

South Plains College
MATH 1325 –Math Analysis II
Spring 2017- Course Syllabus

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Textbook: College Mathematics for business, economics, life sciences, and social sciences 13th edition
by Barnett, Ziegler, byleen Course id: sanchez34916

Homework: www.coursecompass.com

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

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)

Expectations:

- Read the syllabus.
- Attend class, arrive on time, do your homework, turn in homework ON TIME, and be prepared to participate.

- **TURN OFF and PUT AWAY** all cell phones and mp3 players when you enter the classroom and keep off for the duration of the class. Do **NOT** send or receive text messages during class.
- Maintain a classroom environment that is conducive to learning.
- Foster a spirit of complete honesty and a high standard of integrity. For more detail, see page 23 of the South Plains College General Catalog.

Attendance: Record of your attendance will be maintained throughout the semester. You may be dropped from this course with a grade of X or F if you exceed three absences throughout the semester. **Absences are not classified as 'excused' or 'unexcused'.**

TSI: The Texas Success Initiative (TSI) is a state program designed to ensure that all Texas institutions provide placement testing, personal advisement and appropriate instruction to students to enhance their opportunities for success in their college studies. All new students entering Texas colleges and universities are required to take a placement test prior to enrolling in college-level courses, unless exempt from testing under specified state standards (i.e., scores on ACT, SAT or TAKS). Testing will indicate whether a student possesses adequate basic college level skills in reading, writing and mathematics necessary to begin an undergraduate program of study. (copied from the current SPC catalog)

You will need a graphing calculator for this course (cannot use the nspire, ti-89 or anything equivalent). I recommend either a ti-83 or ti-84

Grading:

Homework 35%
Exams 50%
Final Exam 15%

Grading Scale:

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

Homework:

- **All homework is online and due at midnight of the week it is assigned. No late homework is accepted for any reason.**

Tutoring: Free tutoring and video tapes are available in Room 116 of the Math Building. Digital versions of these tutorial videos can be viewed on your personal computer. There is a link for these videos on blackboard <http://spc.blackboard.com>

Exams: There will be 4 exams and a comprehensive departmental final exam . Dates will be announced in class 1 week prior. If for any reason you are unable to take an exam at the designated time you must contact me prior to class time. Make-up exams will be given at the discretion of the instructor. Any person who knows they will be absent on a day of an exam should make arrangements to take the exam at an EARLIER date.

Equal Opportunity: South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability or age.

4.1.1.1 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.

4.1.1.2 Disabilities Statement

Levelland Campus – 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 to federal law, a student requesting accommodations must provide acceptable documentation of his/her disability. For more information, call or visit the Disability Services Office in the Student Services Building, 806-716-2577.

Reese Center and the Byron Martin Advanced Technology Center (ATC) –Rooms 809 and 811, Reese Center Building 8, 806-716-4675.

“Insanity is doing the same thing, over and over again, but expecting different results.”

~Albert Einstein