

Course Title: Calculus for Business and Social Sciences

Course Number: Math 1325.001

Instructor: Alma Lopez

Telephone Number and Office: (806) 716-2640

Email: alopez@southplainscollege.edu

Prerequisites: (*courses/TSI compliance*): Math 1324, TSI compliance

Textbook: College Mathematics for Business, Economics, Life Sciences, and Social Sciences, 13th Edition, Barnett, Ziegler, and Byleen, Prentice Hall, 2011. ISBN-10: 0-321-61400-3, ISBN-13: 978-0-321-61400-1

Supplies: Scientific calculator with log, ln, and e^x . TI Inspires are not allowed.

Cell Phones: In this class the instructor reserves the right to ask a student to leave the class if a cell phone is left on and it disrupts the class. This instructor defines disrupting the class as 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. Cell phones are not allowed to use as a calculator. Your cell phone should be off and out of sight. You may be asked to leave if your phone is out during class. During exams if a cell phone disrupts class the student with the offending cell phone will have 15 points deducted from their exam.

Homework: 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 homework has been shown to correlate with passing the course.

Course Description: This course covers basic algebraic operations, quadratics, theory of equations, elementary probability, elementary differential and integral calculus. The purpose/rationale/goal of this course is to introduce students to the fundamental principles of elementary differential and integral calculus and business calculus applications.

Course Requirements: To maximize the potential to complete this course, a student should **attend** all class meetings, complete all homework assignments and examinations including final projects and/or examinations.

Course Evaluation: Your final grade will be the average of the major exams, the homework, and the final. There will be no makeup exams given. A missed exam will receive a grade of 0. If all of the hour exams are taken the lowest one will be dropped at the end of the semester and replaced by the Final. (Hence the final exam will be counted twice.)

A 90-100

B 80-89

C 70-79

D 60-69

F 0-59

***During exams the use of or possession of smartphones, smart watches, water bottles or any bottled drinks, and bathroom breaks are not allowed. Any infraction will be penalized with a zero on the days assignment and can result in removal from the class.**

Attendance Policy: Whenever absences become excessive and, in the instructor's opinion, minimum course objectives cannot be met due to absences, the student will be withdrawn from the course. This will be a total of five absences for this instructor.

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.

Disabilities 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 Special 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 Special Services Coordinator. For more information, call or visit the Special Services Office in the Student Services building, 894-9611 ext. 2529.

Student Learning Outcomes/Competencies:

1. Limits: Student will
 - 1.1. determine the existence of a limit. (10.1)
 - 1.2. compute limits from a graph and from a formula. (10.1, 10.2)
 - 1.3. calculate the limit of the difference quotient. (10.1)
2. Derivatives: Student will
 - 2.1. calculate derivatives using the limit of the difference quotient. (10.4)
 - 2.2. calculate derivatives and higher order derivatives by using rules of differentiation. (10.5, 11.2, 11.3, 11.4)
 - 2.3. determine points of discontinuity and non-differentiability of functions. (10.3)
 - 2.4. use the derivative to calculate rates of change. (10.4)
 - 2.5. use the derivative to calculate the slope of the tangent line to a curve. (10.4)
 - 2.6. analyze and sketch the graphs of functions using the first and second derivative tests. (12.1, 1.2, 12.4, 12.5)
 - 2.7. set up and solve business applications involving differentiation. (10.7, 11.1, 11.2, 11.3, 11.4, 11.7, 12.6)
3. Integrals: Student will
 - 3.1. calculate indefinite and definite integrals using basic integration formulas and substitution. (13.1, 13.2, 13.5)
 - 3.2. calculate area using definite integrals. (14.1)
 - 3.3. set up and solve business applications involving integration. (13.1, 13.2, 14.2)

Class: Math 1325.001 MW 1-2:15pm
 Instructor: Alma F. Lopez M124
 Email: alopez@southplainscollege.edu
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Semester: Fall 2016
 Office: M116D 806-716-2640
 Semester: Fall 2016
 Office: M116D (806) 716-2640

Monday	Tuesday	Wednesday	Thursday	Friday
Office Hours 9-10, 3-4 pm	Office Hours By appt	Office Hours 9-10, 3-4 pm	Office Hours By appt	Office Hours 9-11:30
August 29 Forms and Assessment	August 30	August 31 10.1	September 1	September 2
September 5 Labor Day Holiday	September 6	September 7 10.2	September 8	September 9
September 12 10.3	September 13	September 14 10.4	September 15	September 16
September 19 10.5	September 20	September 21 Test 1	September 22	September 23
September 26 11.1	September 27	September 28 11.2	September 29	September 30
October 3 11.3	October 4	October 5 11.4	October 6	October 7
October 10 11.7	October 11	October 12 Review	October 13	October 14 Fall Break
October 17 Test 2	October 18	October 19 12.1	October 20	October 21
October 24 12.2	October 25	October 26 12.4	October 27	October 28
October 31 12.5,12.6	November 1	November 2 Review	November 3	November 4
November 7 Test 3	November 8	November 9 13.1	November 10	November 11
November 14 13.2	November 15	November 16 13.3	November 17 LDTD	November 18
November 21 13.5	November 22	November 23 Thanksgiving Break!	November 24 Thanksgiving Break!	November 25 Thanksgiving Break!
November 28 14.1	November 29	November 30 14.2	December 1	December 2
December 5 14.5	December 6	December 7 Test 4	December 8	December 9
December 12 Final Exam 1-3 pm	December 13	December 14	December 15	December 16