to have) different life experiences, we all have different mathematical experiences as well. And while it is important that the systems and institutions that people interact with (of which this class is one) are impartial, to expect such from human beings borders on impossible. To that end, it is imperative that all students give space for their classmates to come into the material from where they are, and that we seek to understand each other. The most important capacity students can give each other is the space to be wrong, and to be guided out of misconceptions or errors. Both instructor and student are not just the product of their own hard work and thinking, but also of what their environments (both past and present) allowed them to work or think hard about.

Students in disagreements over results or processes must disagree professionally. Blanket statements (“you’re wrong” or “that doesn’t work”) cannot be given without explicit evidence, and should still be framed more in terms of your own understanding: phrases like “I think the problem is asking for...” or “did you consider...” are more appropriate phrases to use when correcting and/or helping other students. People cannot escape their biases, but everybody can recognize that people do not always look at a problem the same way. As the saying goes: “Above all else, be kind.”

**Honesty:** “Scholastic dishonesty” includes but is not limited to cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student. Incidents of academic dishonesty will be promptly reported and dealt with.

The ethics and appropriateness of the use of apps such as photomath on quizzes are discussed in one of the first discussion assignments. That being said, it is the policy of this class that use of these apps is strictly prohibited on all quizzes and exams.

**Student Resources:** To schedule a face-to-face or virtual meeting with SPC tutors, go to the SPC webpage, click Student Services, and click on Tutoring. There students may choose at which center they wish to have tutoring or if they wish to have a virtual session (face-to-face sessions only require an open spot, while virtual sessions require 4 hours notice). Click the Booking link and log in with SPC credentials. Students can then choose the subject and tutor.

Students also have access to the use of BrainFuse, via Blackboard, for a few hours each week in the evenings. The link is found in the Course Resources folder.

Week	Sections Covered	Due Dates (Assignments due 11 pm on the corresponding Friday)
Week 1 1/12 - 1/16	Syllabus, Calendar, Course Resources Lesson 1: Limits	Introductory Survey - first attempt due Wednesday, 1/15 Honorlock Practice Exam - first attempt Assignment 1
Week 2 1/19 - 1/23	Lesson 2: Continuity Lesson 3: Rates of Change and Derivatives	Assignments 2 and 3 Honorlock Practice Exam - last attempt
Week 3 1/26 - 1/30	Lesson 4: Basic Derivative Rules Lesson 5: Marginal Analysis	Assignments 4 and 5
Week 4 2/2 - 2/6	Lesson 6: Product and Quotient Rules Lesson 7: Chain Rule Exam 1	Assignments 6 and 7 Exam 1 Honorlock - Open 2/6 8 am through 2/8 10 pm Exam 1 in person - 2/5 6 pm or 2/6 9 am (room B011)
Week 5 2/9 - 2/13	Lesson 8: Implicit Differentiation Lesson 9: Related Rates	Assignments 8 and 9
Week 6 2/16 - 2/20	Lesson 10: First Derivative Test Lesson 11: Absolute Extrema	Assignments 10 and 11
Week 7 2/23 - 2/27	Lesson 12: Second Derivatives Exam 2	Assignment 12 Exam 2 Honorlock - Open 2/27 8 am through 3/1 10 pm Exam 2 in person - 2/26 6 pm or 2/27 9 am (room B011)
Week 8 3/2 - 3/6	Lesson 14: Optimization	Assignment 14
Week 9 3/9 - 3/13	Lesson 15: Exponential and Logarithmic Derivatives <i>SPRING BREAK 3/16 - 3/20</i>	Assignment 15
Week 10 3/23 - 3/27	Lesson 16: Differentials Lesson 17: Elasticity of Demand	Assignments 16 and 17
Week 11 3/30 - 4/3	Lesson 18: Antiderivatives Lesson 19: Integration by Substitution	Assignments 18 and 19
Week 12 4/6 - 4/10	Lesson 20: Integration by Parts Exam 3	Assignment 20 Exam 3 Honorlock - Open 4/9 8 am through 4/12 10 pm Exam 3 in person - 4/9 6 pm or 4/10 9 am (room B011)
Week 13 4/13 - 4/17	Lesson 21: Area Under the Curve, Fundamental Theorem of Calculus	Assignment 21
Week 14 4/20 - 4/24	Lesson 22: Applications of the Integral Exam 4	Assignment 22 Exam 4 Honorlock - Open 4/24 8 am through 4/26 10 pm Exam 4 in person - 4/24 6 pm or 4/24 9 am (room B011)
Week 15 4/27 - 5/1	Review	
Week 16 5/4 - 5/7	Final Exam (comprehensive)	Final Exam Honorlock - Open 5/4 8 am through 5/5 10 pm Final Exam in person - select from schedule