South Plains College Math 1325.201 Syllabus Mathematics for Business, Economics, Life and Social Sciences Fall 2017

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Textbook: College Mathematics 13th ed. by Barnett, Ziegler, Byleen. You will need a MyMathLab access code. A physical copy of the text is not required but the access to MyMathLab is required.

Course Description: This course is designed for Business, Economics, and Life and Social Science majors. It is a heavy application course, meaning the course is primarily word problems relating to the majors listed previously. This section of 1325 requires each student to utilize MyMathLab for the online homework as well as coming to class each day with the notes provided by the instruction online at southplainscollege.blackboard.com.

Course Requirements: To maximize the potential to complete this course, a student should attend all class meetings, take notes and participate in class, and complete all homework assignments and examinations including the final exam in the allotted time.

Student Learning Outcomes/Competencies:

Upon successful completion of this course students should be able to competently perform the following:

- 1. Utilize functions and algebraic concepts to model realistic problems from business, economics and life/social sciences situations.
- 2. Use concepts of limit and continuity to describe behaviors of functions and models.
- 3. Use the derivative to analyze the local behaviors of mathematical models, and to understand other business and economics definitions
- 4. Use the indefinite and definite integrals appropriately to describe mathematical models or create new models.

Grading:	Tests (3 total) Homework/Quizzes Final Exam	60% 20% 20%	<u>Grading Scale</u> :	A 90-100 B 80-89 C 70-79 D 60-69 F 59 or bel	ow
5	Homework/Quizzes	20%		C 70-79 D 60-69	C

***Note: Students must justify answers or show work on all problems to receive full credit.

Homework: Homework will be assigned through the online system MyMathLab. Your homework grades will be strictly the grades received on each assignment on MyMathLab. Homework is usually posted no less than 48 hours before the due date. There are <u>no excuses</u> for late assignments (internet outages, school activities, work, etc.). No homework extensions will be granted. The best way to succeed with online homework is to print off or copy down the problems prior to starting the assignment. Once you have done the problems, then go back to the online system and input your answers. Keep your homework notebook organized and neat in case you need to redo a problem or ask questions about a problem. To register in the

MyMathLab system, you will need an access code purchased online or in the bookstore, your SPC email, your legal name, and the course ID **groves50387**.

Quizzes: The instructor reserves the right to quiz whenever she feels it is necessary. There will not be a regular quizzing schedule. However, in the event of a quiz, it may be announced or pop.

Tests: There will be a total of 3 exams in this course. No notes/homework/textbooks will be allowed on ANY exam. All exams are expected to be completed in the allotted class time, no exceptions. No exam grades will be dropped. However, *if your final exam grade is higher than your lowest test grade, then it will replace your lowest test grade at the end of the course.* Exam corrections are for your own learning well-being and will not be graded but are expected to be completed after each exam is returned. Exam grades are not posted online anywhere. You will get all of your exams back. It is in your best interest to save ALL graded documents until your final grade is assigned at the end of the term.

Late work: Late work is not accepted. If you do not turn in an assignment on time, you will receive a zero.

Class Notes: The class notes (outline) will be posted on Blackboard. It is the responsibility of the student to bring the notes to class everyday. Be sure to look at the tentative calendar to see what sections we will cover next. We will work through the notes together in class, but the bulk of the definitions and formulas will be provided in the printed notes.

Calculators: There will be times throughout the year when students will need a graphing calculator to complete an assignment.

Materials: Students are expected to bring the following to class each day:

- Class Notes (printed or hand-written in advance from Blackboard)
- Pencil and eraser
- Calculator (approved)
- Extra paper, if desired

Academic Integrity: Academic dishonesty will not be tolerated. You are expected to uphold the ideas of academic honesty. All work that is graded must be your own. This policy applies to all work attempted in this course. If this policy is violated the student will receive an F for the assignment and will be dropped with an F. For more details on what is considered cheating, see the South Plains College catalog.

Class Rules:

- Be courteous and respectful at all times.
- Be on time and ready to learn.
- Keep your hands and feet to yourself.
- Use only pencil for all assignments.
- No food or drinks in class other than bottled water.
- Students are not permitted to use electronic devices, other than a calculator, in class. Put the cell phones away!!
- Adhere to the requirements of the Student Code of Conduct.

Core Objectives:

This course satisfies the following Core Objectives:

Communication Skills:

- Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through oral communication
- Develop, interpret, and express ideas through visual communication

Critical Thinking:

- Generate and communicate ideas by combining, changing, and reapplying existing information
- Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information

Empirical and Quantitative Competency Skills:

- Manipulate and analyze numerical data and arrive at an informed conclusion
- Manipulate and analyze observable facts and arrive at an informed conclusion

Disclaimer

The instructor reserves the right to alter any class policies as deemed necessary by the instructor or South Plains College, and will announce any changes in class. If a student has any questions about a change in policy ask the instructor for clarification.

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.

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 Special Services Office at South Plains College 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. You must also talk directly to your instructor to inform her of your requests. This conversation must happen within the first two weeks of classes.

Campus Concealed Carry:

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, please refer to the SPC policy at: http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.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.

	Tentative Calendar for Math 1325					
Day	Date	Торіс	Sections			
Tuesday	Aug 29	Introduction/Limits	10.1, 10.2			
Thursday	Aug 31	Continuity, Definition of Derivative	10.3, 10.4			
Tuesday	Sept 5	Derivative Rules: Basic Rules	10.5, 11.2			
Thursday	Sept 7	Product/Quotient Rules	11.3			
Tuesday	Sept 12	Chain Rule	11.4			
Thursday	Sept 14	L'Hopital's Rule	12.3			
Tuesday	Sept 19	Review				
Thursday	Sept 21	Exam 1 – Limits and Derivatives	Ch. 10, 11			
Tuesday	Sept 26	Marginal Analysis, L'Hopital's Rule	10.7			
Thursday	Sept 28	Implicit Differentiation	11.5			
Tuesday	Oct 3	Related Rates	11.6			
Thursday	Oct 5	Relative Rate of Change, Elasticity	11.7			
Tuesday	Oct 10	First and Second Derivative Tests	12.1, 12.2			
Thursday	Oct 12	Absolute Extrema	12.5			
Tuesday	Oct 17	Optimization	12.6			
Thursday	Oct 19	Review				
Tuesday	Oct 24	Exam 2 – Applications of Derivatives	Ch. 11, 12			
Thursday	Oct 26	Anti-derivatives	13.1			
Tuesday	Oct 31	Integration by Substitution	13.2			
Thursday	Nov 2	Intro to Differential Equations	13.3			
Tuesday	Nov 7	Definite Integrals	13.4, 13.5			
Thursday	Nov 9	Integration by Parts	14.3			
Tuesday	Nov 14	Area Between Two Curves	14.1			
Thursday	Nov 16	Applications of the Integral	14.4			
Tuesday	Nov 21	Exam 3 – Integration	Ch. 13, 14			
Thursday	Nov 23	Thanksgiving Break				
Tuesday	Nov 28	Partial Derivatives	15.1, 15.2			
Thursday	Nov 30	Multivariable Optimization	15.3			
Tuesday	Dec 5	Optimization: LaGrange Multipliers	15.4			
Thursday	Dec 7	Review				
Tuesday	Dec 12	Final Exam 7:45pm – 9:45pm				