# South Plains College Math 1325.002TR Syllabus Mathematics for Business, Economics, Life and Social Sciences Fall 2018

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**Office Phone:** 716-2735

Office Hours: MW 11am – 12pm TR 7:50am – 8:50am, 12:45pm – 1:45pm F 8am – 11am

**Textbook:** College Mathematics 13<sup>th</sup> ed. by Barnett, Ziegler, Byleen. You will need to gain access to Knewton for the online homework.

**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.

**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 (4 total)	60% <u>G</u>	Grading Scale:	A 9	0-100
_	Daily	20%	-	B 8	0-89
	Final Exam	20%		C 7	0-79
	Bonus Tests	5%		D 6	0-69
				F 59	9 or below

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

**Homework:** All homework assignments will be online through a system called Knewton. You can find directions for creating a student account and getting registered into the online homework system attached. Homework is to be completed by the due dates posted on each assignment. No late homework will be accepted.

**Tests:** There will be a total of 4 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 if you have fewer than 3 absenses. Exam corrections are for your own learning wellbeing 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. If you do not take the final exam, you will fail the class regardless of your average at the time of the final.

**Bonus Tests:** There are weekly bonus tests on Knewton. If you complete these tests, you can earn up to 5 percentage points added to your final grade. These tests are optional but they are timed and they do expire at the end of each week. The average of your bonus test scores will determine the number of points added to your final average (i.e. If you average 80% on the bonus tests, then you will be awarded 80(0.05) = 4 points to your final average.) Any bonus test you skip will be scored as a 0.

**Attendance:** Attendance to this class is mandatory. Any student who misses 4 consecutive classes or 5 cumulative classes will be administratively dropped.

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

**Calculators:** There will be times throughout the course when students will need a graphing calculator to complete an assignment. This course is taught with the assumption that each student owns and brings a TI 83 graphing calculator (or newer) to class. I highly recommend the TI 84 series calculator, but you can do this course with a TI 83.

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

- Notes printed from Blackboard or purchased from the bookstore for \$16.
- Pencil and eraser
- Calculator

**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

**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.

## 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.

	Tentative Calendar for Math 1325 Fall 2018					
Day	Date	Торіс	Sections			
Tuesday	Aug 28	Syllabus/Algebra Review	Review			
Thursday	Aug 30	<i>Quiz 1: Review Material</i> Limits and the Derivative	10.1			
Tuesday	Sept 4	<i>Quiz 2: 10.1</i> Limits at Infinity/Continuity	10.2 – 10.3			
Thursday	Sept 6	<i>Quiz 3: 10.2 – 10.3</i> The Derivative/Basic Derivative Rules	10.4 – 10.5			
Tuesday	Sept 11	<i>Quiz 4: 10.4 – 10.5</i> Marginal Analysis	10.7			
Thursday	Sept 13	<i>Quiz 5: 10.7</i> Review for Exam 1				
Tuesday	Sept 18	Exam 1	Ch. 10			
Thursday	Sept 20	Exponential and Logarithmic Derivative Rules	11.2			
Tuesday	Sept 25	<i>Quiz 6: 11.2</i> Product, Quotient, and Chain Rules	11.3 – 11.4			
Thursday	Sept 27	<i>Quiz 7: 11.3 – 11.4</i> Implicit Differentiation	11.5			
Tuesday	Oct 2	<i>Quiz 8: 11.5</i> Related Rates	11.6			
Thursday	Oct 4	<i>Quiz 9: 11.6</i> Elasticity	11.7			
Tuesday	Oct 9	<i>Quiz 10: 11.7</i> Review for Exam 2				
Thursday	Oct 11	Exam 2	Ch. 11			
Tuesday	Oct 16	First Derivative Test	12.1			
Thursday	Oct 18	<i>Quiz 11: 12.1</i> Second Derivative Tests	12.2			
Tuesday	Oct 23	<i>Quiz 12: 12.2</i> L'Hopital's Rule, Absolute Extrema	12.3, 12.5			
Thursday	Oct 25	Quiz 13: 12.3, 12.5 Optimization	12.6			
Tuesday	Oct 30	<i>Quiz 14: 12.6</i> Review for Exam 3				
Thursday	Nov 1	Exam 3	Ch. 12			
Tuesday	Nov 6	Anti-derivatives 1				
Thursday	Nov 8	<i>Quiz 15: 13.1</i> Integration by Substitution	13.2			
Tuesday	Nov 13	<i>Quiz 16: 13.2</i> The Definite Integral The Fundamental Theorem of Calculus	13.4 – 13.5			
Thursday	Nov 15	Last Day to Drop Quiz 17: 13.4 – 13.5 Area Between Two Curves Applications in Business and Economics	14.1			

Tuesday	Nov 20	<i>Quiz 18: 14.1</i> Applications in Business and Economics	14.2
Thursday	Nov 22	Thanksgiving Break	
Tuesday	Nov 27	<i>Quiz 19: 14.2</i> Integration by Parts Applications of the Integral	14.3
Thursday	Nov 29	<i>Quiz 20: 14.3</i> Review for Exam 4	
Tuesday	Dec 4	Exam 4	Ch. 13, 14
Thursday	Dec 6	Review for Final Exam	
Tuesday	Dec 10 - 13	Final Exam Week	Ch. 10 - 14