

# Course Syllabus

## Math 1325 – Business Calculus

### Fall 2016

**Instructor:** Kiyomi Kaskela

**Office:** RC268F

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#### Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
9:55 – 10:30 AM	10:50 – 11:30 AM	9:55 – 10:30 AM	10:50 – 11:30 AM	9:30 – 11:00 AM
12:20 – 12:55 PM	12:20 – 12:55 PM	12:20 – 12:55 PM	12:20 – 12:55 PM	
	3:20 – 3:55 PM		3:20 – 3:55 PM	
	6:45 – 7:30 PM		6:45 – 7:30 PM	

Also by appointment

**Textbook:** College Mathematics for Business, Economics, Life Sciences, and Social Sciences, 13<sup>th</sup> edition, Barnett, Ziegler, and Byleen, Prentice Hall. 2015. ISBN-10: 0-321-94551-4, ISBN-13: 978-0-321-94551-8

**Supplies:** Calculator: a scientific calculator

**Course Specific Instructions:** There are video tapes of many topics available in the room M116 in the math building at the Levelland campus. These tapes can be viewed in the lab, or checked out and taken home for viewing. These videos can also be viewed online. Go to Blackboard, for the log in name and password type “mvideos”. You can then find the appropriate course and the topic in which you are interested.

**Tutoring:** Students can obtain tutoring at no charge in Room 116 on the South Plains Campus in Levelland and in RC208 at the Reese Center, Building 2.

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

**Course Evaluation:** Your grade will be determined by the 3 in-class tests (100 points each), the comprehensive final exam (200 points), and homework assignments (200 points total). There will be no makeups for any test. If you miss a test by a valid reason/documentation, your final exam grade will count twice to replace the missing grade after being converted to a 100-point scale. (If you can make arrangements and take the test before it is handed back, you may take the same test as the rest of the class.) Also, for those students with 10 points or more attendance bonus and good class participation (turning in homework assignments regularly, no cellphone\*, eating, unnecessary talking, etc. during class), the lowest in-class test grade will be replaced with your final test grade after being converted to a 100-point scale (if it is higher than the in-class test).

(\*including other electronic devices)

**Homework:** Homework will be assigned each day, and all homework from any week will be picked up generally at the following Monday. NOTE: Due for homework from any Wednesday is always the following lecture day. **All of your work will be shown on the homework, or it will be counted as not done.** No late homework will be accepted. Homework assignments from any one week are considered as one weekly homework grade (20 points each week). As your semester homework grade, the top 10 weekly homework grades will be chosen. If you miss a class, you are expected to get the assignment from a classmate or the instructor and stay caught up.

**Assessment Procedures:** The summary assessment of students' mastery of the skills and concepts as specified in the expected learning outcomes will occur, with appropriate course grades assigned as follows:

630 – 700	A	In-class tests (3 x 100)	300
560 – 629	B	Homework (10 x 20)	200
490 – 559	C	Final exam (1 x 200)	200
420 – 489	D		
below 420	F		
			<hr/>
			700

**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)

**CORE OBJECTIVES:**

**Communication Skills:**

effective development, interpretation, and expression of ideas through written, oral, and visual communication.

- 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:**

creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information.

- 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:**

the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

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

**Attendance Policy:** A student who misses two consecutive weeks of class or a total of five absences may be dropped from the class. (You are encouraged to come to the instructor's office during the office hours to catch up with the class.) In a case of a student sleeping in class, it is counted as an absent for the student.

**Attendance Bonus Points:** For each perfect weekly attendance (attending and participating each lecture day of the week with no tardy, stepping out during lecture, or leaving class early), you will receive one bonus point per week (15 possible bonus points for the semester). The bonus points will be added to your total points at the end of the semester.

**Academic Honesty:** 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**.

**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 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.

**Classroom Civility:** Students are expected to assist in maintaining a classroom environment that is conducive to learning. Please be respectful of your fellow classmates. **Turn off all cell phones, pagers, and electronic devices (Ipods, Mp3 players, CD players, etc.) before entering the room** and refrain from reading newspapers, chewing tobacco products, or otherwise being disruptive in class. Also, ***no food and drink are allowed in the classroom.***

***“Your cellphone (or other electronic devices) cannot be seen or heard in the classroom.”***  
***Consequence: loss of 5 points from the upcoming test for each violation***

**Religious Holy Days:** In accordance with Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the first fifteen (15) days of the semester in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. “Religious holy days” means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code.

**School Sponsored Events:** If a student misses class because of participation (being a spectator at any sporting event does not qualify) in a school sponsored event (athletics, choir, etc.), it is the student's responsibility to:

1. Inform the instructor about the absence **prior** to the date;
2. Hand in assignments due during planned absence **prior** to the absence (unless specifically granted permission to do otherwise);
3. Arrange with instructor to take any exams that will be missed during the period of absence.

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

**Recording Lectures:** To improve the teaching method, the instructor may record the lecture with or without a notice.

**Dropping a Course:** You have to return a completed official drop form to the Admissions and Records office, if you decide to drop the course, by:

Thursday, November 17
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Last Day to Drop a Course
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Then, a student will receive a W (no grade penalty).

**Holiday:**

Monday, September 5
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Labor Day
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**Fall Break:**

Friday, October 14
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No Classes
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**Thanksgiving Holiday:**

November 23 - 25
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No Classes
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**Final Examinations:**

Tuesday, December 13
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5:00 – 7:00 PM
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In our regular classroom (RC253)
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## Math 1325 - Fall 2016 Tentative Course Schedule and Assignments

Week	Sections	Readings	Tentative Homework Assignments	
1	Syllabus			
	Review (Factoring)	Handout	will be announced in class	
	Algebra Review	Handout	will be announced in class	
2	§10.1 (handout)	p.489 ~	p.499	#9~69 (e5 - every 5th as 9, 14, 19, ..., 69), 26, 27, 82, 84
	§10.2 (Handout)	p.503 ~	p.511	#10, 12, 14, 16, 25, 27, 43, 46, 86
3	§10.4	p.526 ~	p.537	#11, 12, 20~53 (e3 - every 3rd as 20, 23, 26, ..., 53), 61, 67, 70, 79, 82
4	<b>Exam 1</b>			
	§10.3	p.515 ~	p.522	#11~38 (e3), 62, 63, 66, 67, 69
5	§10.5	p.541 ~	p.547	#11~62 (e3), 89, 92, 95
	§10.7	p.557 ~	p.564	#34, 38, 43, 44, 47, 50
6	§11.2	p.581 ~	p.588	#11~20 (e3), 27~54 (e3, omit 36), 60, 63, 70
	§11.3	p.590 ~	p.595	#11~56 (e5), 63, 66, 69, 75, 78, 83, 88, 93, 96, 97
7	§11.4	p.598 ~	p.605	#18~38 (e5), 41, 44, 48, 53, 58, 62, 65, 68, 71, 82, 87, 93, 96
	§11.7	p. 620 ~	p.625	#19~34 (e5), 49~76 (e3), 81, 82, 83, 86
8	§11.7			
	§12.1 (Handout)	p. 632 ~	p.643	#11, 14, 30~42 (e3), 66~84 (e3), 92, 94, 97
9	<b>Exam 2</b>			
	§12.2 (Handout)	p. 648 ~	p.660	#10, 13, 16, 17, 20, 23, 25~37 (e3), 42, 72, 83, 86, 89
10	§12.4	p. 674 ~	p.683	Handout
11	§12.5 (Handout)	p. 687 ~	p.693	#13, 16, 24, 26, 29, 34, 39, 43, 46, 50, 53, 62, 72, 74
	§12.6	p. 695 ~	p.704	#14, 17, 20, 26, 29, 32, 45, 48
12	§13.1	p. 714 ~	p.722	#9, 14, 19, 24, 34, 39, 44~53 (e3), 55~73 (e3), 82, 85, 91, 94
	§13.2	p. 725 ~	p.734	#17~50 (e3), #61~88 (e3)
13	§13.4	p. 736 ~	p.754	#15, 16, 17, 18
	§13.5	p. 757 ~	p.765	#10, 14~62 (e3), 69~84 (e3)
14	<b>Exam 3</b>			
	§14.1	p. 776 ~	p.782	#23, 26, 45~63 (e3), 66, 87, 90, 92, 96
15	§14.2	p. 785 ~	p.794	#56, 58, 59, 61, 64, 66
	Review for the Final Exam			