

**South Plains College**  
**MATH 1325 Business Calculus**

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

**Instructor:** Alma Lopez    **Phone:** 806-716-2640    **Email:** [alopez@southplainscollege.edu](mailto:alopez@southplainscollege.edu)  
**Office:** Math Building 116d

**Course Number:** MATH 1325.001

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

**Campus:** Levelland

**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  
ISBN 978-0-13-476762-8 or ISBN 0-13-476762-4

**Supplies:** Textbook, a scientific calculator (a TI 83 or TI 84 are recommended...INSPIRE and TI89 are not allowed.) and a good attitude.

**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:** The final grade in the class will be the average of the major exams and the homework. There will be no makeup exams given. A grade of 0 will be assigned for missed exams and a cumulative final will be counted in its place to replace that 0. To maximize the potential to complete this course a student should attend all class meetings, complete all homework assignments and exams. If you miss an exam because you are quarantined you will take a different exam when you return. You are responsible for making arrangements with your instructor ahead of time.

A 90-100      B 80-89      C 70-79      D 60-69      F 0-59

Homework will be assigned daily. Questions are taken at the next class period only. You are responsible for keeping up to date and prepared. No late homework will be accepted...no exceptions. Keeping up to date and current on the homework has been shown to correlate with passing the course.

**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.

**Cell Phones:** In this class, the instructor reserves the right to ask a student to leave the class if the phone is left on and it disrupts the class. This instructor defines disrupting the class as texting, being on social media, allowing the phone to ring or vibrate in class or answering the phone. This is very disrespectful to other students around you and to the instructor. During exams having a cellphone visible or having a cellphone disrupting a class will penalize a student by at least 20 points.

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.

Math1325 Tentative Calendar

**Week 1** (Jan 18-22)

Syllabus, 11.1

**Week 2** (Jan 25-29)

11.2, 11.3

**Week 3** (Feb 1-5)

11.4, Review

**Week 4** (Feb 8-12)

Test 1

**Week 5** (Feb 15-19)

11.5, 11.6

**Week 6** (Feb 22-26)

11.7, 11.8

**Week 7** (Mar 1-5)

11.9, Review

**Week 8** (Mar 8-12)

Test 2

**Spring Break (Mar 15-19)**

**Week 9** (Mar 22-26)

12.1, 12.2

**Week 10** (Mar 29-April 2)

12.3, 12.4

**Week 11** (April 5-9)

12.5, 12.6, Review

**Week 12** (April 12-16)

Test 3

**Week 13** (April 19-23)

13.1, 13.2

**Week 14** (April 26-30)

13.3, 13.4

**Week 15** (May 3-7)

13.5, 13.6 Review

**Week 16** (May 10-14)

Test 4