

**South Plains College**  
**Common Course Syllabus: MATH 1325**  
**Revised December 2019**

**Department:** Mathematics, Engineering, and Computer Science

**Discipline:** Mathematics

**Course Number:** MATH 1325

**Course Title:** Calculus for Business and Social Sciences

**Available Formats:** conventional and internet

**Campuses:** Levelland, Reese, and Dual Credit

**Course Description:** This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2313 or 2413, Calculus I.

**Prerequisite:** Successful completion with a grade of 'C' or better in MATH 1324 or MATH 1314.

**Credit:** 3 **Lecture:** 3 **Lab:** 0

**Textbook:** *Mathematics with Applications in the Management, Natural, and Social Sciences*, Lial, Hungerford, Holcomb, and Mullins, 2019, 12<sup>th</sup> Edition, Prentice Hall/Pearson Education

**Supplies:** Please see the instructor's course information sheet for specific supplies.

**This course partially satisfies a Core Curriculum Requirement:** None

**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. Apply calculus to solve business, economics, and social sciences problems.
2. Apply appropriate differentiation techniques to obtain derivatives of various functions, including logarithmic and exponential functions.
3. Solve application problems involving implicit differentiation and related rates.
4. Solve optimization problems with emphasis on business and social sciences applications.
5. Determine appropriate technique(s) of integration.

6. Integrate functions using the method of integration by parts or substitution, as appropriate.
7. Solve business, economics, and social sciences applications problems using integration techniques.

**Student Learning Outcomes Assessment:** A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

**Course Evaluation:** There will be departmental final exam questions given by all instructors.

**Attendance Policy:** Attendance and effort are the most important activities for success in this course. Records of your attendance are maintained throughout the semester. Five (5) absences, **for any reason**, are allotted to the student for the semester. Tardies count as one-half (1/2) of an absence. Tardies will be applied for consistently being late to class, as deemed by the instructor and leaving class early. If this number is exceeded, the instructor has the right to drop you with a grade of F or an X, depending on their discretion.

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.

**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.

**Diversity Statement:** In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

**Disability Statement:** Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

**Nondiscrimination Policy:** South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

**Title IX Pregnancy Accommodations Statement:** If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To [activate](#) accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or [email cgilster@southplainscollege.edu](mailto:cgilster@southplainscollege.edu) for assistance.

**Campus Concealed Carry:** Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at: <http://www.southplainscollege.edu/campuscarry.php> Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

**SPC Bookstore Price Match Guarantee Policy:** If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by Amazon*, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

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.

# MATH 1325 Calculus for Business and Social Sciences, Summer 1, 2020

**Instructor:** Jason Groves **Office:** M107  
**e-mail:** jgroves@southplainscollege.edu  
**Phone:** 806-716-2739  
**Office Hours:** by appointment

**Prerequisites:** Completion of MATH 1324 with a C or better, or approval from instructor.

**Materials:** MyMathLab access is required and comes with access to the text electronically. An access code for MyMathLab can be purchased from the campus bookstore or from Pearson directly. Also required:

- Access to a computer with reliable internet connection. Avoid using Chromebooks, as they are not compatible with the lockdown browser used on exams.
- Google Chrome or Mozilla Firefox web browsers.
- Calculator with exponential and logarithmic commands (Graphing Calculators are allowed but not required).
- Adequate materials for taking notes and writing work down.
- A scanner, or a document scanning app for a smartphone (iPhones should have this built-in to the camera app. For android users, there are many free options available).

IT IS THE RESPONSIBILITY OF THE STUDENT TO BE FAMILIAR WITH SOUTH PLAINS COLLEGE POLICIES. BELOW ARE ITEMS SPECIFIC TO THIS COURSE

**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:

Homework	20%
Written Assignments	10%
Tests	50%
Final Exam	20%

**Class Attendance:** Students should be involved with working the course material as often as possible in order to develop mastery of the topics presented. For this course, that is a minimum of 3 days each week. Please observe that this is a MINIMUM, and successful students will be working online for 5-6 days per week. These will be checked regularly by the instructor from the login information that MyMathLab provides.

Attendance is counted by minimum online access noted above and completed exams. Thus, not meeting the minimum access requirements or missing exams will count as absences with respect to whether a student is dropped by the instructor for excessive absences.

If a student wishes to drop the course on their own they may contact the registrar, Andrew Ruiz (email: aruiz@southplainscollege.edu). Give him the course name and section number, and he will process the request.

Students should make sure they have regular access to a reliable computer and internet connection, especially where quizzes and exams are concerned. South Plains College has numerous computer labs at each campus (Levelland, Plainview, Reese, and Lubbock Center) that have all the required software and browser extensions to perform the work in this course. **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:** Daily homework is essential to developing mastery over the topics presented in this course. Homework assignments are due on Friday, with the exam for that week, and are available from the first day of classes. Homework problems may be attempted an unlimited number of times in order to achieve the desired score/mastery. For best results, you should keep a notebook of all correctly worked homework problems to use as a study guide for quizzes and exams. Homework assignments close at the due date, and will not be extended except at the discretion of the instructor.

**Case Studies:** Case Studies are assignments found at the end of each chapter of the textbook. All work must be shown, and all explanations of steps or interpretations of results must be given in complete sentences. Due dates are given on the course calendar, and late work will not be accepted (the student will receive a 0).

**Exams:** Midterm exams are given during this course. Questions will be similar to assigned homework problems. While you may use your textbook and written notes, it is expected that students do the exam alone, without help from other people. Exams may only be attempted once, and must be done in one sitting. Students caught cheating will be dropped from the class with an F and disciplinary action will be pursued.

*In order to preserve academic integrity, it is the within the rights of the instructor to compel a face-to-face, proctored exam.* Students may also request a face-to-face exam if they feel that their internet connection will not be adequate for the exam. Due to the COVID-19 pandemic, proper personal protection and social distancing procedures will be observed if a face-to-face exam is required.

As stated above, ensure that your computer and internet connection are *reliable* and make appropriate arrangements in advance if they are not. Exam due dates are given on the course calendar. Exams will be opened for student testing the morning of the day *before* the due date. Students may not make up exams, nor take them late. Missed exams are automatically given a zero.

When taking exams, students must install and use the MyMathLab Lockdown Browser. Before starting the exam, make sure all browser tabs are closed, push notifications are disabled, and other internet-based programs are closed. Interruptions from such programs may cause Lockdown to glitch, and you may lose access to the exam.

Students must show all work when taking exams. All work must be done neatly, and submitted scans or photos should be of reasonable and legible quality. If an exam question involves nothing more than reading information from a graph or table, or answering a question about a definition, you may use the “show work” function to explain the reasoning behind your answer choice. *Any problem that requires multiple steps must have written work submitted.* See the section “Email and Written Assignment Submission” for more details. For best results, email the attachments to yourself first to see if the results are satisfactory. Written work for exams must be submitted

within **one hour** of completion of the exam. This will be verified based on MyMathLab's data and timestamps from student email and metadata from the attachment. The exam grade will be reduced by 10% for each day the work is late up to 50%.

**Final Exam:** The final exam is comprehensive, and a required part of the course. Failure to attend the final exam results in an automatic F. Students have 4 hours to complete the final exam. While the average student may not need all 4 hours, make all efforts *now* to ensure that there will be 4 hours of uninterrupted time to take the final exam.

As with midterm exams, all work must be shown and submitted via email within one hour of completion of the exam. The Final Exam will be due Monday, July 6, at 11:00 pm

**Email and Written Assignment Submission:** The email at the header of the syllabus is the best way to get into contact with the instructor. This should be used as often as necessary to ask questions, schedule appointments for office hours, (see "Attendance" above) or turn in written assignments (see below). All emails should be formatted with the course number and section, and an adequate heading (i.e. "Math 1325-151 exam 1 work" or "Math 1325-151 Chapter 13 Case Study"). Failure to format the subject line properly 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.*

If students have questions during a homework assignment, they may use the "ask your instructor" link provided in the "Question Helps" menu near the top of the window. A text box is provided to describe where you are stuck, or what your question is, and then the email will be sent to the instructor with a link to that specific problem, as well as what the last input answer was. The instructor's response will always go to the email address used for the MyMathLab account.

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.

All attachments should be formatted with the course and section number, *your* first initial and last name, and the assignment. For example, if I were to submit an attachment for the chapter 13 case study, the file would be named: 1325-151-jgroves-casestudy13.

If I were submitting exam work: 1325-151-jgroves-exam2-work.

When submitting written work, be sure that all relevant steps are included. If explanations are required/necessary, make sure they are written in complete sentences. Work should be neat, legible and organized. If a graphing calculator is being used, ANY use of the graphing calculator beyond basic computations must be included. For example: if a graph is used to find an intersection point, draw the graphs as part of showing work and indicate which commands on the calculator were used to obtain the answer. If a table of values is used to arrive at a conclusion, show the table of values clearly labeled with all entries.

If multiple problems are shown on a page, make sure they are all numbered correctly. If multiple pages are submitted, make sure that each page is numbered, and that your name is at the top of each page.

**It is the responsibility of the student to make sure that written work has been attached, and that emails have made it to their destination.**

## MATH1325 Tentative Course Calendar

Due	Topics	Section
June 2	How to Enter Answers in MyMathLab Introductory Survey	
	Limits	11.1
	One-sided Limits and Limits Involving Infinity	11.2
June 5	Continuity	11.9
	Rates of Change and the Derivative	11.3, 11.4
	Exam 1	
	Derivative Techniques	11.5
	Derivatives of Products and Quotients	11.6
	Chain Rule	11.7
June 12	Derivatives of Exponential and Logarithmic Functions	11.8
	Exam 2	
	Ch. 11 Case Study	
	Local Extrema and the First Derivative Test	12.1
	The Second Derivative	12.2
	Optimization	12.3
June 19	Implicit Differentiation	12.4
	Related Rates	12.5
	Exam 3	
	Ch. 12 Case Study	
	Antiderivatives	13.1
	Integration by Substitution	13.2
June 26	Integration by Parts	13.3
	Differential Equations	13.7
	Exam 4	
	Area and the Definite Integral	13.4
July 2	The Fundamental Theorem of Calculus	13.5
	Applications of the Integral	13.6
	Ch. 13 Case Study	
July 6	Final Exam	