Course Syllabus
Math 1324 - Business Algebra
Fall 2016

Instructor: Kiyomi Kaskela
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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, 13th edition, Barnett, Ziegler, and Byleen, Prentice Hall. 2015. ISBN-10: 0-321-94551-4, ISBN-13: 978-0-321-94551-8
Prerequisites:	Two years of high school algebra or Math 0320, TSI compliance
Supplies:	Graphing calculator: TI-83 or 84

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 Description: Topics include inequalities, progression, relations, functions, systems of equations, matrices, linear programming, compound interest and annuities.

Course Purpose/Rational/Goal: The purpose/rationale/goal of this course is to introduce students to the fundamental principles in business mathematics including functions, systems of equations, linear programming, and financial math and to prepare students to study Business Calculus.

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

Course Evaluation: Your grade will be determined by the 3 in-class tests (100 points each), the homework assignments (200 points total), the comprehensive final (200 points), and a project (100 points). There will be no makeups for any test. If you miss a test by a valid reason/documentation, your final test grade will replace your missed test 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, <u>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 tests).</u>   (*including other electronic devices)

Homework: Homework will be assigned each day, and all homework from any week will be picked up <u>generally</u> at the following Monday (for MW class) and Tuesday (for TT classes). NOTE: Due for homework from any Wednesday (Thursday) is always the following lecture day. **All of your work will be shown on the homework, or it will be counted as not done.** <u>No late homework will be accepted.</u> 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:

720 –	800	A	In-class tests (3 x 100)	300
640 –	719	B	Homework (10 x 20)	200
560 –	639	C	Project (1 x 100)	100
480 –	559	D	Final exam (1 x 200)	200
below	480	F		800

Attendance Policy: A student who misses two consecutive weeks of class or a total of five absences may be dropped from the class with an "X" or an "F." You are also encouraged to come to my office during my office hours to catch up with the class. In a case a student sleeping in class, it is counted as an absent.

Attendance Bonus Points: For each <u>perfect weekly attendance</u> (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.

Student Learning Outcomes/Competencies:
1. Functions: Student will
   1.1. identify, evaluate, characterize and graph linear, polynomial, rational, exponential and logarithmic functions. (1.2, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6)
   1.2. determine the domain of a function. (2.1)
2. Linear Models: Student will
   2.1. set up and solve linear business functions: cost, revenue, profit. (1.1,)
   2.2. set up and solve problems involving break-even points. (1.1)
   2.3. set up and solve problems involving equilibrium points. (1.2)
3. Finance: Student will
   3.1. use business formulas to calculate simple and compound interest. (2.5, 3.1, 3.2)
   3.2. use business formulas to calculate effective rates. (3.2)
   3.3. use business formulas to evaluate annuities. (3.3, 3.4)
4. Systems of Equations: Student will
   4.1. solve systems of equations: by substitution, elimination, Gauss-Jordan elimination and matrix inversion. (4.1, 4.3, 4.6)
   4.2. analyze the nature of the solution to a system of equations. (4.1)
   4.3. apply the use of technology to perform matrix operations, find the inverse of a matrix, and solve systems of equations. (4.2, 4.4, 4.5)
   4.4. set up and solve applications involving systems of equations. (4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7)
5. Linear Programming: Student will
   5.1. use graphical methods to solve linear programming problems. (5.3)
   5.2. use the Simplex Method to solve linear programming problems. (6.1, 6.2, 6.3, 6.4)
   5.3. set up and solve applications involving linear programming problems. (5.3, 6.1, 6.2, 6.3, 6.4)
6. Algebra: Student will
   6.1. simplify and factor algebraic expressions involving polynomials, rational expressions, exponents, and radicals. (A.2, A. 3, A.4, A.5, A.6)
   6.2. solve linear, quadratic, exponential, logarithmic and rational equations. (1.1, 2.3, 2.4, 2.6, A.7)

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

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 conductive 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 or drinks in the classroom are allowed.***

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

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.

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

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.

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	Last Day to Drop a Course

Then, a student will receive a W (no grade penalty).

Holiday:

Monday, September 5	Labor Day

Fall Break:

Friday, October 14	No Classes

Thanksgiving Holiday:

November 23 - 25	No Classes

Final Examinations:

200 (MW at 1 PM)	Monday, December 12	1:00 – 3:00 PM	In our regular classroom (RC265)
202 (TT at 9:30 AM)	Thursday, December 15	8:00 – 10:00 AM	In our regular classroom (RC272)
203 (TT at 1 PM)	Thursday, December 15	10:15 – 12:15 AM	In our regular classroom (RC265)
204 (TT at 4 PM)	Thursday, December 15	1:00 - 3: PM	In our regular classroom (RC253)

Tentative Course Schedule (MATH1324)

Week	Sections	Readings		**Tentative** Homework Assignments
1	Introduction	Syllabus		
	§2.1 (Handout)	p.42~	(p.53~)	#61, 62, 64, 66, 70, 73, 75, 78, 87, 94
	§2.2 (Handout)	p.57~	(p.65~)	#47, 49, 51, 70, 71, 72
	§2.4 (Handout)	p.84~	(p.92~)	#3 ~ 51 (e3 - every 3rd as #3,6,9,12,15,…,51); omit #30
2	§2.4			
3	§2.5	p.95~	(p.103~)	#1 ~ 16 (e3), 22, 29 ~ 37 (odd), 56, 59, 62
	§2.6 (Handout)	p.106~	(p.115~)	#1 ~ 34 (e3), 43 ~ 52 (e3), 58 ~ 64 (e3), 79, 88, 91
4	§2.6 (Handout)			
	§3.1	p.127~	(p.132~)	#34 ~ 64 (e3, omit 40), 49 ~ 64 (e3), 69, 72
5	§3.2	p.134~	(p.144~)	#28 ~ 58 (**e5** - every 5th as 28, 33, 38, …, 58), 61, 64, 67, 71, 77, 89, 92
	§3.3	p.147~	(p.153~)	#26, 27 ~ 51 (e3); omit 36
6				**Test 1**
	§3.4	p.155~	(p.164~)	#13, 26 ~ 51 (e3), 40; *For #36, just find PMT and I.
7	§3.4			
	§1.1 (Handout)	p.3~10	(p.10~)	#48 ~ 60 (e3), 62, 65
	§1.2 (Handout)		(p. 23~)	#63 ~ 75 (e3), 79, 80
8	§4.1	p.174~	(p.183~)	#68, 71, 77, 78, 80
	§4.2	p.187~	(p.194~)	#55 ~ 79 (e3); omit 73
	§4.3	p.196~	(p.205~)	#47 ~ 59 (e3), 71, 73, 76, 91
9	§4.4	p.210~	(p.218~)	#16, 19, 25, 28, 31, 32, 49, 65, 66, 69, 71
	§4.5	p.222~	(p.231~)	#39 ~ 66 (e3), 75
10	§4.6	p.231~	(p.239~)	#34 ~ 70 (e3); omit 58, 67
	§4.7	p.242~	(p.248~)	#35, 38, 39, 40
11				**Test 2**
	§5.2	p.263~	(p.267~)	#28, 30, 32, 34, 43, **44**, **48**, **49**; For #44, 48, 49, just set up the constraints.
12	§5.3	p.270~	(p.278~)	#40(Hint: 5.2 **44**), 41, 46, 50(Hint: 5.2 **48**), 52, 53(Hint: 5.2 **49**)
	§6.2	p.297~	(p.310~)	#37, 42, 43, 44, 45, 48
13	§6.3	p.313~	(p.323~)	#46 ~ 56 (all), 52
	§6.4 (Handout §7.7)		will be assigned in class	
14	§6.4 (Handout §7.7) and Review			
				Test 3
15	Algebra Review	Handout	will be assigned in class	
			Review for the Final Exam	