

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, 12th 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.

Instructor: Jason Groves **Office:** M107
e-mail: jgroves@southplainscollege.edu
Phone: 806-716-2739
Office Hours: MW: 11 am - 12:30 pm
TR: 10 am - 11:30 am
Fri: 8 am - 11 am
or by appointment

Prerequisites: Successful completion of MATH 1314 or MATH 1324 within the last calendar year.

Materials: Mathematics with Applications by Lial, Hungerford, Holcomb, Mullins. Suitable writing instruments and paper for taking notes and completing assignments. Calculators with exponential and logarithmic functions are required. Graphing Calculators are recommended, but not required. Access to MyMathLab will be required for doing homework. Note that access to MyMathLab will come with an electronic version of the textbook including answers to odd-numbered problems (from the text) and a student solutions manual, in addition to other resources. Consider all options before committing to purchasing a hard-copy. MyMathLab will require regular access to a reliable computer and internet connection. Access to a printer may be needed to print out some assignments, and a scanner or document camera will be required to submit written assignments (a smartphone with a reasonable camera should suffice). 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	18%
Quizzes	16%
Case Studies	6%
Tests	40%
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 weekly by the instructor from the login information that MyMathLab provides.

Students must send weekly “check-in” emails to the instructor, sent on Monday no later than 11:59 pm (or Tuesday in the event of a campus holiday on Monday). These emails should state (1)

how many topics were covered the previous week and (2) which topics gave the most trouble (and why?).

If a student misses 4 weekly emails, or does not meet the minimum login requirement 4 times, that student will be dropped from the course with an X or an F (depending on the student's current course average).

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 take care of it.

It is the policy of the South Plains College math department that online 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 face-to-face classroom setting.

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 the day of the next quiz, 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.

Quizzes: Quizzes will be given weekly. Quiz problems are taken from the same pool of problems as the homework assignments. They are generated in the moment, so students may have slightly different quizzes, but they will assess the same topics and material. Students have 100 minutes to take a quiz, and it must be done in one sitting. They may be taken up to two times, and MyMathLab will record the better result of the two attempts. The "Show Work" feature of MyMathLab is enabled on all quiz questions, and students are encouraged to use this module to submit their work *on quizzes only*. Students may also submit their work via email, if desired. Quiz questions involving reading a graph or performing a simple calculation do not need to have work shown. Quizzes are not dropped and cannot be made up.

Case Studies: Case Studies are assignments found at the end of each chapter of the textbook. The case studies for chapters 11, 12, and 13 will be done in this course. 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 and 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.

As stated above, ensure that your computer and internet connection are *reliable* and make appropriate arrangements (in advance!) if they are not. There are tentative exam dates given on the course calendar. These will be made official one week in advance of the due date, and the exam will be opened for student testing 3 days in advance of the due date. Students may not make up exams, nor take them late. Missed exams are automatically given a zero, and students that miss more than one exam will be dropped from the course.

From the time an exam is opened until its due date, I will not answer questions about course material.

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 should be done neatly and in pencil, 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 state that no work is needed. *Any problem that requires multiple steps must have written work submitted.* For best results, email the attachments to yourself first to see if the results are satisfactory. Exam work must be submitted before the exam due date. 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 by the due date. The Final Exam will be due Wednesday May 6, by 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, check in weekly (see 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 weekly check in, 1/20/2020” or “Math 1325-151 Exam 3 work”). 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.

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 3 case study, the file would be named: 1324007-jgroves-casestudy3. If I were submitting exam work: 1324007-jgroves-exam2-work. As an additional measure, it is encouraged that you write your name at the top of each page of written work that you submit. If

you are using Microsoft Word or another document processing program, you can edit the header to have your name automatically appear at the top of every page.

Civility in the classroom: Students are expected to assist in maintaining a classroom environment that is conducive to learning. Thus inappropriate use of cell phones, making offensive remarks, or engaging in any other form of distraction are not permitted. Infractions will be dealt with proportionally to the offense, and may include dismissal from that class period (which will count as an absence on your attendance record). Tobacco products are not permitted in the classroom.

Student Resources: Students have access to tutoring in M116 on the Levelland campus, or Building 2 (rooms 206 and 208) on the Reese campus.

Mathematics for Business Online Tentative Calendar

Due Date	Assignments Due
Friday, January 17 11:59 pm	Introductory Survey How to Enter Answers in MyMathLab
Friday, January 17 11:59 pm	Ch. 1 Skills check quiz and homework Homework 1.2 and 1.3
Thursday, January 23 11:59 pm	Quiz 2: 1.2 - 1.5
Thursday, January 30 11:59 pm	Quiz 3: 1.6 - 2.2 Ch. 2 skills check and homework
Thursday, February 6 11:59 pm	Quiz 4: 2.4 - 3.2 Ch. 3 Skills Check quiz and homework
Friday, February 7 11:59 pm	Exam 1
Thursday, Febraury 13 11:59 pm	Quiz 5: 3.4 - 4.1 Ch. 4 Skills Check quiz and Homework
Thursday,February 20 11:59 pm	Quiz 6: 4.3, 4.4, 11.1 Ch. 11 Skills Check and Homework
Friday, February 21 11:59 pm	Exam 2
Thursday, February 27 11:59 pm	Quiz 7: 11.2, 11.3
Thursday, March 5 11:59 pm	Quiz 8: 11.4, 11.5
Thursday, March 12 11:59 pm	Quiz 9: 11.6, 11.7
Thursday, March 26 11:59 pm	Quiz 10: 11.8, 11.9
Friday, March 27 11:59 pm	Exam 3 Case Study 11
Thursday, April 2 11:59 pm	Quiz 11: 12.1, 12.2 Ch.12 Skills Check quiz and homework
Thursday, April 9 11:59 pm	Quiz 12: 12.3, 12.4
Thursday, April 16 11:59 pm	Quiz 13: 12.5, 12.6
Friday, April 17 11:59 pm	Exam 4 Case Study 12
Thursday, April 23 11:59 pm	Quiz 14: 13.1, 13.2 Ch. 13 Skills Check quiz and homework
Thursday, April 30 11:59 pm	Quiz 15: 13.3, 13.4
Friday, May 1 11:59 pm	Homework 13.5, 13.6 Case Study 13
Wednesday, May 6 11:00 pm	Final Exam